



IF YOU WANT TO USE THE EXISTING ACCOUNT, INPUT THE ACCOUNT #. IF YOU WANT A NEW ACCOUNT, LEAVE THIS BLANK.

Account Number

Nonretirement Account Separately Managed Account Addendum

Account owner(s) ("you"): Use this form to add a Separately Managed Account feature to your existing Personal, Trust or Business account. The account features you elected on your Brokerage or Business Account application and all authorizations to your Authorized agent(s)/Advisor(s) on your account as well as the authorizations and instructions provided herein will apply to your Authorized agent(s)/Advisor(s). Through this addendum, you also instruct Fidelity to establish separately managed accounts ("Separate Account(s)") with the authorizations and features you grant to separate account managers ("SAM(s)") as you indicate herein. The Client Account Agreement for Managed Accounts supersedes the Client Account Agreement you received with the Brokerage or Business Account Application. The Account you established will become the Primary Account unless you indicate otherwise below. To change the Authorized agent(s)/Advisor(s) on this account, you must complete the Advisor Authorization and Termination form.

Type on screen or fill in using CAPITAL letters and black ink. If you need more room for information or signatures, use a copy of the relevant page.

Authorized agent/Advisor	G Number	DTC Number for Primary Account
	G	

SAM Sponsor

The sponsor will be added to your Separately Managed Accounts, including the Primary Account, and granted the same authorities granted to authorized agent(s)/Advisor(s) in the Client Agreement for Separately Managed Accounts.

Add SAM Sponsor

Firm Name	G Number	Pricing Code if applicable
	G	

SAMPLE

1. Account Information

Owner Information

For trusts and business registrations, provide the name of the entity. For other registrations, enter the account owner's (A) name(s)

Entity Owner Name

First Name	M.I.	Last Name



2. Separate Account Information

List each Separate Account Manager (SAM) to be designated as agent on a Separate Account. Obtain product G Number(s) from SAM, other information from Fidelity Separate Account Network (SAN) Spreadsheet.

For all Separate Accounts, mutual fund dividend and capital gain distributions will be reinvested, and all other dividends and interest will be paid to the core account. **Managers of separately managed accounts have trading authority and authority to exercise corporate actions for the Separate Account they manage but do not have the authority to move assets in and out of any account.**

By checking one or more boxes under "Proxies" or "Prospectuses and Reports," you direct Fidelity to forward all proxy voting materials, annual reports, information statements, and prospectuses for each Separate Account to you or to the SAM for that account. If you choose to send this information to the SAM, you also direct Fidelity to accept votes regarding these proxies from your SAM.

SAM Name		Fidelity Separately Managed Account G#	Pricing Code <i>if applicable</i>
		G	
SAM Product Name		SAM Product G Number	
		G	
Additional Authorized agent/Advisor		G Number	Short Name
		G	

Fidelity Account Number	Proxies <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me
	Annual Reports and Prospectuses <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me
	Corporate Actions <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me
	Additional Reports <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me

IF YOU WANT TO USE THE EXISTING ACCOUNT, INPUT THE ACCOUNT #. IF YOU WANT A NEW ACCOUNT, LEAVE THIS BLANK.

SAM Name		Fidelity Separately Managed Account G#	Pricing Code <i>if applicable</i>
		G	
SAM Product Name		SAM Product G Number	
		G	
Additional Authorized agent/Advisor		G Number	Short Name
		G	

Fidelity Account Number	Proxies <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me
	Annual Reports and Prospectuses <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me
	Corporate Actions <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me
	Additional Reports <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me

SAM Name		Fidelity Separately Managed Account G#	Pricing Code <i>if applicable</i>
		G	
SAM Product Name		SAM Product G Number	
		G	
Additional Authorized agent/Advisor		G Number	Short Name
		G	

Fidelity Account Number	Proxies <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me
	Annual Reports and Prospectuses <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me
	Corporate Actions <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me
	Additional Reports <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me

continued on next page

2. Separate Account Information *continued*

SAM Name		Fidelity Separately Managed Account G#	Pricing Code <i>if applicable</i>
		G	
SAM Product Name		SAM Product G Number	
		G	
Additional Authorized agent/Advisor		G Number	Short Name
		G	
Fidelity Account Number	Proxies <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me Annual Reports and Prospectuses <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me Corporate Actions <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me Additional Reports <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me		

SAM Name		Fidelity Separately Managed Account G#	Pricing Code <i>if applicable</i>
		G	
SAM Product Name		SAM Product G Number	
		G	
Additional Authorized agent/Advisor		G Number	Short Name
		G	
Fidelity Account Number	Proxies <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me Annual Reports and Prospectuses <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me Corporate Actions <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me Additional Reports <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me		

SAM Name		Fidelity Separately Managed Account G#	Pricing Code <i>if applicable</i>
		G	
SAM Product Name		SAM Product G Number	
		G	
Additional Authorized agent/Advisor		G Number	Short Name
		G	
Fidelity Account Number	Proxies <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me Annual Reports and Prospectuses <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me Corporate Actions <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me Additional Reports <input type="checkbox"/> Send to SAM OR <input type="checkbox"/> Send to Me		

If seven or more SAMs, fill out a duplicate of this page.

3. Prime Brokerage

Authorizes Fidelity to act as the prime broker in cases where an Authorized agent/Advisor or SAM chooses to execute trades away from Fidelity. All accounts opened with this application will have Prime Brokerage unless you check the box below. See the Retirement Account Client Agreement for Managed Accounts and the Prime Brokerage Services Agreement for Managed Accounts for more information

Check only if you do NOT want this feature.

DO NOT Include Prime Brokerage on these accounts.

4. Signatures and Dates *Form cannot be processed without signatures and dates.*

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 identification 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.

For purposes of this agreement, each account opened with this Addendum is a separately managed brokerage account linked to your Primary Account (the "Separate Account(s)"). A separate account manager (SAM) manages a Separate Account and is not considered an Authorized agent/ Advisor. By signing below, you acknowledge and agree that:

- You are asking Fidelity to establish the Separate Accounts in your name as described in this Addendum, you understand that this Addendum becomes effective when delivered to and accepted by Fidelity.
- 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 these accounts.
- All information about you 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.
- The terms and conditions set forth in this Addendum and the Client Account Agreement for Managed Accounts govern your Account. Your Authorized agent/ Advisor has provided you with a complete copy of the Client Account Agreement for Managed Accounts 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
- your authorizations and statements concerning your Authorized agent(s)/ Advisor(s) and SAMs, including your agreement to grant discretion (as described in a written advisory contract)
- the policies governing your accounts and any optional features you may have requested, such as options trading
- your agreement to indemnify us
- our policies on gathering information and recording phone calls
- our privacy policy and other notices and disclosures
- You grant your SAMs trading authorization as indicated above, and agree that Fidelity may accept instructions on your Separate Accounts (such as orders to buy and sell securities) from your SAMs.
- With respect to the fees associated with your accounts:
 - you authorize your Authorized agent(s)/ Advisor(s) to negotiate the fees you pay for their services and Fidelity's services
 - you authorize each SAM to negotiate the fees you pay for their services
 - you have reviewed the investment advisory fees with your Authorized agent(s)/ Advisor(s) and all other fees applicable to your Account and you believe the fees are reasonable for the services provided.
 - you authorize Fidelity to accept instructions from your Authorized agent(s)/Advisor(s), and from your SAMs to deduct their fees directly from the applicable accounts
 - you authorize brokerage commissions and termination fees to be deducted from your account
- 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 SAMs, and understand

that any changes in account features or instructions (including changes of beneficiary or the rescinding of authorizations) will be effective as soon as Fidelity receives written notice from you in a form and manner acceptable to Fidelity.

