

PRODUCTS, SERVICES, AND CONFLICTS OF INTEREST

This important disclosure information about Fidelity Brokerage Services LLC ("FBS") is provided to comply with the federal securities laws. It does not create or modify, amend or supersede any agreement, relationship, or obligation between you and FBS (or your financial intermediary). Please consult your account agreement with us and other related documentation for the terms and conditions that govern your relationship with us. Please go to [Fidelity.com/information](https://www.fidelity.com/information) for further information.

Introduction

This document provides retail customers (referred to as "you" or "your") with important information regarding your relationship with FBS (referred to as "we," "us," or "our"), a broker-dealer registered with the U.S. Securities and Exchange Commission ("SEC"), and a member of the Financial Industry Regulatory Authority ("FINRA"), the New York Stock Exchange ("NYSE"), and Securities Investor Protection Corporation ("SIPC"). Within this document, you will find information regarding the products and services FBS offers, including their material limitations and risks. In addition, this document describes our best interest obligations and fiduciary status when we make recommendations for retirement accounts. This document also describes the conflicts of interest that arise in FBS's business, including those conflicts that arise from compensation received by FBS, its affiliates, and its registered representatives ("Representatives"), and how we address those conflicts.

FBS offers brokerage accounts and services for personal investing, including retail, retirement (such as Individual Retirement Accounts ("IRAs")) and cash management services (credit and debit cards, checkwriting, etc.). These brokerage accounts generally allow you to invest in mutual funds, exchange-traded funds, stocks, bonds, options, college savings plans, insurance and annuity products, and more. FBS also offers brokerage accounts and services for Workplace Savings Plans, which are discussed in "Retirement and Other Tax-Advantaged Accounts" below. FBS works with its affiliated clearing broker, National Financial Services LLC ("NFS"), along with other affiliates, to provide you with these brokerage accounts and services.

Your FBS brokerage account ("FBS Account") is self-directed. This means that you or someone you designate are solely responsible for deciding whether and how to invest in the securities, strategies, products, and services offered by FBS. You or your designee are also solely responsible for the ongoing review and monitoring of the investments held in your FBS Account, even if FBS has made a recommendation to you. It is important you understand that FBS is not an investment advisor and is not required to update any previously provided recommendations, and that unless specifically agreed to in writing, FBS will not monitor any investment recommendation made to you or the investments held in your Account. You are responsible for independently ensuring that the investments in your FBS Account remain appropriate given your Investment Profile. Furthermore, for any FBS customer that is a corporation, limited liability company, partnership or other business-related entity, the entity and the authorized person(s) acting for it are solely responsible for directing all of the entity's account activity, including selecting and monitoring its investments, and must do so independent of, and without reliance on, any advice, recommendation or guidance provided by FBS.

When providing brokerage services to you, FBS is required to:

- Have reasonable grounds to believe that any security, investment strategy, or account type that we specifically recommend to you as an individual investor is in your best interest after taking into account factors relevant to your personal circumstances, such as your age, other investments, financial situation and needs, tax status, investment objectives, investment experience, investment time horizon, liquidity needs, risk tolerance, and other financial information you have disclosed to us (your "Investment Profile") and the cost associated with our recommendation (this is our "best interest obligation");
- Ensure that your trades are executed with diligence and competence and seek to provide best execution in light of prevailing market conditions; and
- Treat you in a manner consistent with principles of fair dealing and high standards of honesty and integrity.

There is no minimum required to open an FBS Account, but there are minimums to purchase some types of investments. All transaction charges will be identified to you in the confirmation of a transaction and/or in the account statement FBS sends to you on a periodic basis. Please see the FBS Account Customer Agreement ("Customer Agreement") and the FBS Brokerage Commission and Fee Schedule ("Schedule") for information regarding the transaction fees and other charges that apply to your FBS Account, including trade execution, clearing, and other services provided by our affiliate, NFS, as well as the terms and conditions applicable to your FBS Account, which can be found at [Fidelity.com/information](https://www.fidelity.com/information).

- **FBS Accounts and Intermediaries:** You may have an FBS Account in connection with services provided by an investment advisor affiliated with FBS including Fidelity Personal and Workplace Advisors LLC ("FPWA"), Fidelity Institutional Wealth Adviser LLC ("FIWA") or a third party, such as a registered investment advisor, retirement plan administrator, bank, or family office (collectively referred to as an "Intermediary" or "Intermediary Accounts"). **While FBS and its affiliates provide services to Intermediary Accounts, FBS generally does not provide recommendations to Intermediary Accounts and does not monitor Intermediary Accounts or the investments held therein.** Your Intermediary may offer different investment services and products from those offered by FBS. Please contact your Intermediary for more information on the services offered, conflicts of interest, and the fees you will pay.

How We Recommend Investments

FBS Representatives use various tools and methodologies to help you choose your investments, investment strategies, and accounts. In addition, many of these tools are available to you directly on our websites and mobile applications. FBS tools and methodologies use information you provide about your financial goals, investment objectives, and financial situation ("Investment Profile"). When developing a recommendation that is in your best interest, we consider your Investment Profile as well as the potential risks, rewards, and costs associated with the investment, strategy, or account recommendation. Although cost is a factor that we consider in making recommendations to you, it is only one of several factors. As a result, we do not necessarily recommend the lowest-cost investment option, and lower-cost alternatives might be available with the same, similar, or different risk and return characteristics. In addition, we do not consider every investment, product, or service offered by FBS when making a recommendation; certain investments and products are only available for self-selection (i.e., without an FBS recommendation). We are not obligated to provide a recommendation to you.

Retirement and Other Tax-Advantaged Accounts

We offer a variety of retirement and other tax-advantaged accounts (including IRAs, workplace savings plan accounts, Health Savings Accounts ("HSAs"), and other similar accounts, collectively "Retirement Accounts"). We have a best interest obligation when we provide a recommendation as part of our brokerage services to your Retirement Account.

When we provide investment advice to you regarding your Retirement Account within the meaning of Title I of the Employee Retirement Income Security Act ("ERISA") and/or the Internal Revenue Code ("IRC"), as applicable, we are a fiduciary within the meaning of these laws governing retirement accounts. The way we make money creates some conflicts with your interests, so when we provide such investment advice, we operate under special rules that require us to act in your best interest and not put our interest ahead of yours.

Under these special rules, we must:

- Meet a professional standard of care when making investment recommendations (give prudent advice);
- Never put our financial interests ahead of yours when making recommendations (give loyal advice);
- Avoid misleading statements about conflicts of interest, fees, and investments;
- Follow policies and procedures designed to ensure that we give advice that is in your best interest;
- Charge no more than is reasonable for our services; and
- Give you basic information about conflicts of interest.

The above fiduciary acknowledgement applies solely with respect to the following types of recommendations (each a "Covered Recommendation"):

- **Transfer and Account Recommendations.** From time to time, we may recommend that you transfer or roll over assets from a Workplace Savings Plan to a brokerage or an advisory IRA (or another Workplace Savings Plan). We may also recommend that you transfer assets in your Workplace Savings Plan to an advisory program or transfer IRA assets to an advisory program.
- **Investment Recommendations.** If you have a Retirement Account with us, we may, from time to time, recommend that you buy, sell, or hold securities or other investment property for your Account. We may also recommend that you hire third parties to provide you with investment advice for your IRA.