- Fidelity is not affiliated with your Authorized agent(s)/Advisor(s) or SAMs.
- Fidelity will act only on authorized instructions and has no responsibility to monitor or review your accounts, to determine the suitability of any investment, or to judge the appropriateness of any instruction placed on your Account, including your Primary Account and any Separate Accounts so long as it appears to be authorized. You can revoke this authorization at any time by giving written notice to Fidelity.
- You understand that all transactions and instructions related to your account are subject to Fidelity's policies and procedures which may result in Fidelity's refusal to accept or execute any order, instruction or transfer related to your account for any reason at any time in its sole discretion.
- You instruct Fidelity to grant your primary Authorized agent/Advisor a limited power of attorney to add or replace SAMs and to establish new Separate Accounts for additional SAMs, with these accounts having the same features, authorizations, and registrations as those initially established with this Addendum, or as subsequently amended.
- You grant each SAM the right to receive duplicate account statements, trade confirmations, and any other account information, electronically or via paper, for its designated Separate Account.
- Unless you indicate otherwise you authorize Fidelity to establish prime brokerage relationships and process transactions under them, as directed by each SAM.
- You authorize Fidelity to consolidate the statement information for all Separate Accounts that are a part of your Account onto a single statement mailed to the address of record.

continued on next page

4. Signatures and Dates *continued*

<p><i>These accounts are governed by a pre-dispute arbitration clause, which appears on the last page of the Client Account Agreement for Managed Accounts, and you acknowledge that you have received a copy of this clause.</i></p>	<p>If you are a U.S. person:</p> <ul style="list-style-type: none"> You certify under penalties of perjury that: (1) the Social Security number or Taxpayer identification Number that you provided on this application is correct (or you are waiting for a number to be issued to you); and (2) you are not subject to backup withholding because: (a) you are exempt from backup withholding, or (b) you have not been notified by the Internal Revenue Service (IRS) that you are subject to backup withholding for failure to report all interest or dividends, or (c) the IRS has notified you that you are no longer subject to backup withholding; and (3) you are a U.S. citizen or other U.S. person, including a U.S. resident alien; and (4) the FATCA code(s) entered on this form (if any) indicating that you are exempt from FATCA reporting are correct. <p><input type="checkbox"/> If you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return, you must check this box to indicate that you do not certify Item 2.</p> <p>If you are not a U.S. person:</p> <ul style="list-style-type: none"> You are submitting the applicable Form W-8 with this form to certify your foreign status and, if applicable, claim tax treaty benefits.
---	--

Asset Based Pricing Disclosure:

You represent that you have read, understood, and agreed to the terms and conditions set forth in the Asset Based Pricing Supplement and agree to be bound by such terms and conditions as are currently in effect and as may be amended from time to time if you elect asset based pricing now or in the future.

All account owners must sign and date. For Trust accounts, all trustees must sign and date. For business accounts, all authorized individuals must sign and date.

<p>Print Account Owner Name <i>First, M.I., Last</i></p> <hr/> <p>Account Owner Signature Date <i>MM - DD - YYYY</i></p> <p>SIGN </p>	<p>Print Account Owner Name <i>First, M.I., Last</i></p> <hr/> <p>Account Owner Signature Date <i>MM - DD - YYYY</i></p> <p>SIGN </p>
<p>Print Account Owner Name <i>First, M.I., Last</i></p> <hr/> <p>Account Owner Signature Date <i>MM - DD - YYYY</i></p> <p>SIGN </p>	<p>Print Account Owner Name <i>First, M.I., Last</i></p> <hr/> <p>Account Owner Signature Date <i>MM - DD - YYYY</i></p> <p>SIGN </p>





Asset-Based Pricing Supplement

This supplement sets forth the terms and conditions for Asset-Based Pricing. Contact your Authorized agent(s)/Advisor(s) to determine if this supplement applies to your account.

This Fidelity Asset-Based Pricing Supplement ("Supplement") is part of my Client Account Agreement. Unless otherwise defined in this Supplement, defined terms have the same meaning as in my Client Account Agreement. In the event any provision in this Supplement conflicts or is inconsistent with any provision of my applicable Client Account Agreement, the provisions of this Supplement will control for matters related to my or my Authorized agent(s)/Advisor(s) having chosen Asset-Based Pricing for my Account(s). In the event that any provisions in this Supplement or my Client Account Agreement conflicts or is inconsistent with any provision of the Premiere Select IRA Custodial Agreement and Disclosure Statement, or Premiere Select Roth IRA Custodial Agreement and Disclosure Statement, as applicable, the provisions of the Premiere Select IRA (or Roth IRA) Custodial Agreement and Disclosure Statement will control. As noted in the Client Account Agreement, I have authorized my Authorized agent(s)/Advisor(s) to enter into such schedule of interest rates, commission rates and any other fee schedules for my accounts. More specifically, my Authorized agent(s)/Advisor(s) have entered into an Asset-Based Pricing relationship for my account(s) established at Fidelity. Account(s) chosen for Asset-Based Pricing ("ABP Account(s)") will, subject to certain restrictions, receive Fidelity's customary securities brokerage and execution services for an asset-based fee ("Asset-Based Fee" or "ABF") based on the value of certain assets in ABP Accounts, generally in lieu of paying commissions and similar costs at the time of each transaction. I understand that the ABF for each account is calculated and charged based only on the assets held in that account and does not take into consideration any other accounts or assets held at Fidelity.

1. Chargeable Assets. As used in this Supplement, "Chargeable Assets" mean:

- all assets in the account excluding the following assets which are defined as non-chargeable: cash, cash equivalents, alternative investments, no transaction fee mutual funds, mutual funds with a load or sales charge, Fidelity Mutual Funds, same day settlement Money Market Funds, Unit Investment Trusts (UITs), and international securities that settle and are held in local currency. Note that an international security that is held in USD will be charged an asset-based fee.

Fidelity may change the definition of Chargeable Assets anytime, and any change will be effective in the following billing cycle with notice to me and my Authorized agent(s)/Advisor(s). Changes in these definitions may affect the ABF rate I am charged. In the event an Asset is deemed at any time to be non-chargeable, I understand transaction fees shall apply.

2. Asset-Based Fee. I agree to pay Fidelity an ABF calculated by applying the ABF as it has been communicated to me by my Authorized agent(s)/Advisor(s) to the average daily balance of Chargeable Assets held in each ABP Account. I understand that I may be subject to a minimum fee per billing cycle. The fees shall be communicated to me by my Authorized agent(s)/Advisor(s). I authorize Fidelity to provide notice of my fees or any changes in my fees to my Authorized agent(s)/Advisor(s) and I will be bound by such notice. It is my responsibility to determine from my Authorized agent(s)/Advisor(s) the fees being charged. A copy of my fee schedule can be obtained from Fidelity upon request.

For each ABP account, the ABF is calculated by applying the Annual Percentage Rate (measured by "basis points" or "BPS") to the average daily balance of the Chargeable Assets in each ABP Account (schedule may be dependant on turnover classification of my account). The ABF shall be charged in arrears based on the average daily balance of Chargeable Assets in the ABP account for the billing period. Fidelity will calculate the ABF for each Billing Period by multiplying the average daily balance of Chargeable Assets for each month by the corresponding BPS (adjusted to a monthly amount by multiplying the annual percentage rate by the number of days in the month divided by 365 days (or, 366 days in the case of a leap year) of the applicable tiers of the schedule of my Authorized agent/Advisor. The ABF for the Billing Period will be the sum of the monthly amounts for said Billing Period. This shall be the ABF

fee billed for said billing period unless the sum is less than the period's applicable minimum Account fee ("Minimum Fee") described below. The ABF shall be charged to an account on or about the seventh day of the second month following the end of each billing period.

Accounts may be subject to a Minimum Fee to be billed on the same day as the ABF. The Minimum Fee does not apply when the ABP Account's ABF for the billing period exceeds the applicable Minimum Fee. The amount charged, if applicable, will be shown on my account statement. The Minimum Fee charged will be reduced by the amount of the ABF charged to the ABP Account. Accounts may also be subject to an annual trade cap and excess trade fee applied to all trades in excess of the trade cap. The trade cap is based on the number of trades executed on all asset types and is calculated on an annual basis at the anniversary of the funding of the account or the establishment of the ABP on the account ("Anniversary Date"). Trade counting is done on a 12-month basis from the account's Anniversary Date. Certain assets may be excluded from the trade cap. For further details, contact your Authorized agent(s)/Advisor(s).

The ABF, Minimum Fee and Trade Cap Fee may be changed by Fidelity in its discretion. I authorize Fidelity to provide notice of my fees or any changes in my fees to my Authorized agent(s)/Advisor(s) and I will be bound by such notice. It is my responsibility to determine from my Authorized agent(s)/Advisor(s) the fees being charged.

I authorize my Authorized agent/Advisor to determine which securities and other property are to be sold and to liquidate or withdraw the securities and other property in each ABP Account, without notice to me, to pay the ABF and any other fees due to Fidelity under this Supplement. Payment of the ABF generally will be made first from free credit balances (from my core money market mutual fund, in the case of IRAs), next from the liquidation of shares of money market funds, and finally from the liquidation of any remaining securities or other property. Transfers into the ABP Account(s) of Chargeable Assets will be subject to the ABF or Minimum Fee, if applicable.

3. Other Fees and Charges. The ABF does not cover all fees and charges that apply to my ABP Accounts. The ABF does not cover brokerage and execution costs associated with Non-Chargeable Assets held in my ABP Accounts or with securities and other property held outside my ABP Accounts. The ABF does not cover certain charges including but not limited to transfer taxes, regulatory and exchange fees electronic fund and wire transfer fees, storage, fabrication and delivery fees for precious metals, auction fees, debit balances, margin interest, certain odd-lot differentials, other charges imposed by law, charges imposed by custodians other than Fidelity, fees in connection with custodial, trustee and other services rendered by a Fidelity affiliate, certain fees in connection with trust accounting, or the establishment, administration, or termination of retirement or profit sharing plans, and fees for other products and services that Fidelity or its affiliates may offer. Customary brokerage and execution costs will apply to purchases and sales of Non-Chargeable Assets in my ABP Account, and these charges may be applied on a per-trade basis. My ABP Account also may be subject to Supplemental Charges and Closing Fees (defined below).

- a. Closing Fee.** Fidelity may charge a fee ("Closing Fee") at the time of the termination of this Supplement or the closing of an ABP Account. This fee is in addition to any IRA termination/liquidation fees that may be applied.
- b. Agency and Principal Trades.** For agency transactions, I will pay the ABF in lieu of the commission, if any, that otherwise would be charged on a per-trade basis. However, I understand that principal transactions will be effected at a net price reasonably related to the prevailing market price and will include a dealer spread (normally the difference between the bid and the offer price). The dealer spread will vary based on a number of factors such as the nature and liquidity of the security. I further understand that Fidelity's affiliate, National Financial Services LLC ("NFS"), generally will receive additional compensation or other benefits

from principal trades because of the dealer spread or because of any gains resulting from changes in the prices of securities and other property held for NFS's own account before sale to, or after purchase from, me. Fidelity will not receive any additional compensation.

c. **Underwritten Offerings.** ABP Fees will be applied to underwritten offerings of eligible individual equities and fixed income securities purchased or held in my ABP Accounts. Underwritten offerings generally will be purchased only at the public offering price, which includes sales compensation. Fidelity's affiliate, NFS, may receive a selling concession or other compensation which is part of the underwriting commission that is described generally in the relevant offering documents. Fidelity will not receive any additional compensation.

d. **Commissions and Other Charges of other Broker-Dealers.** The ABF does not cover commissions, commission equivalents, or other charges on transactions my Authorized agent(s)/Advisor(s) place with broker-dealers other than Fidelity that settle into or from my ABP Account. Any such charges will be separately charged to my ABP Account. ABP Fees will be applied to Chargeable Assets in my ABP Account that are purchased or sold through other broker-dealers but custodied at Fidelity. I understand that my Authorized agent(s)/Advisor(s)' use of Fidelity's Prime Brokerage Services or other trade away programs will involve execution of transactions for my ABP Account by broker-dealers other than Fidelity, and that such transactions will be subject to additional fees charged by Fidelity for its Prime Brokerage Services or other trade-away program. Because I will be charged commissions, commission equivalents, dealer markups, markdowns, or other charges on transactions my Authorized agent(s)/Advisor(s) place with broker-dealers other than Fidelity – which will be in addition to the ABF I pay Fidelity under this Supplement – I recognize that my Authorized agent(s)/Advisor(s) may have an incentive to execute most transactions for settlement into my ABP Account through Fidelity. This incentive could, in some circumstances, conflict with my Authorized agent(s)/Advisor(s)' duties to obtain best execution of transactions for my ABP Account.

4. **Valuation of Chargeable Assets.** For purposes of determining the market value of the Chargeable Assets in my ABP Accounts, securities listed on a national securities exchange will be valued, as of the valuation date, at the closing price on the principal exchange on which they are traded. Securities and other property in my ABP Account will be valued in a manner determined by Fidelity in good faith to reflect their estimated fair market value. Fidelity may use prices obtained from third-party vendors. While Fidelity believes these sources to be reliable, Fidelity's valuation of Chargeable Assets for purposes of this Supplement should not be considered a guarantee of any kind whatsoever of the value of any assets in my ABP Accounts. The actual prices at which securities may be bought and sold may be different from those used for purposes of this Supplement. The ABF and other ABP Fees will apply to short market positions in Chargeable Assets. Chargeable Assets purchased on margin are subject to the ABF and the market value of the Chargeable Assets will not be reduced by the amount of any margin indebtedness or increased by the amount of any credits. I understand that margin is not available on my Premiere Select IRAs (or Premiere Select Roth IRAs).

5. **Acknowledgements.** I understand and agree that:

a. **Special Considerations.** I have determined in consultation with my Authorized agent(s)/Advisor(s) that participation in this ABP arrangement ("ABP Arrangement") is suitable and appropriate for me. **ABP Arrangements are not right for everyone.** In deciding whether this arrangement is appropriate, I have carefully considered, in consultation with my Authorized agent(s)/Advisor(s), all relevant factors, including my past and anticipated trading practices and holdings of Chargeable Assets, my Authorized agent(s)/Advisor(s)' investment strategies and trading patterns (including the frequency of trading and the number and size of the transactions that my Authorized agent(s)/Advisor(s) order for my ABP Accounts), the costs and potential benefits of this arrangement as compared to paying commissions on a per-trade basis, and my investment objectives and goals. I understand that, depending on

the circumstances, the brokerage and execution services offered through this arrangement would be available for less money if I paid commissions and execution costs on a per-trade basis. I have also considered whether this arrangement is appropriate if I primarily intend to hold the types of Chargeable Assets or engage in the trading strategies described below:

- "Buy and Hold" Investors. This arrangement is designed for investors who trade with some regularity and may not be appropriate if I do not intend to trade or intend to make only a small number of trades. It may not be appropriate for me to include in my ABP Account existing securities or other property that I intend to hold for a long time.
 - Short-Term Trading Activity. ABP Accounts are not intended for day trading (i.e., the practice of purchasing and selling or selling and purchasing the same positions in one trading day) or other short-term or excessive trading activity, including excessive options trading. If I engage in trading activities Fidelity views as excessive, I may be subject to additional charges and/or Fidelity may restrict my ABP Account and/or convert it to a transaction based account which shall effectively terminate this Supplement.
 - Prior Commission Payments. I may transfer Chargeable Assets on which I have previously paid a commission or similar fee on a per-trade basis into my ABP Account. The ABF will be applied to these transferred securities even though a commission or other similar fee has previously been charged, and I will consider whether it is appropriate to transfer such securities and other property into my ABP Account.
- b. **Arrangement Is Appropriate for Me.** I have determined, in consultation with my Authorized agent(s)/Advisor(s) that participation in this ABP Arrangement is suitable and appropriate for me. Accordingly, I have carefully considered all relevant factors, including the factors described in this Supplement. I acknowledge that Fidelity has not recommended participation in this ABP Arrangement. I agree that Fidelity is not responsible for determining whether participation in this ABP Arrangement remains suitable or appropriate for me. Rather, such determination is solely mine and my Authorized agent(s)/Advisor(s)' responsibility. Because the relevant factors bearing on the appropriateness of my participation in this ABP Arrangement may change over time, I will periodically reevaluate, in consultation with my Authorized agent(s)/Advisor(s), whether continued enrollment in this ABP Arrangement remains suitable and appropriate for me. I acknowledge that I have been given notice of all fees and other charges related to my having chosen Asset-Based Pricing for my managed accounts. I further represent that all such fees are reasonable in light of the services being provided to me.
- c. **No Investment Advice.** This ABP Arrangement is a pricing alternative, not an investment advisory service. My ABP Account is a brokerage account in which, subject to certain restrictions, Fidelity provides securities brokerage and execution services on a non-discretionary basis for an ABF. Any information or assistance Fidelity provides to me in this ABP Arrangement is solely incidental to Fidelity's business as a broker-dealer and is customarily provided or available without charge where brokerage and execution charges are paid on a per-trade basis. Neither Fidelity nor any of its affiliates or employees is acting or will act as an "investment adviser" as defined in the Investment Advisers Act of 1940 ("Advisers Act") with respect to my ABP Account. The Advisers Act will not apply to the relationship between me and Fidelity (including its affiliates and employees) with respect to my ABP Account. Fidelity is not an "investment manager" and does not provide investment advice within the meaning of the Employee Retirement Income Security Act of 1974 as a result of the services provided under this Supplement, and Fidelity does not, nor will it, render advice or any other services.
- d. **Payments to Affiliates; Multiple Layers of Fees.** Fidelity, its affiliates and employees may receive additional compensation in connection with specific types of Chargeable Assets as described in the Supplement. These Chargeable Assets will also be included for purposes of calculating the ABP Fees. This may result in me paying multiple layers of fees on certain Chargeable Assets.

- e. **Limitation of Liability; Risk Acknowledgement.** All investments involve risk, and certain types of investments involve substantially more risk than others. I (or my Authorized agent(s)/Advisor(s)) will select investments for my ABP Account, and neither Fidelity nor any of its affiliates or employees will have any discretionary authority or control over my ABP Account. Fidelity, its affiliates and employees will execute transactions for my ABP Account only as specifically instructed by me or my Authorized agent/Advisor or other authorized representative. I am responsible for any trades placed in my ABP Account and for all losses arising from or related to my ABP Account.
- f. **Tax Considerations.** The ABF paid in connection with my ABP Account may be considered by the Internal Revenue Service as an investment expense, rather than a transaction charge, which may result in less favorable tax treatment for me. If I sell or redeem Chargeable Assets, including as part of a transfer described in paragraph 5, that sale or redemption of Chargeable Assets may result in adverse tax consequences. Notwithstanding anything herein to the contrary, I understand that distributions from IRAs are subject to ordinary income tax and a possible 10% penalty if I am under age 59½. I understand that Fidelity does not, and will not, offer tax advice and I am encouraged to consult a tax advisor or other qualified professional.
- 6. Duration and Termination.** I agree that, even though I have signed the Client Account Agreement and agreed to this Supplement, Fidelity may refrain from providing the services described in this

Supplement until all of Fidelity's internal procedures for establishing ABP Accounts have been completed and any necessary internal approvals have been obtained. This Supplement will become effective when accepted by Fidelity. Either party may terminate the Supplement. Fidelity will accept verbal termination instructions from me directly or my Authorized agent(s)/Advisor(s). In the event of the termination of an ABP Account, this Supplement will terminate with respect to such account, but will remain in full force and effect as to any remaining ABP Accounts. Termination of this Supplement will not result in termination of the Client Account Agreement, the terms and conditions of which will continue to remain in full force and effect and the Client Account will be subject to transaction based pricing which shall be communicated to me by my Authorized agent(s)/Advisor(s). In the case of any termination by me, the "Termination Date" is the last business day of the quarter in which my notice is received by Fidelity. In the case of any termination by Fidelity, the "Termination Date" is the date on which any such notice is sent by Fidelity to me. Termination of this Supplement or any particular ABP Account will not affect or preclude the consummation of any trade initiated, or any liability or obligation arising before the Termination Date, including payment of any outstanding fees.

- 7. Amendments.** Fidelity may amend this Supplement on written notice to my Authorized agent(s)/Advisor(s) or me and any amendment will be effective as of the date specified by Fidelity.

This section applies only to accounts established in the Managed Account Solutions (formerly Managed Account Resources Platform ("MAS Platform")): Be advised that the billing cycle and householding features are unique for this platform. The MAS Platform will bill your ABP Fees at the beginning of the quarter on or about the fifteenth day of the quarter. The ABP Fees will be determined by applying the BPS to your Account(s) previous quarter ending account balance. Within the MAS Platform, any Accounts in each of the MAS Programs will be householded for purposes of calculating and billing the ABF.

Client Account Agreement for Managed Accounts



"Client Account 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(s)

This agreement governs the terms under which I may open a Primary Account, as defined below, and multiple Separate Accounts, as defined below, pursuant to which I and/or my Authorized agent(s)/Advisor(s) select one or more Separate Account Managers (SAMs) who manage certain assets that I agreed I may invest from time to time.

Upon approval by Fidelity, I understand that Fidelity will maintain accounts for me and buy, sell or exchange securities or other products in accordance with instructions from me or my Authorized agent(s)/Advisor(s) or SAMs. Certain administrative services will be provided to me or my Authorized agent(s)/Advisor(s) through Fidelity and/or their affiliates. I understand that this Client Agreement governs my accounts 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), SAMs and Fidelity:

Within this Client Agreement, the term "Authorized agent(s)/Advisor(s)" is defined to include my primary Authorized agent/Advisor, any additional Authorized agent(s)/Advisor(s) and Sponsors. I also understand that the term "SAM" is defined to include SAMs identified in the Separate Account Information section of the Application and such other SAMs as I and/or my Authorized agent(s)/Advisor(s) may designate from time to time.

1. I have selected my Authorized agent(s)/Advisor(s), and I and/or my Authorized agent(s)/Advisor(s) have selected my SAMs, 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) or SAMs;
3. Fidelity is authorized to accept and act upon the instruction of my Authorized agent(s)/Advisor(s) regarding the establishment, selection or replacement of SAMs with respect to my accounts in accordance with my Separately Managed Account Application ("the Application") until you receive written notice revoking such authority. I hereby instruct Fidelity to grant a Limited Power of Attorney to the Authorized agent(s)/Advisor(s) named on page 1 of the account application to establish additional new Separate Accounts and their respective Separate Account Managers (SAMs). SAMs will have the same authorization and the accounts will have identical registrations as those initially established as part of this application. In consideration of Fidelity acting on my instruction, I shall indemnify and hold harmless Fidelity 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 as a result of Fidelity's actions in accordance with this document;
4. My Authorized agent(s)/Advisor(s) and SAMs are not affiliated with, or an agent of, Fidelity and are not authorized to act or make representations on Fidelity's behalf; Fidelity and my Authorized agent(s)/Advisor(s) and/or SAM(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) and/or SAM(s) or the frequency of the investment or trading activity in my accounts; I am relying exclusively on my Authorized agent(s)/Advisor(s) and SAMs to collect 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) and/or SAM(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) and/or SAM(s). I represent that my Authorized agent(s)/Advisor(s) and/or SAM(s) have disclosed to me all third-party service providers they use and any data related to my account they make available to third-party providers in the course of managing my account. I further agree that Fidelity will not undertake nor does it have any obligation to review or monitor these third-party providers.
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 their offer or sale would be contrary to local law or regulation.

9. I shall indemnify and hold harmless Fidelity, 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) and SAMs with respect to my accounts;
10. I understand that it is my responsibility to read the prospectus of any mutual fund into which I purchase or exchange.
11. The Authorized agent(s)/Advisor(s) and/or SAM(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) and/or SAM(s) remains in compliance with its obligations.
12. I have consulted with my Authorized agent(s)/Advisor(s) and request that Fidelity open separate brokerage accounts that will be managed by SAMs identified on the Separate Account section of the Application or such other SAMs as I and/or my Authorized agent(s)/Advisor(s) may designate from time to time. These SAMs have been selected through due diligence and screening by myself and/or my Authorized agent(s)/Advisor(s). Each SAM will have trading authorization over the Separate Account the SAM has been designated to manage.