It is important to understand that we will not be a fiduciary in connection with all of our interactions with you regarding your Retirement Account. Specifically, we provide non-fiduciary assistance and education regarding Retirement Accounts and this information is not intended to be individualized to your particular circumstances and should not be considered as a primary basis for your investment decisions. This type of assistance includes:

- Execution of self-directed, or unsolicited, transactions or trades;
- General descriptions, information and education about our products and services or with respect to plan distribution or rollover decisions;
- Communications that are not an individualized/personalized suggestion for you to take a particular course of action with respect to your retirement assets;
- Assistance for workplace savings plan accounts that are not subject to Title I of ERISA (e.g., certain plans maintained by governmental or tax-exempt employers and non-qualified deferred compensation plans);
- Recommendations with respect to accounts other than Retirement Accounts that you maintain with us; or
- Any communications that are not fiduciary investment advice (as defined by ERISA or the IRC).

Rollovers from an Employer-Sponsored Retirement Plan

You can open or contribute to an IRA with assets that are "rolled over" from a 401(k) or other employer-sponsored retirement plan. Our affiliates provide recordkeeping and other services to employer-sponsored retirement plans ("Workplace Savings Plans") and assets held in a Workplace Savings Plan Account can be rolled over to an FBS IRA. Similarly, assets held in a third-party retirement plan can also be rolled over to an FBS IRA.

If you are a participant in a Workplace Savings Plan, we can provide you with information and/or recommendations regarding your plan distribution options. Certain FBS Representatives can discuss the financial and nonfinancial factors to consider when deciding whether to stay in your Workplace Savings Plan, roll over to another Workplace Savings Plan, or roll over to an FBS IRA. When discussing IRAs in connection with a rollover transaction, Representatives will only discuss the features of an FBS IRA. Other financial services firms may offer rollover IRAs that have different features.

Our plan distribution assistance process can include providing you with information to help you understand the factors to consider and the trade-offs with each distribution option so you can make an informed decision. Our Representatives can answer questions you might have about any of these factors.

If you are a participant in an employer-sponsored retirement plan or maintain an IRA that is not record kept by an affiliate of FBS and you are eligible to roll over retirement assets to an IRA, we can provide you with information regarding the factors that are important for you to consider when deciding whether to remain in your current plan or IRA or transfer all or part of such plan or IRA to an FBS IRA. We do not make recommendations with respect to whether you should roll over from an employer-sponsored retirement plan or IRA that is not record kept by an affiliate of FBS.

Conflicts of Interest

Conflicts of interest arise because the products and services we offer have different costs to you and different levels of compensation earned by us, our affiliates, and our Representatives. Generally, FBS and our affiliates earn more compensation when you select a product or service offered by us or one of our affiliates (i.e., a "proprietary" product or service), as compared to a product or service offered by a third party. FBS may also receive compensation from third parties in connection with the securities you purchase. As a result, when working with you, FBS has a financial incentive to recommend the accounts, products, and services that result in greater compensation to FBS. Most FBS Representatives receive variable compensation based on the type of product or service you select, but FBS Representatives' compensation is not affected by whether you purchase a proprietary product or service, or a similar third-party product or service offered through us.

We seek to address these conflicts in multiple ways. For example:

- We primarily use standardized methodologies and tools to provide advice so that recommendations made for your FBS account are in your best interest, based on your needs and financial circumstances.
- We train, compensate, and supervise FBS Representatives appropriately to provide you with the best client experience, which includes offering products and services that are in your best interest based on your financial situation and needs. As described in the "How We Pay Our Representatives" section below, products and services that require more time and engagement with a customer and/or that are more complex or require special training or licensing typically provide greater compensation to a Representative. Based on these neutral factors, the compensation received by a Representative in connection with certain products and services offered by us or our affiliates, including certain investment advisory programs offered through our investment advisor affiliate FPWA, is greater than the compensation Representatives receive for other products and services that we offer.
- We disclose information to you about any important conflicts of interest that are associated with a recommendation in advance of providing you with a recommendation so that you can make informed decisions.

How We Pay Our Representatives

- FBS takes customer relationships very seriously and has processes in place to help ensure that when we recommend products and services to you, what we recommend is in your best interest. FBS Representative compensation is designed to ensure that our Representatives are appropriately motivated and compensated to provide you with the best possible service, including providing recommendations that are in your best interest, based on your stated needs. This section generally describes how we compensate FBS Representatives. Compensation to FBS and its Representatives for the products and services we offer is described in the "Investment Products and Services" section below.
- Fidelity Representatives receive a portion of their total compensation as base pay—a predetermined and fixed annual salary. Base pay varies between Fidelity Representatives based on experience and position. In addition to base pay, FBS Representatives are also eligible to receive variable compensation or an annual bonus, and certain Representatives are also eligible to receive longer-term compensation. Whether and how much each FBS Representative receives in each component of compensation is generally determined by the Representatives role, responsibilities, and performance measures and is also impacted by the type of product or service you select. These compensation differentials recognize the relative time required to engage with a customer and that more time is required to become proficient or receive additional licensing (for example, insurance and annuity products or investment advisory services) as compared to, for example, a money market fund. Products and services that require more time to engage with a client and/or that are more complex generally provide greater compensation to our Representatives, FBS, and/or our affiliates. Although we believe that it is fair to base the compensation received by our Representatives on the time and complexity involved with the sale of products, this compensation structure creates a financial incentive for Representatives to recommend and that a client maintain investments in these products and services over others. Depending on the specific situation, the compensation received by Fidelity Representatives in connection with you maintaining an FBS Account could be less than the compensation received by Fidelity Representatives in connection with you choosing to participate in a Fidelity advisory program. FBS addresses these conflicts of interest by training and supervising our Representatives to make recommendations that are in your best interest and by disclosing these conflicts so that you can consider them when making your financial decisions.
- For additional information about FBS Representative compensation, please see *Important Information Regarding Representatives' Compensation* at [Fidelity.com/information](https://www.fidelity.com/information).

Investment Products and Services Offered by FBS

General Investment Risks

All investments involve risk of financial loss. Historically, investments with a higher return potential also have a greater risk potential. Events that disrupt global economies and financial markets, such as war, acts of terrorism, the spread of infectious illness or other public health issues, and recessions, can magnify an investment's inherent risks.

The general risks of investing in specific products and services offered by FBS are described below. Detailed information regarding a specific investment's risks is also provided in other disclosure and legal documents we make available to you, including prospectuses, term sheets, offering circulars, and offering memoranda. As stated previously, you are responsible for deciding whether and how to invest in the securities, strategies, products, and services offered by FBS. You should carefully consider your investment objectives and the risks, fees, expenses, and other charges associated with an investment product or service before making any investment decision. The investments held in your Account (except for certificates of deposit ["CDs"] or a Federal Deposit Insurance Corporation ("FDIC") insured deposit account bank sweep) are not deposits in a bank and are not insured or guaranteed by the FDIC or any other government agency.

Fees and Charges

Details regarding the fees, charges, and commissions and/or markups associated with the investment products and services described below are available at [Fidelity.com/information](https://www.fidelity.com/information).

If you work with an intermediary, your intermediary determines with FBS the fees, charges, commissions and/or markups you pay to FBS and its affiliates for their services. Contact your intermediary for more information.

Available Securities

This section generally describes the securities offered by FBS, the fees you will pay, how we and/or our affiliates are compensated, the associated risks and Representative compensation. If you are investing through your workplace retirement plan, the securities available to you will be determined by your plan sponsor and generally do not include all of the securities discussed in this document.

Bonds, Municipal Securities, Treasuries, and Other Fixed Income Securities

FBS offers fixed income securities including, among others, corporate bonds, U.S. Treasuries, agency and municipal bonds, and CDs. You can purchase fixed income securities from us in two ways: directly from the issuer (new issues) in the primary market and through broker-dealers, including affiliates of FBS, in the secondary market. FBS also offers brokered CDs issued by third-party banks.