I understand that my Authorized agent/Advisor may journal funds and assets between the primary and/or separate accounts and that the ability to do these journals does not require Asset Movement Authorization.

I acknowledge that my Authorized agent(s)/Advisor(s) have assisted me in determining my investment objectives and have, with or without consulting with me, selected SAMs to manage Separate Accounts according to those objectives, and that the SAMs so chosen will have trading authorization to manage the Separate Accounts to satisfy those objectives. I understand that Fidelity is acting solely as a broker/dealer and custodian and not as an investment advisor on the Separate Accounts or Primary Account. I represent that Fidelity has not provided to me any advice regarding my selection of Authorized agent(s)/Advisor(s) and/or SAM, nor has Fidelity assisted me in the determination of my investment objectives; and I have not relied on Fidelity to do so.

My Authorized agent(s)/Advisor(s) will have trading authorization and, if applicable, Level I or Level II Asset Movement Authorization, as described in Sections 23 and 24 of this agreement, over the Primary Account and all the Separate Accounts identified in the Application. I understand that each SAM will have trading authorization, as described in Section 23 of this agreement, over the Separate Accounts the SAM has been designated to manage. I represent that I have read Sections 23 and 24 of this Agreement, and that I understand the terms trading authorization and asset movement authorization as they are defined in Sections 23 and 24.

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 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. 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 your 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.

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 accounts 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.

Before establishing a Non-Fidelity Prototype Retirement Account, your plan/program must meet the requirements as set forth in the Non-Fidelity Prototype Retirement Application. Depending on your plan type, you may be required to send certain pages of your plan or trust documents to Fidelity. Fidelity provides only the investment vehicle for non-Fidelity prototype retirement plans and does not provide any trustee recordkeeping, tax withholding or tax reporting services. As Trustee, you or your recordkeeper will be responsible for tracking each participant's ownership share in the investment account(s). If you are applying for a Non-Fidelity Prototype Retirement Plan, the trustees/custodians of the plan can grant trading authority as defined in this agreement to the plan participant by completing a Trading Authorization form.

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 Agreement Signatures 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 Margin.

Estate Accounts require a court appointment/letter of testamentary. Additional paperwork may be required. Non-Fidelity Prototype Retirement Accounts are not eligible for Level 2 Asset Movement Authorization. If Level 2 is selected, the request will default to Level 1 authorization.

2. Custodial Accounts

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

If these are custodial accounts, I understand Fidelity will maintain accounts 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 accounts 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.

These accounts are not eligible for Margin.

3. Joint Accounts

If these are joint accounts, "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 accounts 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 accounts.
- Receive money, securities and property of every kind and dispose of the same on behalf of the joint accounts.
- 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 accounts.
- Deal with Fidelity as fully and completely as if he/she alone were interested in these accounts and without notice to the other account participants.
- Elect and terminate account-related products and services.

All obligations and liabilities arising under these accounts 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 accounts 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 share of the tenancy shall vest in the decedent's legal representative. 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 these accounts are trust or business accounts, or these accounts are 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 short-sales), 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: That the Secretary of the Entity 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 Entity, or otherwise, to the Brokers:

- a true copy of these resolutions;
- specimen signatures of each and every person by these resolutions empowered;
- a certificate (which, if required by the Brokers, shall be supported by an opinion of the general counsel of the Entity, 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, to any applicable policies and/or procedures of Fidelity, as well as to any applicable federal or state laws, rules and regulations.

I also understand that all transactions and instructions related to my account are subject to Fidelity's policies and procedures, which may result in Fidelity's refusal to accept or execute any order, instruction or transfer related to my account for any reason at any time in its sole discretion.

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 Exchange Act of 1934, and Rules 144, 144A, 145 and 701 thereunder. 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 accounts. 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 accounts, 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 accounts as may be determined between my Authorized agent(s)/Advisor(s) and Fidelity, and I hereby certify that my Authorized agent(s)/Advisor(s) have informed me of such interest rates, commission rates and other fee schedules, and I agree to be bound thereby.

Use of Funds Held Overnight

As compensation for services provided with respect to accounts, NFS receives use of: amounts from the sale of securities prior to settlement; amounts that are deposited in the accounts before investment; and disbursement amounts made by check prior to the check being cleared by the bank on which it was drawn. Any above amounts will first be netted against outstanding account obligations. The use of such amounts may generate earnings (or "float") for NFS or instead may be used

by NFS to offset its other operational obligations. Information concerning the time frames during which NFS may have use of such amounts and rates at which float earnings are expected to accrue is provided as follows:

- (1) **Receipts.** Amounts that settle from the sale of securities or that are deposited into an account (by wire, check, ACH (Automated Clearing House) or other means) will generally be invested in the account's core account investment vehicle ("Core Transaction Account") by close of business on the business day following NFS's receipt of such funds. NFS gets the use of such amounts from the time it receives funds until the Core Transaction Account purchase settles on the next business day. Note that amounts disbursed from an account (other than as referenced in Section (2) below) or purchases made in an account will result in a corresponding "cost" to NFS. This occurs because NFS provides funding for these disbursements or purchases one day prior to the receipt of funds from the Core Transaction Account. These "costs" may reduce or eliminate any benefit that NFS derived from the receipts described previously.
- (2) **Disbursements.** NFS gets the use of amounts disbursed by check from accounts from the date the check is issued by NFS until the check is presented and paid.
- (3) **Float Earnings.** To the extent that such amounts generate float earnings, such earnings will generally be realized by NFS at rates approximating the Target Federal Funds Rate.

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 accounts 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. And I agree to deliver my securities I have in my possession in sufficient time to be received by Fidelity one day before 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.

10. Money Market Same-Day Trading and Settlement (SDS)

I agree that my use of the Money Market Fund Same Day Settlement Program (SDS) is governed by the terms and conditions in this section. I understand and acknowledge that SDS purchase trades (buy orders) are funded by cash wired into my account on the day I place an SDS purchase trade (buy). I cannot use the available balance in my Core Transaction Account (defined below) to fund an SDS purchase trade. I understand that cash wired into my account and not used that day will settle overnight into my Core Transaction Account and become ineligible to fund SDS purchase trades. Fidelity may cancel any purchase trade if I have not wired cash into my account by the last transmission intervals available for the SDS fund I want to buy. I understand that transmission intervals are determined by Fidelity and the applicable fund company at their discretion. Sale/redemption (sell order) proceeds will not be released to me until the wire is received by Fidelity. All orders must be placed during trading hours; overnight orders will not be accepted. Once an order has been transmitted to the fund company by Fidelity, it cannot be canceled. Retirement accounts are not eligible for this program.

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 Transaction 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 certificate 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 immediately after its 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 accounts, unless I have authorized on the application to direct all immediate written trade confirmations to my Authorized agent(s)/Advisor(s) and/or SAMs 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) and/or SAMs. I acknowledge my Authorized agent(s)/Advisor(s) and/or SAMs are my fiduciaries and have investment discretion over the accounts, that Fidelity has no responsibility for the trading activity in the accounts or for monitoring the trading in my accounts, and that Fidelity's role is limited to carrying out my Authorized agent(s)/Advisor(s) and/or SAMs(s) instructions relating to the trading activity and investments in my accounts. I can revoke these instructions with written notice to you. The brokerage statement will detail: securities bought or sold in my securities accounts, 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) and/or SAMs in lieu of sending them to me, I acknowledge that I will not receive prospectuses on securities held in my accounts and that it is my responsibility to evaluate the appropriateness of trading decisions made by my Authorized agent(s)/Advisor(s) and/or SAMs.

14. Extraordinary Events

Fidelity shall not be liable for loss caused directly or indirectly by government restrictions, exchange or market rulings, suspensions 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 me on an annual basis.

Fidelity receives 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 on-line trading systems cannot specify a particular market center for execution.

17. 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.

18. 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.

19. 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 uncalled 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.

20. 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 this Client Agreement as they are today and as they are 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) and/or SAMs 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 accounts. 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 accounts to your successors and assigns, and this agreement shall be binding upon my heirs, executors, administrators, successors and assigns.

21. Core Transaction Account

Amounts contributed and received may be invested while awaiting reinvestment in a free credit balance which is a taxable income-earning account (note, this is a different option from the Intra-day Free Credit Balance described in this Agreement), the Bank Deposit Sweep Program, the money market mutual fund I choose, or any other fund Fidelity makes available (the "Core Transaction Account") subject to prior payment by me, 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 when required. I agree to indemnify and hold Fidelity harmless for any actions that might result from Fidelity changing my core transaction account option. My account statement details all activity in the Core Transaction Account. This is provided in lieu of a confirmation that might otherwise be provided by Fidelity 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. I acknowledge that I have received the description of the Core Transaction Account and available options in the Account Application and Agreement, including Fidelity's right to change the options available to me, and consent to having free credit balances held or invested in the Core Transaction Account.

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.

I understand and agree that Fidelity may change my core account selection with notice to me. I may make a different core account selection from available options. I can contact my Authorized agent/Advisor or Fidelity to change my core account option.

Fidelity may change the interest rates and annual percentage yields (APY) for a Bank Deposit Sweep Program and the money market mutual fund options available for the Core Transaction Account without prior notice to me. Fidelity will notify me of changes to the terms and conditions of products available through the Core Transaction Account. The notice will describe the new terms, conditions or products. I may ask Fidelity to remit my available cash balances to me, or place them in another core account option for which I am eligible.

If my account is eligible (as defined in the Bank Deposit Sweep Program (BDSP) Disclosure documents), and a BDSP is available, a BDSP may be selected as the Core Position in my Account. If elected by me or my Authorized agent/Advisor at any time, the cash balance in my core account will be swept to an FDIC insurance-eligible interest-bearing account at a Bank(s), subject to applicable FDIC insurance coverage limits. A Bank Deposit Sweep Program is not a security and therefore is not protected by SIPC. Funds received into an account are immediately covered by SIPC (up to applicable SIPC coverage limits) and when swept to an FDIC insured account at a Bank, are eligible for FDIC insurance subject to FDIC insurance coverage limits. I understand my account must continue to remain eligible for the BDSP as defined in the BDSP Disclosure documents.

If at any time a Bank Deposit Sweep Program is not available for investment, I understand the core account option will be the then-current default option for that applicable account type until such time as I or my Authorized agent/Advisor elect otherwise.

Each of the Banks in a Bank Deposit Sweep Program are eligible to receive some or all of my cash balances as more fully described within the BDSP Disclosure Documents. Once deposited at a Bank(s), my cash balance is eligible for FDIC insurance subject to applicable FDIC insurance coverage limits. Note that the Bank Lists may be different for each Bank Deposit Sweep Program and for each account I own, and may change from time to time. I may contact my Authorized agent/Advisor or Fidelity at any time to request a copy of the BDSP Disclosure Documents, a Bank List, to obtain the current balances I may have in each Bank or to opt out of any Bank in my list.

For more information about the methodology used to assign a Bank to receive my cash balances, how my cash balances will be swept to and from the Banks on the Bank Lists, interest rates or the relationship between a Bank and Fidelity, including fees paid to Fidelity by the Bank(s), I can refer to the BDSP Disclosure Documents.

Cash balances held on my behalf at a Bank(s) earn a rate of interest that will vary over time. For more information about interest rates I can refer to the BDSP Disclosure Documents. For current interest rates and information about comparable investment options, I can contact my Authorized agent/Advisor or visit Fidelity.com.

IMPORTANT: In the event that my total assets at a Bank (including assets held in multiple accounts at Fidelity Brokerage Services or assets that I hold with a Bank(s) outside of the BDSP) exceed the FDIC insurance limits, my assets in excess of FDIC limits are not covered by SIPC or insured by FDIC.

Notwithstanding the available number of eligible Banks, Program limitations require that deposits made into a Bank Deposit Sweep Program are only eligible for up to a maximum of \$2.5 million in FDIC insurance at any given time (for an individual account) or up to a maximum of \$5 million in FDIC insurance at any given time (for a joint account), subject to the total amount on deposit in an account, applicable FDIC rules (generally, the standard FDIC insurance protects up to \$250,000 per depositor, per depository bank, for each account ownership category; see FDIC rules for details) and other factors (such as up to only \$500,000

per joint account, regardless of the number of account holders). Refer to the Bank Deposit Sweep Program Disclosure Documents. **Deposits over the maximums or limits will not be FDIC or SIPC insured.**

A Bank Deposit Sweep Program is not SIPC insured. Once my cash balance is deposited at a Bank(s), it is no longer covered by SIPC (subject to applicable SIPC rules). The deposit is eligible for FDIC insurance subject to FDIC insurance coverage limits and in accordance with FDIC rules. All of the account holder's assets at a Bank, including assets outside the BDSP, will generally be counted toward the FDIC aggregate limit. In accordance with the BDSP Disclosure Documents, customers are responsible for monitoring their total assets at a Bank to determine the extent of available FDIC insurance.

If I or my Authorized agent/Advisor elect a Bank Deposit Sweep Program, I understand that I am responsible for monitoring my total assets at a Bank(s) including assets held in multiple accounts at Fidelity or assets that I hold with Banks outside of a Bank Deposit Sweep Program to determine the extent of available FDIC insurance. Information regarding deposits at Banks can be found on account statements. All FDIC insurance coverage is in accordance with FDIC rules. For additional information see the Bank Deposit Sweep Program Disclosure Documents or the Bank Deposit Direct Investment Disclosure Document.

Amounts in excess of FDIC limits in any Bank, assets held in multiple accounts at Fidelity Brokerage Services or assets that I hold with Banks outside of a Bank Deposit Sweep Program or a Bank Deposit Direct Investment exceed the FDIC insurance limits, my assets in excess of FDIC limits are not covered by SIPC or insured by FDIC. For more information about FDIC insurance coverage, visit the FDIC website at www.FDIC.gov or call 877-ASK-FDIC.

Core Options for Non-U.S. Customers

If Fidelity determines that I am a non-U.S. customer either at the time I open my account, or at any point in time after I open this account (e.g., as a result of a subsequent change of address) my core account will not operate as described above, but will be subject to the terms and conditions as described below.

New Fidelity Accounts

If I select or default into the Taxable Interest Bearing Option as my core option (or if I subsequently change my election to the Taxable Interest Bearing Option), my core account will operate as otherwise described in this Agreement, except that I may be unable to change my core option election even if other options are available to me.

If I select or default into any option for my core option other than the Taxable Interest Bearing Option, the process of sweeping the Intra-day Free Credit Balance to my core account as described herein will be suspended. As a result, all uninvested cash in my account will be held in the Intra-day Free Credit Balance. I may also be unable to make any change to the option I selected or were defaulted into for my core option during the account opening process, except that I may change my election to the Taxable Interest Bearing Option, if that option is available to me. Should I make that change, my core account will operate as if I selected or were defaulted into the Taxable Interest Bearing Option as my core option during the account opening process (as described in the immediately preceding paragraph).

Existing Fidelity Accounts

If I have an existing account that utilizes the Taxable Interest Bearing Option as my core position (or if I subsequently change my election to the Taxable Interest Bearing Option), my core account will operate as otherwise described in this Agreement, except that I may be unable to change my core option election even if other options are available to me.

If I have an existing account that utilizes any option for my core option other than the Taxable Interest Bearing Option, the process of sweeping the Intra-day Free Credit Balance to my core account will be suspended. This will not affect any balance held in the core position at the time of the suspension. Although, while I will be able to liquidate that position should I elect to do so, I will generally be unable to add to it for so long as Fidelity determines I am a non-U.S. customer, except for automatically reinvested dividends on money market fund positions and the deposit of accrued interest in the case of a bank sweep. As a result, all new deposits to my account or settlement proceeds from transactions in the Account will be held in the Intra-day Free Credit Balance. I also may be unable to make any change to my core option election, except that I may change my election to the Taxable Interest Bearing Option, if that option is available to me. Should I make that change, my core account will operate as if I had an existing account that utilizes the Taxable Interest Bearing Option.