FBS makes certain new issue fixed income securities available without a separate transaction fee. New issue CDs are also offered without a transaction fee. With respect to fixed income securities purchased or sold through the secondary market, the cost for the transaction (commonly called a "markup" for purchases or "markdown" for sales) is included in the purchase or sale price. In addition to any markup or markdown, an additional transaction charge can be imposed by FBS when you place your order through an FBS Representative, depending on the type of fixed income security you purchase.

FBS or its affiliates receive compensation from the issuer for participating in new issue offerings of bonds and CDs. Information about the sources, amounts, and terms of this compensation is contained in the bond's or CD's prospectus and related documents. FBS or an affiliate could have an ownership interest in certain of the banks participating in the new issue offering of CDs and any such interest will be disclosed to you. For secondary market transactions, FBS and/or its affiliate, NFS, receive compensation by marking up or marking down the price of the security.

In general, the bond market is volatile and fixed income securities carry interest rate risk (i.e., as interest rates rise, bond prices usually fall, and vice versa). Interest rate risk is generally more pronounced for longer-term fixed income securities. Very low or negative interest rates can magnify interest rate risks. Changing interest rates, including rates that fall below zero, can also have unpredictable effects on markets and can result in heightened market volatility. Fixed income securities also carry inflation risk, liquidity risk, call risk, and credit and default risks for both issuers and counterparties. Tax code changes can impact the municipal bond market. Lower-quality fixed income securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. Foreign fixed income investments involve greater risks than U.S. investments, and can decline significantly in response to adverse issuer, political, regulatory, market, and economic risks. Fixed income securities sold or redeemed prior to maturity are subject to loss.

Certain FBS Representatives are compensated in connection with the purchase of fixed income securities in your FBS Account. Representative compensation is not affected by whether the security is purchased or sold as a new issue or in a secondary market transaction and is paid irrespective of whether our Representative recommended the transaction to you. Representative compensation is based on the type of fixed income security that you purchase, with compensation for CDs and U.S. Treasury bonds being lower than for other types of fixed income securities. As a result, these Representatives have a financial incentive to recommend certain fixed income products over others. We address this conflict by providing our Representatives with appropriate training and tools to ensure that they are making recommendations that are in your best interest, supervising our Representatives, and disclosing these conflicts so that you can consider them when making your financial decisions.

Exchange-Traded Products (ETPs)

ETPs include a range of security types, including exchange-traded funds (ETFs) and other securities, which are not considered a form of mutual fund. FBS offers ETFs sponsored by an FBS affiliate and ETPs and ETFs sponsored by third parties.

Generally, FBS does not charge a commission or other transaction fee for ETPs purchased online but will charge you a transaction fee if purchased through an FBS Representative. You will pay a fee on the sale of any ETP, which will be identified in a transaction confirmation sent to you. You can find more information about ETP fees and costs by visiting [Fidelity.com/information](https://www.fidelity.com/information).

FBS and its affiliate NFS receive compensation from BlackRock Fund Advisors, the sponsor of the iShares® ETFs, in connection with a marketing program that includes promotion of iShares® ETFs and inclusion of iShares funds in certain FBS and NFS platforms and investment programs. This marketing program creates an incentive for FBS to recommend the purchase of iShares ETFs. Additional information about the sources, amounts, and terms of this compensation is contained in the iShares ETF's prospectuses and related documents. FBS and its affiliate NFS also have commission-free marketing arrangements with several other sponsors of ETFs under which

we are entitled to receive payments. Certain ETF sponsors also pay FBS and NFS fees in support of their ETFs on Fidelity's platform, including related shareholder support services, the provision of calculation and analytical tools, as well as general investment research and educational materials regarding ETFs.

For the specific risks associated with an ETP, please see its prospectus or summary prospectus and read it carefully.

Certain FBS Representatives are compensated in connection with the purchase of ETPs in your FBS Account, regardless of whether the Representative recommended the transaction to you. Representatives receive no additional compensation for purchases of iShares ETFs versus other ETFs.

Insurance and Annuities

FBS and its affiliates offer proprietary and nonproprietary life insurance and annuities issued by FBS-affiliated insurance companies and third-party insurance companies.

Insurance companies charge fees that are either explicitly disclosed or incorporated into the product's benefits or credits. The fees for these products vary depending on the type of insurance product purchased, any available options selected, and surrender charges incurred, if any. Any explicit fees are disclosed in the applicable prospectus, contract, and/or marketing materials. FBS or its affiliates receive a commission from the issuing insurance companies for sales of their insurance and annuity products.

Life insurance and annuity products are subject to various risks, including the claims-paying ability of the issuing insurance company, which are detailed in the applicable prospectus, contract, and/or marketing materials.

Certain Representatives are compensated in connection with your purchase of insurance and annuity products. This compensation is not affected by the type of insurance or annuity product you purchase or whether you purchase a proprietary or third-party product, but this compensation is higher than the compensation received in connection with the sale of other less complex types of investments offered by FBS. As a result, these Representatives have a financial incentive to recommend insurance and annuity products over less complex investments. We address this conflict by providing our Representatives with appropriate training and tools to ensure that they are making recommendations that are in your best interest, supervising our Representatives, and disclosing these conflicts so that you can consider them when making your financial decisions.

Mutual Funds

FBS offers proprietary mutual funds that do not have a transaction fee or third-party mutual funds that do not have a transaction fee or that FBS makes available on a load-waived basis (collectively "no transaction fee" or "NTF" funds). In addition, FBS offers third-party mutual funds available with a sales load and/or a transaction fee ("transaction fee" or "TF" funds). FBS and its Representatives will only recommend NTF funds, and do not make recommendations regarding TF funds or consider them when making recommendations to you. As discussed below, FBS and its affiliates receive greater compensation for holdings in NTF funds than TF funds.

FBS does not charge a fee for the purchase or sale of NTF funds. FBS will impose a short-term trading fee for sales of all nonproprietary, NTF funds made within 60 days of purchase. For TF funds, FBS charges a fee for all purchases. Load funds have a sales charge imposed by the third-party fund company that varies based on the share class of the fund, which is described in each fund's prospectus.

FBS and its affiliates earn the following compensation from mutual fund transactions:

- FBS affiliates earn compensation from the ongoing management fees for proprietary funds, as identified in the funds' prospectuses.
- FBS or its affiliates receive a portion of the sales load paid to a third-party fund company in connection with your purchase of a load fund.
- FBS and its affiliates receive compensation from certain third-party fund companies or their affiliates for (i) access to, purchase or redemption of, and maintenance of their mutual funds and other investment products on Fidelity's platform, and (ii) other related shareholder servicing provided by FBS or its affiliates to the funds' shareholders. This compensation may take the form of 12b-1 fees described in the prospectus and/or additional compensation such as shareholder servicing fees, revenue sharing fees, training and education fees, or other fees paid by the fund, its investment adviser, or an affiliate. This compensation can also take the form of asset and position-based fees, fund company and fund start-up fees, infrastructure support fees, fund company minimum monthly fees, and fund low platform asset fees.
- FBS and its affiliates also receive compensation through a fixed annual fee from certain third-party fund companies that participate in an exclusive access, engagement, and analytics program. The only third-party fund companies eligible to participate in this program are those that have adequately compensated FBS or its affiliates for shareholder servicing and that have demonstrated consistent customer demand for their funds.