Should Fidelity determine I am no longer a non-U.S. customer, if my account was subject to a suspension, this suspension will be lifted, the Intra-day Free Credit Balance will be swept to my core account and held in the core option that I selected or were defaulted into, and on a going-forward basis my account will operate as otherwise described herein.

During normal hours when the market is open ("Intraday"), any new deposit to my account or settlement proceeds from a transaction in my Fidelity Account are held as a free credit balance (the "Intra-day Free Credit Balance"). Each business day, the Intra-day Free Credit Balance is automatically swept into my core account, where it is handled as described herein. Like any free credit balance, the Intra-day Free Credit Balance represents an amount payable to me on demand by Fidelity. Subject to applicable law, Fidelity may use this free credit balance in connection with its business. Fidelity may, but is not required to, pay me interest on this free credit balance, provided that the accrued interest for a given day is at least \$.0050. Interest, if paid, will be based upon a schedule set by Fidelity, which may change from time to time at Fidelity's sole discretion.

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.

If a check issued to me from my account remains uncashed and outstanding for at least six months, I authorize and instruct Fidelity to cancel the check and return the underlying proceeds to me by depositing the proceeds into my Core Transaction 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 advisor 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. If I select a money market fund, it is a request for a prospectus which will be sent to me or will be available on www.fidelity.com. Making the first investment into that fund is my acknowledgment that I have received and read a prospectus for that fund.

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

22. 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, 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; fourth, 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; and fifth, any securities in any other account at 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.

23. 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.

24. Trading Authorization

A. By opening these accounts, I understand that I am granting my Authorized

agent(s)/Advisor(s) trading authorization over my Primary account and all the Separate Accounts identified in the Application, and I am granting each SAM trading authorization over the Separate Accounts the SAM has been designated to manage. Through trading authorization, I authorize my Authorized agent(s)/Advisor(s) and SAM(s) to execute trades on my accounts, and Fidelity is authorized and directed to accept any trading, servicing, account-related, or other instruction of the Authorized agent(s)/Advisor(s) and SAM(s) on my behalf. Fidelity reserves the right, but is not obligated, to confirm with me any of my Authorized agent(s)/Advisor(s) and SAM(s)'s instructions prior to acting on such instructions, **including requests from my Authorized agent(s)/Advisor(s) to change the address on my account.** The Authorized agent(s)/Advisor(s) and SAM(s) may inquire in and trade in my accounts as specified, and Fidelity is authorized and directed to accept the instructions of the Authorized agent(s)/Advisor(s) and SAMs. The authorization shall be applicable to all assets I hold in the specified account. Except as otherwise provided, my Authorized agent(s)/Advisor(s) and/or SAM(s) are 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) and SAM(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) and SAM(s)'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 only my Authorized agent(s)/Advisor(s) will have the ability to instruct Fidelity to initiate transfers of cash from my bank account to my Fidelity account, based on the completed Electronic Funds Transfer instruction form provided by me to Fidelity.
3. Fidelity is further authorized to act upon my Authorized agent(s)/Advisor(s) and SAM(s)'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) and SAM(s) have trading authorization or to accept or deliver assets pursuant to a separately executed authorization I have granted to my Authorized agent(s)/Advisor(s) and SAM(s) in transactions executed by other Broker/Dealers where Authorized agent(s)/Advisor(s) and SAM(s) have 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.

25. 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 granting Level I asset movement authorization, 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 accounts 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 or Transfer on Death Individual (TODI) account, contributions from this account to any IRA I own at Fidelity, or from this account to any third-party account at Fidelity you have authorized through standing written instructions. Periodic Distribution Plans is a plan which enables scheduled recurring distributions of predetermined amounts from your account as described above.

Level II

By granting Level II asset movement authorization, 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)'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)'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 accounts. Fidelity may require direct instructions from you for transactions over a certain amount.**

A. Upon requests for any account-related activity on my accounts 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)'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) are 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 accounts, in accordance with this agreement or my separate standing instructions. This authorization shall apply only with respect to my brokerage accounts opened with this application. The Authorized agent(s)/Advisor(s) will place no trading orders or conduct activity in my accounts that exceed their authority under this authorization or any other agreement governing the accounts.

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 accounts. 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.

26. 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, and SAMs from the applicable accounts. Fidelity may use money from the Core Transaction Account and/or cash in my accounts to the extent necessary to pay such fees. Fidelity may rely on the fee calculation submitted by Authorized agent(s)/Advisor(s) and SAMs to Fidelity to deduct from my applicable accounts. 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 or 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)/Advisor(s) and/or SAMs'(s) representations or upon the above authorization.

Fidelity, Authorized agent(s)/Advisor(s) and/or SAMs 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.

27. Fidelity Stock Plan Services

If I am a participant in equity compensation plans ("Stock Plans") and associated equity compensation rights under those Stock Plans (collectively "Rights") of my employer (together with its affiliates the "Issuer") for which Fidelity Stock Plan Services provides recordkeeping and administrative services (the "Stock Plan Services"), then with respect to the Stock Plan Services and my individual brokerage account identified to be used in connection with the Stock Plan Services, I agree as follows:

- I acknowledge that the terms of the Stock Plans and of my Rights are determined by the Issuer, and that I have received, reviewed, and understand the information distributed to me by the Issuer in connection with such Stock Plans and Rights, including any applicable prospectus, grant, or enrollment agreement, or other Stock Plan document (collectively "Plan Documents").
- I acknowledge that various federal and state laws or regulations may be applicable to my transactions, including, without limitation, Rule 144 under the Securities Act of 1933 and Section 16(b) of the Securities Exchange Act of 1934, and I agree to conduct these transactions in conformity with all applicable laws and regulations.
- I acknowledge that my rights and obligations with respect to the Rights (including, without limitation, quantities, vesting dates, and expiration dates) are determined under the Plan Documents, and that if any information provided by Fidelity to me (whether verbally or in writing) conflicts with the provisions of the Plan Documents, the information in the Plan Documents will control.
- I acknowledge that certain events may affect my rights and obligations with respect to the Rights (including, without limitation, changes in my employment relationship with the Issuer), and that I am responsible for understanding my rights and obligations with respect to the Rights.
- I authorize Fidelity to act on my instructions (given in writing, by telephone, or electronically) with respect to Rights in connection with the Issuer, including, without limitation, to exercise, purchase shares, or take other actions with respect to the Rights on my behalf, or to hold, transfer, or sell shares in my account.
- I understand that my instructions to Fidelity are irrevocable, except in the case of an unexecuted limit order, which I may attempt to cancel.
- I authorize the Issuer or its agent to rely without further investigation on this authorization as conclusive evidence of my irrevocable election to authorize Fidelity to act on my behalf with respect to the Rights, including exercising my Rights in accordance with and subject to the terms, provisions, and conditions of the Issuer's Stock Plans and the Plan Documents.
- In connection with certain Stock Plans, I may agree to certain contractual limitations on the shares that I obtain through the Stock Plan, including, without limitation, contractual restrictions on my ability to sell securities I obtain in connection with Stock Plans, and I hereby consent to and authorize Fidelity to take actions reasonable and necessary to enforce such contractual limitations in accordance with the Stock Plans and the Plan Documents.
- I authorize Fidelity, the Issuer, and their agents to exchange information regarding the exercise of my Rights and my purchase and sale of shares, including, without limitation, notice of exercise, number of shares, sale date, sale price, and income tax information relating to compensation income and tax withholding in relation to these transactions and subsequent sales, transfers, and dispositions of shares.