For more information about the specific investment objectives, risks, charges, fees and other expenses, including those that apply to a continued investment in a mutual fund, please read the mutual fund's prospectus carefully. You should also understand that sometimes a third-party fund company makes both a no-transaction-fee share class and a transaction fee share class of a fund available for purchase. In this situation, the expense ratio associated with the TF fund could be lower than the NTF fund. You can find more information about mutual fund fees and costs by visiting [Fidelity.com/information](https://www.fidelity.com/information).

Certain FBS Representatives are compensated in connection with the purchase of mutual funds in your FBS Account, regardless of whether the Representative recommended the transaction to you or if you purchase an NTF or TF fund. Representative compensation is not affected by whether you purchase a proprietary or third-party fund, or by the amount of compensation received by FBS or its affiliates in connection with a proprietary or third-party fund.

Private Funds and Alternative Investments

FBS offers certain proprietary and third-party privately offered funds and other alternative investments.

Investing in private funds and alternative investments are subject to certain eligibility and suitability requirements. The fees for purchasing these types of investments are typically higher than for mutual funds or ETPs. For details regarding a specific private fund or alternative investment, including fees and risks, please read its offering materials carefully.

FBS receives compensation from its affiliates and third parties for distributing and/or servicing alternative investments. FBS affiliates also earn compensation from the ongoing management fees for proprietary alternative investments.

Certain Representatives are compensated in connection with your purchase of proprietary alternative investments, regardless of whether the Representative recommended the transaction to you. Representative compensation, where received, will be higher than the compensation received in connection with the sale of other less complex types of investments offered by FBS. As a result, Representatives have a financial incentive to introduce and assist you with your purchase of proprietary alternative investments over other types of investments. We address this conflict by providing our Representatives with appropriate training and tools to ensure that they are making recommendations that are in your best interest, supervising our Representatives, and disclosing these conflicts so that you can consider them when making your financial decisions.

Stocks and Options

FBS makes available for purchase and sale the stocks of publicly traded companies listed on domestic and international exchanges, as well as options on many of these securities. FBS and its Representatives do not make recommendations regarding stocks or options.

FBS does not charge you a commission for online U.S. stock transactions but will charge you a commission when a stock purchase order is placed over the phone or through a Representative. An activity assessment fee is charged when a stock is sold, either online or through the phone or a Representative. There are also specific commissions, fees, and charges that apply to transactions in stocks listed on international exchanges. Options have a per-contract fee when traded online and a commission and per-contract fee apply if traded over the phone or through a Representative. The per-contract fee and/or commission charged for options strategies involving multiple purchases and sales of options, such as spreads, straddles, and collars, is higher than the fee and/or commission charged for a single options trade. In addition, all options trades incur certain regulatory fees that are included in the Activity Assessment Fee on the transaction confirmation. FBS and/or NFS receives remuneration, compensation, or other consideration for directing customer stock and option orders to certain market centers. Such consideration can take the form of financial credits, monetary payments, rebates, volume discounts, or reciprocal business. The details of any credit, payment, rebate, or other form of compensation received in connection with the routing of a particular order will be provided upon your request. For additional information on our best execution and order entry procedures, please refer to the "Order Routing and Principal Trading by FBS Affiliates" section of this document and to our Fidelity Account Customer Agreement, which you can find at [Fidelity.com/information](https://www.fidelity.com/information).

Stock markets are volatile and can fluctuate significantly in response to company, industry, political, regulatory, market, infectious illness, or economic developments. Investing in stocks involves risks, including the loss of principal. Stocks listed on foreign exchanges involve greater risks than U.S. investments, including political and economic risks and the risk of currency fluctuations, all of which may be magnified in emerging markets.

Options trading entails significant risk and is not appropriate for all investors. Before you make use of options in any way, it's essential to fully understand the risks involved, and to be certain that you are prepared to accept them. Your account must be approved for options trading. Before trading options, please read *Characteristics and Risks of Standardized Options*, which can be found by visiting [Fidelity.com/information](https://www.fidelity.com/information).

For information regarding trading and order routing practices, including compensation, see the "Order Routing and Principal Trading by FBS Affiliates" section below.

Certain FBS Representatives are compensated in connection with the aggregate value of stock held in your account but are not compensated when you purchase stock or make an options transaction.

Additional FBS Account Services, Features, and Types

Checkwriting Services

You can set up checkwriting within your FBS account. Checks are issued through a bank that we have entered into an arrangement with to provide checkwriting services. Checkwriting is not available for certain account types.

Credit and Debit Cards

Credit Cards

FBS has an arrangement with a third-party service provider that allows the service provider to issue several different versions of a co-branded credit card. Most of these credit cards offer cash back rewards, among other features. If you are an FBS customer and choose to have one of these credit cards, you have the option of depositing these rewards into an eligible FBS account. FBS or its affiliates share the revenue attributable to these credit cards with the issuer, and FBS or its affiliates receive additional revenue from the credit card network.

Debit Cards

FBS has entered into an arrangement with third-party service providers that provide FBS customers with a debit card to access the uninvested cash in their FBS Accounts. The service provider charges FBS fees in exchange for its services. However, those fees are offset by revenue generated in connection with customers' use of these cards, and FBS or its affiliates receive additional revenue from the debit card network. FBS or an affiliate could have an ownership interest in certain of the third-party service providers offering debit cards; any such interest will be disclosed to you.

College Savings Accounts/Plans, ABLE Plans, and Other Custodial Accounts

FBS or its affiliates offer a variety of state-sponsored 529 college savings plans ("529 Plans"), at both the state and national level, and ABLE disability account savings plans ("ABLE Plans").

There is no annual account fee or minimum required to open a 529 Plan or ABLE Plan account at Fidelity. Some states offer favorable tax treatment to their residents only if they invest in their own state's Plan. Before making any investment decision, you should consider whether your state or the designated beneficiary's home state offers its residents a Plan with alternate state tax advantages or other state benefits, such as financial aid, scholarship funds, and protection from creditors.

FBS or its affiliates receive program manager fees as well as portfolio management and underlying fund fees from the 529 Plans and program manager fees and underlying fund fees from the ABLE Plans as compensation for services provided to the Plans. The fees associated with these Plans are described in each Plan's Disclosure Document.

Investments in 529 and ABLE Plans are municipal fund securities and are subject to market fluctuation and volatility. See the Plan's Disclosure Document for additional information regarding risks.

Certain FBS Representatives are compensated for sales of 529 and ABLE Plans. This compensation is the same regardless of the 529 or ABLE product you choose to purchase, but this compensation is higher than the compensation received in connection with certain other types of investments offered by FBS, such as money market funds, equities, and CDs. As a result, these Representatives have a financial incentive to recommend these types of Plans over other types of investments. We address this conflict by providing our Representatives with appropriate training and tools to ensure that they are making recommendations that are in your best interest, by supervising our Representatives, and by disclosing these conflicts so that you can consider them when making your financial decisions.

You can also invest on behalf of a minor through a custodial account (also known as an UGMA or UTMA account, based on the Uniform Gifts/Transfers to Minors Acts). Funds in a custodial account are irrevocable gifts and can only be used for the benefit of the minor. Securities discussed in this document can be purchased through these custodial accounts, and our Representatives are compensated in connection with your purchase of such securities.

Fully Paid Lending Program

Subject to certain eligibility and suitability requirements, you may choose to participate in our Fully Paid Lending Program ("Lending Program"). The Lending Program is available to customers holding positions in eligible U.S. equities that are difficult to borrow. You will enter into a separate agreement with our affiliate NFS, if you choose to participate in the Lending Program.

FBS and NFS earn revenue in connection with borrowing your securities and lending them to others in the securities lending market and/or facilitating the settlement of short sales.