- In the case of Rights which are stock options, for any option exercise-and-sell order for which I give Fidelity instructions, I authorize Fidelity to make full payment to the Issuer or its agent for the option exercise price and, when required, tax withholding as instructed by the Issuer.
- Fidelity reserves the right to reject any order to sell shares in my account until shares are properly delivered by the Issuer and deposited into my account.
- I authorize the Issuer or its agent to issue shares in connection with any Rights to Fidelity in street name and to forward the shares (plus any dividend, split, or similar distribution paid by the Issuer or its agent with respect to such shares) directly to Fidelity for my account.
- I acknowledge that the Rights were granted in connection with my employment and, at the time of exercise, purchase, or other direction I give to Fidelity, I will be authorized to exercise, purchase, or take such other action.
- I understand that the Rights and/or the subsequent sale of the shares may have significant tax consequences. I further understand that Fidelity and its agents and employees are not authorized to give me tax or investment advice, and I have consulted such other sources I deem appropriate in connection with my transactions.
- I will indemnify Fidelity for any losses Fidelity may suffer as a result of our compliance with the authorizations set forth herein and any instructions given by me.

28. Assignment

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

29. Termination of Account

My accounts 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 accounts are 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 accounts. Fidelity reserves the right to charge a service fee or close any accounts that fail to maintain minimum activity or balance requirements, and further reserves the right to close any accounts or remit credit balances because of insufficient investment-related activity. Fidelity may periodically review my accounts' 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.

30. 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 in any way resulting from any transaction initiated before receipt of the revocation. I am not relying on Fidelity to keep track of the granting or revocation of trading authorization to SAMs by me and/or my Authorized agent(s)/Advisor(s) from time to time. 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(s)/Advisor(s) and/or SAM(s), and to cease accepting instructions from my Authorized agent(s)/Advisor(s) and/or SAM(s) 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) and/or SAM(s), Fidelity will not be obligated to honor the authorization I have granted to my Authorized agent(s)/Advisor(s) and/or SAM(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.

31. 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, bank deposit sweep, or money market fund balance in my Core Transaction Account will then be automatically applied to my margin debit balance. Further, I have care-fully 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) has 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 accounts may be 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 of 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 preset 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 immediately after its 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. The Fidelity Advisor Base Lending Rate ("FABLR") is set at the discretion of Fidelity with reference to commercially recognized interest rates, industry conditions regarding the extension of margin credit, and general credit conditions. Contact your Advisor to obtain the most recent FABLR base rate. Fed Funds target rate and Call Money rate are both subject to change based on market conditions. Fidelity will apply the Fed Funds target rate and Call Money rate as published in the Wall Street Journal. Should the Targeted Fed Funds rate or Call Money rate represent a range, the high end of the range shall be used for purposes of applying the following schedule. 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. Dollar 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.

Average Debit Balance	Interest to Be Charged Above Base Rate
\$0-\$9,999	2.00%
\$10,000-\$24,999	1.50%
\$25,000-\$49,999	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+	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	2.00%
\$125,000-\$599,999	1.50%
\$600,000-\$1,499,999	0.50%
\$1,500,000 and over	0.00%

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	2.00%
£70,000-£349,999	1.50%
£350,000-£699,999	0.50%
£700,000 and over	0.00%

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	2.00%
\$100,000-\$499,999	1.50%
\$500,000-\$999,999	0.50%
\$1,000,000 and over	0.00%

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	2.00%
650,000 kr-2,999,999 kr	1.50%
3,000,000 kr-5,999,999 kr	0.50%
6,000,000 kr and over	0.00%

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	2.00%
€100,000-€499,999	1.50%
€500,000-€999,999	0.50%
€1,000,000 and over	0.00%

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	2.00%
\$800,000-\$3,999,999	1.50%
\$4,000,000-\$7,999,999	0.50%
\$8,000,000 and over	0.00%

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	2.00%
¥10,000,000-¥49,999,999	1.50%
¥50,000,000-¥99,999,999	0.50%
¥100,000,000 and over	0.00%

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	2.00%
\$1,500,000-\$6,499,999	1.50%
\$6,500,000-\$12,999,999	0.50%
\$13,000,000 and over	0.00%

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	2.00%
\$150,000-\$799,999	1.50%
\$800,000-\$1,499,999	0.50%
\$1,500,000 and over	0.00%

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	2.00%
700,000 kr-3,499,999 kr	1.50%
3,500,000 kr-6,499,999 kr	0.50%
6,500,000 kr and over	0.00%

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	2.00%
350,000 zł-1,699,999 zł	1.50%
1,700,000 zł-3,499,999 zł	0.50%
3,500,000 zł and over	0.00%

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	2.00%
\$150,000-\$699,000	1.50%
\$700,000-\$1,499,999	0.50%
\$1,500,000 and over	0.00%

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	2.00%
R 750,000-R 3,999,000	1.50%
R 4,000,000-R 7,999,999	0.50%
R 8,000,000 and over	0.00%

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 Kronor ("FABLR-SEK").

Daily Debit Balance	Interest to Be Charged Above FABLR-SEK
0 kr-799,999 kr	2.00%
800,000 kr-3,999,999 kr	1.50%
4,000,000 kr-7,999,999 kr	0.50%
8,000,000 kr and over	0.00%

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	2.00%
100,000 Fr-499,999 Fr	1.50%
500,000 Fr-999,999 Fr	0.50%
1,000,000 Fr and over	0.00%

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	4.00%

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, 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 U.S. holiday, then the prior day's interest rate will be used for calculations on that day.

Credit Extended by The Clearing Broker, National Financial Services, LLC.

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.

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. 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	\$8,000
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 debit 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	\$85,000	5.1%	7.1%	\$16.76
Total for billing cycle				\$57.10

Total interest 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.

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

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. Not all securities are marginable and Fidelity reserves the right in its sole discretion to determine whether to extend margin on any securities. 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. The actual amount you can borrow and Fidelity's margin maintenance requirements may vary depending on Fidelity's internal margin policies, which exceed the margin requirements of FINRA and NYSE. Fidelity's margin policies are subject to review and revision at any time in Fidelity's sole discretion. Fidelity reserves the right to alter the terms on your margin loan at any time to comply with changes in Fidelity's policies. 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.

Risks of Borrowing on Margin

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.** Fidelity uses internal methodologies to determine whether there is insufficient equity in your account. This valuation may differ from your valuation and may differ from the valuation that Fidelity is able to obtain if it sells these assets to meet a margin deficiency in your 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 shortfall in the account after such a sale, possibly including Fidelity's costs related to collecting the shortfall. 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). Fidelity may set account or security specific margin requirements on an individual basis and takes into consideration the following factors in determining margin maintenance requirements: (i) market volatility, which may include general market, issuer, industry and country conditions; (ii) the quality and composition of the securities in your account, including issuer capitalization and issuer, industry, liquidity and ownership concentrations; (iii) the quality and composition of your portfolio, including domestic and foreign exchange exposure, fixed-income exposure, frequency of activity in your account and liquidity of your account; (iv) Fidelity's ability generally to obtain financing for its margin loans; and (v) regulatory requirements and applicable law. Fidelity may place different weight on each of these factors, which may result in Fidelity determining, in its sole discretion, to immediately increase your margin maintenance requirement, which will require you to provide additional funds or securities to avoid the forced sale of assets in your account.

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, you and my Authorized agent(s)/Advisor(s) 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, you and my Authorized agent(s)/Advisor(s), 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 securities self-regulatory organization or 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 self-regulatory organization or securities exchange and those rules fail to be applied for any reason, then I shall designate the prevailing rules of any other securities self-regulatory organization or 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 for-bearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this agreement except to the extent stated herein.

Pre-Dispute Arbitration Agreement

Fidelity's review of any of the factors described above may require you to provide additional funds or securities, in an amount determined by Fidelity in its sole discretion, to avoid the forced sale of those securities or other securities in your account.

- **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, checkwriting and similar features with your margin account may increase the risk of a margin call.**
- **Fidelity may use certain securities in your account in connection with short sales and may receive compensation in connection therewith.**

Please contact your authorized agent/Advisor or Fidelity to request additional information concerning Fidelity's margin policies or concerning questions you may have with your margin account.