Certain FBS Representatives can recommend the use of the Lending Program but are not compensated in connection with your participation in the Lending Program.

Health Savings Account (HSA)

An HSA is a tax-advantaged account that can be used by individuals enrolled in an HSA-eligible health plan to make contributions and take current or future distributions for qualified medical expenses. The Fidelity HSA® is a brokerage account that can be opened directly with FBS or through an Intermediary. For an HSA, FBS and its Representatives will only recommend investment management services provided by FPWA, proprietary mutual funds and mutual funds that participate in the exclusive marketing, engagement, and analytics program as described in the "Investment Products and Services" section above. Note that HSAs offered in connection with your workplace benefits program are described in the "Workplace Savings Plan Accounts" section below.

There are no fees to open an HSA account with FBS, and our Representatives are not compensated when you open an HSA directly with FBS.

Certain of the securities discussed in this document can be purchased through an HSA, and our Representatives are compensated in connection with your purchase of such securities.

IRAs and Other Retirement Accounts

We offer traditional IRAs and Roth IRAs to individual investors to make investments on a tax-advantaged basis. We also offer other retirement accounts for those who are self-employed (Self-Employed 401(k)s, SIMPLE IRAs, etc.) and to small-business owners.

There are no fees to open IRAs or other Retirement Accounts with FBS, and our Representatives are not compensated when you open these accounts. Certain of the securities discussed in this document can be purchased through an IRA or other Retirement Account, and our Representatives are compensated in connection with your purchase of such securities.

Margin

The use of margin involves borrowing money to buy securities. If you use margin to buy eligible securities in your Account, you will pay interest on the amount you borrow. Retirement accounts are not typically eligible for margin.

Margin trading entails greater risk, including, but not limited to, risk of loss and incurrence of margin interest debt, and is not suitable for all investors. Please assess your financial circumstances and risk tolerance before trading on margin. If the market value of the securities in your margin account declines, you may be required to deposit more money or securities to maintain your line of credit. If you are unable to do so, we may be required to sell all or a portion of your pledged assets. Your account must be approved for trading on margin. We can set stricter margin requirements than the industry required minimum and can institute immediate increases to our margin requirements which can trigger a margin call.

FBS Representatives are not compensated in connection with the use of margin in your FBS Account and do not make recommendations regarding the use of margin. Please refer to the Client Agreement, which can be found at [Fidelity.com/information](https://www.fidelity.com/information), for more information concerning margin.

Sweep Options

Your FBS Account includes a “core position” that holds assets awaiting further investment or withdrawal. Depending on the type of account, and how it is opened, the available sweep options made available and presented to you include one or more of the following: Fidelity money market mutual funds, an FDIC-insured bank sweep, or a free credit balance. For more information, please refer to the Customer Agreement at [Fidelity.com/information](https://www.fidelity.com/information). If you work with an Intermediary, only certain core options are available. Contact your Intermediary for more information. If you use a free credit balance, FBS’s affiliates earn interest by investing your cash overnight and can earn additional compensation through the use of unsettled funds that can generate earnings, or “float.” These funds can also be used for other business purposes including funding margin loans. If you use a Fidelity money market fund, FBS’s affiliates earn management and other fees as described in the fund’s prospectus. If your cash is swept to an FDIC-insured deposit bank sweep account, FBS’s affiliates receive a fee from the bank receiving deposits through the bank sweep program. FBS or an affiliate could have an ownership interest in certain of the banks participating in the program and any such interest will be disclosed to you. For more information, please refer to the *FDIC-Insured Deposit Sweep Program Disclosures* document at [Fidelity.com/information](https://www.fidelity.com/information).

Third-Party Lending Solutions

Securities-backed lines of credit are available, which allow you to borrow funds from banks using the securities in your FBS Account as collateral. FBS or an affiliate could have an ownership interest in certain of the banks offering these lines of credit and any such interest will be disclosed to you. FBS Representatives are compensated when you draw down a loan on your securities-backed line of credit.

Additionally, FBS Representatives may refer you to banks in which it or an affiliate have an ownership interest and any such interest will be disclosed to you. FBS Representatives do not receive compensation for such referrals.

Accounts Offered by Affiliates of FBS Charitable Giving

Fidelity Investments Charitable Gift Fund (“Fidelity Charitable”) is an independent public charity that offers the Fidelity Charitable® Giving Account®, a donor-advised fund. FBS and its affiliates provide services to Fidelity Charitable® and are compensated in connection with those services.

Certain FBS Representatives are compensated for referrals to Fidelity Charitable.

Investment Advisory Services

Brokerage accounts and investment advisory services offered to you by FBS and its affiliates are separate and distinct. These offerings are governed by different laws and regulations and have separate agreements with different terms, conditions, and fees that reflect the differences between the services provided. It is important for you to understand that a self-directed FBS brokerage account differs from a discretionary investment advisory service where FPWA or another FBS affiliate is responsible for deciding which investments will be purchased or sold. FPWA also offers nondiscretionary investment advisory services that include financial planning, profiling, and, as appropriate, referrals to third-party investment advisors. Please refer to the “Guide to Brokerage and Investment Advisory Services at Fidelity Investments” (available at [Fidelity.com/information](https://www.fidelity.com/information)) for more information regarding our roles and responsibilities when providing brokerage and advisory services.

Investment advisory accounts typically charge an ongoing fee for the investment, advice, and monitoring services provided which, in the case of FPWA discretionary advisory services, also include costs of brokerage execution and custody. Fees for these investment advisory services vary based on the scope of services provided and the value of the assets for which the services are provided. Information regarding each of the investment advisory programs offered by FPWA, including the fees charged, can be found at [Fidelity.com/information](https://www.fidelity.com/information). FPWA’s discretionary investment advisory services are only provided with respect to the specific accounts or assets that are identified in the agreement(s) you enter into with FPWA. FPWA does not provide investment advisory services for other accounts or assets you have, either at FBS, an FBS affiliate, or with another financial institution.

FBS does not receive separate commissions in connection with FPWA’s discretionary investment advisory services; however, FBS is reimbursed for the brokerage and other services provided to FPWA.

Certain FBS Representatives also act as investment advisory representatives of FPWA. Your Representative will be acting as a registered representative for FBS when providing services to your self-directed brokerage accounts or providing a recommendation for an FPWA investment advisory service. Once a client enrolls in an FPWA investment advisory service, the Fidelity Representative will be providing FPWA services and will be acting as an investment advisory representative for FPWA when providing discretionary and nondiscretionary investment advisory services. FBS Representatives are compensated in their capacity as investment advisory representatives of FPWA when providing investment advisory services to you. This compensation varies based on the investment advisory service you select and can be greater than the compensation received in connection with the sale of other less complex types of investments offered by FBS. As a result, these Representatives have a financial incentive to recommend your enrollment and continued maintenance of an investment in FPWA’s investment advisory services over other types of investments offered by FBS. We address this conflict by providing our Representatives with appropriate training and tools to ensure that they are making recommendations that are in your best interest, by supervising our Representatives, and by disclosing these conflicts so that you can consider them when making your financial decisions. Please review the Program Fundamentals Brochure for the FPWA service being offered to you, which is available at [Fidelity.com/information](https://www.fidelity.com/information), for more information about Fidelity’s compensation and conflicts of interest.

Additionally, FBS's affiliate FIWA offers advisory services to Intermediaries and to retail investors who work with Intermediaries and can be referred by FBS. Generally, you must have a relationship with an Intermediary to receive the advisory services from FIWA. Please refer to FIWA's Form CRS for more information at [Fidelity.com/information](https://www.fidelity.com/information).

Workplace Services

FBS and its affiliates can provide a range of services to your Workplace Savings Plan. These services include investment advisory, transfer agent, brokerage, custodial, recordkeeping, and shareholder services for some or all of the investment options available under your Workplace Savings Plan. FBS can provide you with recommendations with respect to the investments held in your Workplace Savings Plan account as permitted by your plan sponsor, either online or through an FBS Representative. Any such recommendations provided to you will be limited to those investment options selected in your Plan's investment lineup (including investment advisory services offered by FBS's affiliate, FPWA), and will not consider investment options that may be available only through the Plan's self-directed brokerage window.

FBS can provide recommendations concerning a Workplace HSA. Any recommendations provided to you for a Workplace HSA will be limited to investment management services provided by FPWA, proprietary mutual funds, and mutual funds that participate in the exclusive marketing, engagement, and analytics program as described in the "Investment Products and Services" section above. Please refer to your HSA Customer Agreement and our Schedule for additional account maintenance fees that can be charged by your employer.

Our Representatives are not compensated when you participate in a workplace savings plan or open an HSA.

If you have opened an FBS Account in connection with your participation in your employer's equity compensation plan where our affiliate Fidelity Stock Plan Services, LLC, provides recordkeeping and administrative services ("Stock Plan Services"), then FBS will provide you with brokerage account services as described in your Customer Agreement at [Fidelity.com/information](https://www.fidelity.com/information). You are also subject to the terms and conditions of your employer's equity compensation plan, including any applicable prospectus, grant or enrollment agreement, or other documentation. We can also provide information regarding your employee benefits.

FBS can also provide Executive Services to certain employees and/or participants in Workplace Savings Plans and/or through Stock Plan Services. Executive Services typically include customized equity compensation analysis, assistance with retirement planning, income protection, investment strategies, and access to products and services offered by FBS.

Third-Party Services through Marketplace Solutions and Other Programs

We have entered into certain arrangements to make the services of various third-party vendors available to our customers and Intermediaries. These services are generally, but not exclusively, accessed via hyperlinks on our website and mobile apps, as well as application programming interfaces and data transmissions. These connections allow customers and Intermediaries to connect directly with a vendor to obtain that vendor's services. In other cases, we refer and/or introduce Intermediaries to third-party vendors who might be of interest to them. We receive compensation from these vendors when you decide to use their services. This compensation can take a variety of forms, including, but not limited to, payments for marketing and referrals, as well as sharing in a vendor's revenue attributable to our customers' usage of the applicable vendor's products or services.

FBS Representatives are not compensated in connection with these vendor relationships and do not make recommendations regarding the use of these vendors.

Additional Conflicts of Interest

Agreements and Incentives with Intermediaries

If you work with FBS through an Intermediary, you have authorized your Intermediary to enter into an agreement with FBS that includes a schedule of applicable interest rates, commissions, and fees that will apply to your Intermediary Account. In these arrangements, FBS and the Intermediary agree to pricing for the respective Intermediary Accounts based on the nature and scope of business that Intermediary does with FBS and its affiliates, including the current and future expected amount of assets that will be custodied by the Intermediary with an FBS affiliate, the types of securities managed by the Intermediary, and the expected frequency of the Intermediary's trading. Intermediaries select from among a range of pricing schedules and/or investment products and services to make available to Intermediary Accounts. Additionally, FBS can change the pricing, investment products and services, and other benefits we provide if the nature or scope of an Intermediary's business with us, or our affiliates, changes or does not reach certain levels. The pricing arrangements with Intermediaries can pose a conflict of interest for FBS and for Intermediaries and influence the nature and scope of business the Intermediaries obtain from FBS and its affiliates. For more information on the pricing that applies to your Intermediary Account, contact your Intermediary.

In addition, if you work with an Intermediary, FBS or its affiliates provide your Intermediary with a range of benefits to help it conduct its business and serve you. These benefits can include providing or paying for the costs of products and services to assist the Intermediary or direct payment to your Intermediary to defray the costs they incur when they do business. In other instances, Fidelity makes direct payments to Intermediaries in certain arrangements including business loans, referral fees, and revenue sharing. Examples of the benefits provided include (i) paying for technology solutions for Intermediaries; (ii) obtaining discounts on our proprietary products and services; (iii) assisting Intermediaries with their marketing activities; (iv) assisting Intermediaries with transferring customer accounts to our platform and in completing documentation to enroll their clients to receive our services; (v) making direct payments to reimburse for reasonable travel expenses when reviewing our business and practices; (vi) making direct payments for performing backoffice, administrative, custodial support, and clerical services for us in connection with client accounts for which we act as custodian; and (vii) making referral payments to Intermediaries, their affiliates, or third parties for referring business to FBS. These benefits provided to your Intermediary do

not necessarily benefit your Intermediary Account. The benefits and arrangements vary among Intermediaries depending on the business they and their clients conduct with us and other factors. Please discuss with your Intermediary the details regarding its relationship with FBS and its affiliates. Further, FBS administers certain business to business introductory and referral programs to benefit the Intermediaries. As part of these programs, when new business relationships result, from time to time FBS collects program and referral fees.

Order Routing and Principal Trading by FBS Affiliates

When you place a purchase or sale order for individual stocks or bonds in your FBS Account, FBS typically will route the order to its affiliated clearing broker-dealer NFS, which in turn either executes the order from its own account (a "principal trade"), or sends the order to various exchanges or market centers for execution. NFS can also direct customer orders to exchanges or market centers in which it or one of its affiliates has a financial interest. Any order executed for your FBS Account is subject to a "best execution" obligation. If NFS executes the order from its own account through a principal trade, it can earn compensation on the transaction. This creates an incentive for NFS to execute principal trades with its own account. In deciding where to send orders received for execution, NFS considers a number of factors including the size of the order, trading characteristics of the security, favorable execution prices (for example, the opportunity for price improvement), access to reliable market data, availability of efficient automated transaction processing, and execution cost. Some market centers or broker-dealers may execute orders at prices superior to publicly quoted market prices. Although you can instruct us to send an order to a particular marketplace, NFS order routing policies are designed to result in transaction processing that is favorable for you. Please refer to the "Stocks and Options" section of this document for a description of the remuneration, compensation, or other consideration received by FBS and/or NFS for directing customer orders to certain market centers. For additional information on our best execution and order entry procedures, please refer to our Fidelity Account Customer Agreement, which you can find at [Fidelity.com/information](https://www.fidelity.com/information).

FBS Representative compensation is not affected by NFS's order routing practices or whether we execute transactions on a principal basis.

For more information, including copies of any document referenced, please go to [Fidelity.com/information](https://www.fidelity.com/information) or contact your FBS Representative.

RETIREMENT ACCOUNT SUPPLEMENT TO FIDELITY BROKERAGE SERVICES LLC PRODUCTS, SERVICES, AND CONFLICTS OF INTEREST DOCUMENT

How Fidelity Brokerage Services LLC (“FBS”) Can Help You with Your Retirement Accounts

This important disclosure information about Fidelity Brokerage Services LLC (“FBS”) supplements the FBS Products, Services, and Conflicts of Interest document and is provided to comply with applicable federal law. In addition to reviewing and educating you on available options for your workplace savings plan assets after you leave your employer or are eligible for a distribution, this supplement further describes FBS’s best interest obligations when providing investment advice, where applicable, including when making a recommendation regarding options for your workplace savings plan assets after you leave your employer.

FBS can help you in this area in a variety of ways:

- We can help you invest assets held in a Fidelity Individual Retirement Account (“Fidelity IRA”).
- We can also help you with your choices for assets held in a workplace savings plan, such as a 401(k) or 403(b) plan, if you are leaving or have already left an employer. (Workplace savings plans are referred to in this supplement as “plans”; accounts in plans are referred to in this supplement as “Workplace Savings Plan Accounts.”)
- If your Workplace Savings Plan Account(s) are held at Fidelity, we can assist you:
 - with your Workplace Savings Plan Account(s) only, or
 - with all your retirement and other planning needs, including your Workplace Savings Plan Account(s).
- If your Workplace Savings Plan Account(s) are held at a third party, we can provide certain other services.

Important Information about Your Choices after Leaving Your Employer

You generally have four options for your Workplace Savings Plan Account assets after you leave your employer:

- Stay in your Workplace Savings Plan Account
- Roll over to an IRA
- Roll over to another Workplace Savings Plan Account, if available
- Take a cash-out distribution*

*Note that a cash-out distribution from a Workplace Savings Plan Account may be subject to 20% mandatory federal tax withholding.

Additionally, if the distribution is taken before age 59½, an additional 10% early withdrawal tax penalty may apply. Also, following a cash-out distribution, your money won’t have the potential to continue to grow tax deferred unless rolled over to an IRA or another employer plan.

Some plans may allow you to combine these options (for example, rolling over some money and keeping some in your Workplace Savings Plan Account) or offer additional options, such as periodic installment payments. It is important that you understand the specific options available for your Workplace Savings Plan Account assets.

Factors to Consider

You should consider the following factors, including applicable fees and costs, when deciding whether to stay in your existing Workplace Savings Plan Account or roll over to an IRA (or to another Workplace Savings Plan Account, if available):

- **A Workplace Savings Plan Account** may provide features not available outside the plan. While you can’t contribute to the Workplace Savings Plan Account of a prior employer, remaining in the plan (if permitted) lets you keep access to the plan’s investments and continue tax-deferred growth potential. If the following factors are important to you, you may want to consider keeping your assets in a Workplace Savings Plan Account (or rolling over to another Workplace Savings Plan Account, if available).
 - **If you retire early and need access to your plan assets before age 59½:** You can avoid paying the 10% early withdrawal tax penalty on Workplace Savings Plan Account distributions if you leave your job during or after the calendar year you turn 55. (For a public safety employee, these retirement plan withdrawals can begin without penalty as early as age 50.) This exception to the early withdrawal tax penalty is not available for distributions before age 59½ from an IRA.
 - **If you are concerned about asset protection from creditors:** Generally speaking, Workplace Savings Plan Accounts have unlimited protection from creditors under federal law, while IRA assets are protected only in bankruptcy proceedings. State laws vary in the protection of IRA assets in lawsuits. If creditor protection is important to you, this factor favors remaining in (or rolling over to) a Workplace Savings Plan Account.
 - **If you would like to defer Required Minimum Distributions:** Once an individual reaches age 73, the rules for both Workplace Savings Plan Accounts and IRAs generally require the periodic withdrawal of certain minimum amounts known as required minimum distributions or RMDs. If you intend to work past the age of 73, however, keeping assets in a Workplace Savings Plan Account may allow you to defer RMDs until you retire. (Note: If you own 5% or more of the employer, RMD deferral is not available.) Roth accounts will also be exempt from RMD starting in 2024. You should consult with a tax advisor for any tax implications.
 - **If your plan offers unique investment options:** If you want continued access to such options, consider keeping your assets in the Workplace Savings Plan Account. Examples of unique investment options your plan might provide include:

- **Institutional (lower cost) funds/share classes** or **stable value funds** not available outside your plan.
 - **Low-cost managed account options** or a **self-directed brokerage account** with an array of investment options. (Compare whether a self-directed brokerage account would charge the same fees and commissions as charged in an IRA.)
 - **Institutional or group annuities** issued by insurance companies not available outside your Workplace Savings Plan Account. Note that annuities are insurance products, and any income guarantees depend on the annuity provider's financial strength and ability to pay.
- o If you have **appreciated employer stock** in your Workplace Savings Plan Account, there are special issues that you should consider. On the one hand, excessive concentrations in a particular investment, including employer stock, may be risky. On the other hand, transferring or rolling over employer stock to an IRA as opposed to making an in-kind transfer to a non-retirement account, can result in unfavorable tax consequences. Consult your tax advisor for details.
 - o **Special benefits:** If continued participation in your plan provides you with special benefits **such as supplemental healthcare or housing allowances**, that factor would align with retaining assets in your current Workplace Savings Plan Account.
 - o **Plan loans:** If you are paying back a plan loan or need future loans, check your plan's loan rules before deciding what to do with your Workplace Savings Plan Account. Loans are not available from, and cannot be rolled over to, IRAs.
- **An IRA** may provide features and investment options not available for a Workplace Savings Plan Account. IRAs from different providers may have different services and investment options. If the investment options and services available for your Workplace Savings Plan Account do not offer what you need, you may want to consider the options and services available in an IRA, which may include:
 - o **Broader investment options:** An IRA may provide a broader range of investment options than may be available for your Workplace Savings Plan Account. For example, an IRA may offer the ability to invest in individual stocks and bonds or a range of managed account offerings.
 - o **Consolidation:** You may be able to consolidate several Workplace Savings Plan Accounts into an IRA.
 - o **Services:** If you invest through an IRA, you may have access to a range of services and support not available for your Workplace Savings Plan Accounts, including access to various forms of assistance in planning for your retirement and other financial goals.
 - o **Special rules for early withdrawals from an IRA:** If you are under age 59½ and you want to take distributions to cover a first-time home purchase, educational expenses, or health insurance when you are unemployed, you can take certain withdrawals (for a home purchase up to \$10,000 for individuals/\$20,000 for married couples) from your IRA and avoid the early withdrawal penalty. You may also want to consult your tax advisor about your situation, as taxes still apply.
 - **Rolling over to another Workplace Savings Plan Account**, if available, also lets you consolidate your existing and new Workplace Savings Plan Accounts into one plan while continuing tax-deferred growth potential. Investment options vary by plan. Check the rules applicable to your current employer's plan to see if you can roll over from another Workplace Savings Plan Account into that plan.

As you decide among your options, consider the **fees and costs for each option**. There are generally three types of fees that you should consider:

- **Investment expenses:** A range of expenses are associated with investment options that you select. These can be the largest component of overall costs associated with your account.
- **Advisory fees:** If you have selected a managed account or investment advisory service, investment advisory fees are generally charged in addition to underlying investment expenses.
- **Plan or account fees:** There may be a periodic administrative or recordkeeping fee associated with your Workplace Savings Plan Account. In some cases, employers pay for some or all of these expenses. If considering an IRA, there may be a periodic custodial or trustee fee. Fidelity does not currently charge an IRA custodial fee.

Distribution Decision Support for Participants with a Workplace Savings Plan Account Held at Fidelity

When helping you consider your distribution options from a Workplace Savings Plan Account held at Fidelity, our approach is to first assist you in identifying and assessing your needs and preferences. Initially, we ask whether you want to discuss only your distribution options for your Workplace Savings Plan Account or, in the alternative, whether you want to discuss your broader planning and investment needs, including needs related to your Workplace Savings Plan Account. Each approach is discussed below and applies only if your Workplace Savings Plan Account is held at Fidelity.

In either case, we will then help you understand your Workplace Savings Plan Account distribution options by reviewing the factors described in [the two sections immediately above](#). Most participants can decide which distribution option is best for them based on their unique financial situation after reviewing this information and considering the factors that are important to them. If, however, you are not able to select a distribution option, we can make a recommendation based on the information you provide to us. Note that we only consider Fidelity Workplace Savings Plan Accounts and Fidelity IRAs when providing investment advice.

If you request information regarding distribution options for your Workplace Savings Plan Account only:

- We can make a recommendation in your best interest to stay in your current Workplace Savings Plan Account, roll over to another Workplace Savings Plan Account at Fidelity (if you have one), or roll over to a Fidelity IRA. If you identified that one or more of the following "Stay in Plan Factors" apply, we will recommend that you stay in your current Workplace Savings Plan Account or roll over to another Workplace Savings Plan Account, rather than rolling over to an IRA: (1) you terminated employment at or after

age 55 (age 50 for eligible employees) and anticipate needing funds from your Workplace Savings Plan Account before age 59½; (2) creditor protection is important to you; and/or (3) you participate in or are eligible to participate in a plan associated with a tax-exempt organization eligible for special benefits. Otherwise, when considering a rollover, we will base our recommendation on a cost comparison of the following options: (1) staying in your current Workplace Savings Plan Account and investing in the least expensive age-appropriate target date mutual fund available in that plan; (2) if available, rolling over your assets to a new Workplace Savings Plan Account at Fidelity and investing in the least expensive age-appropriate target date mutual fund available in that plan; and (3) rolling over your assets to a Fidelity IRA and investing in Fidelity Go®, which is a Fidelity investment advisory service available in the Fidelity IRA. We will recommend the least expensive of these options. When we make a recommendation, our cost comparison generally considers workplace plan assets, whether your plan offers revenue credits and certain estimated credit assumptions when comparing the cost of those assets between the (1) lowest cost age-appropriate target date fund available in your current or new workplace plan recordkept at Fidelity, and (2) Fidelity Go®. Please note that, when making this recommendation, we will not evaluate any other investment options available for your current Workplace Savings Plan Account (or for any other Workplace Savings Plan Account that may be available to you), nor will we consider any other investment options available through a Fidelity IRA (or other IRA). There may be other investment options that cost more or less than the investments that we will consider.

If you request information regarding your broader planning and investment needs, including your Workplace Savings Plan Account(s):

- We will work with you to develop a plan for your future retirement or other needs; recommend investments that are in your best interest; and, in certain circumstances described below, we can make a recommendation in your best interest to stay in your Workplace Savings Plan Account, roll over to another Workplace Savings Plan Account at Fidelity (if available), or roll over to the Fidelity IRA.
- When we provide you with investment advice in connection with discussions regarding your broader planning and investment needs, we may make a recommendation that you roll over your Workplace Savings Plan Account to a Fidelity IRA when (1) none of the Stay in Plan Factors listed above apply, and (2) we recommend certain investment advisory services available in a Fidelity IRA that are not available to you through your Fidelity Workplace Savings Plan Account. In such circumstances, additional information about the basis for our investment and rollover recommendations will be provided in the enrollment materials for the recommended investment advisory service. In all other circumstances, if our discussion regarding your broader planning and investment needs results in a recommendation about how to invest your assets outside of a Workplace Savings Plan Account, we will provide you with information regarding the investment or service recommended, including information about fees and expenses, as well as information about the **Factors to Consider** described above so that you can make your own decision about whether to roll over the assets in your Workplace Savings Plan Account to a Fidelity IRA.

Distribution Decision Support for Participants with a Workplace Savings Plan Account(s) Not Held at Fidelity

We will not make a recommendation about whether to roll over from your non-Fidelity Workplace Savings Plan Account. We can discuss investment options available through a Fidelity IRA, and, as appropriate, we can recommend investments or advisory services if you choose to open a Fidelity IRA. So that you can make your own decision about whether to roll over the assets in your non-Fidelity Workplace Savings Plan Account to a Fidelity IRA, we can provide you with information regarding any investment or advisory service recommended for a Fidelity IRA, including information about fees and expenses, as well as information about the **Factors to Consider** described above.

Best Interest Rationale for Certain Investment Recommendations

A variety of products and services are available through a Fidelity IRA, including mutual funds, exchange-traded funds, investment advisory services, individual bonds, and annuities. Certain Workplace Savings Plans may make available managed account services. Information regarding these products and services is provided in the [Fidelity Brokerage Services LLC Products, Services, and Conflicts of Interest](#) document. When we recommend certain fee-based investment advisory services, federal rules require that we provide you with the reasons that the recommendation is in your best interest. Our recommendation process begins with understanding whether you want to manage your own investments, or whether you want Fidelity to manage your assets. If you want Fidelity to manage your assets, we will ask you a series of questions designed to identify whether you have unique needs that require more investment personalization than is available through investment in a target-date mutual fund. If so, then based on your need for investment personalization, as well as your identified investment strategy and need for financial planning and support of a Fidelity Representative, we will recommend one of the following advisory services offered by our affiliate, Fidelity Personal and Workplace Advisors LLC, as described below. All recommendations are subject to investment eligibility, which can include meeting certain investment minimums.

- **Fidelity Wealth Services—Wealth Management (“FWS”).** FWS is recommended where you would benefit from a diversified portfolio of mutual funds and ETFs that is actively managed through different market conditions; access to a dedicated Fidelity Personal Investing associate for financial planning and other services; and/or help with broader financial planning across your goals, which can include access to more complex planning topics. See the *FWS Program Fundamentals* for details regarding the services provided and costs of FWS advisory offerings.
- **FWS—Advisory Services Team (“FAST”).** FAST is recommended where you would benefit from a diversified portfolio of mutual funds and ETFs that is actively managed through different market conditions; access to a team of Fidelity Personal Investing associates for financial planning and other services; and/or help with essential financial planning topics including investing, retirement income, buying a home, or reducing debt. See the *FWS Program Fundamentals* for details regarding the services provided and costs of FWS advisory offerings, including FAST.

- Fidelity Strategic Disciplines ("FSD"). FSD is recommended where you would benefit from a portfolio of individual stocks or bonds managed for you, and access to a dedicated Fidelity Personal Investing associate for investment planning and other services. See the *FSD Program Fundamentals* for details regarding the services provided and costs of the FSD advisory offering.
- Fidelity Go ("FGO"). FGO is recommended where you would benefit from a diversified portfolio of mutual funds designed to replicate the performance of relevant market indexes. For clients with at least \$25,000 to invest, FGO may also be appropriate if you desire to couple such a mutual fund portfolio with access to a team of Fidelity Personal Investing associates that can discuss with you foundational financial planning topics, such as budgeting, investing, retirement planning, or reducing debt, or help with other services. See the *FGO Program Fundamentals* for details regarding the services provided and costs of the FGO advisory offering.
- Fidelity Managed FidFolios ("FMF"). FMF is recommended where you would benefit from a portfolio of individual stocks managed for you but do not need access to Fidelity Representatives or help with financial planning. See the *FMF Program Fundamentals* for details regarding the services provided and costs of the FMF advisory offering.
- Fidelity Personalized Planning & Advice at Work ("FPPA") is recommended where you would benefit from a diversified portfolio of investment options from your Workplace Savings Plan investment option lineup actively managed through different market conditions for your retirement investment strategy. In addition, you prefer to have your investments managed so that the level of risk adjusts over time. See the Fidelity® Personalized Planning & Advice at Work Terms and Conditions for details regarding the services provided and costs of the FPPA advisory offering.



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Client Agreement for Managed Accounts

Please retain for your records

In this agreement, "Fidelity," and "you" refer to Fidelity Brokerage Services LLC and National Financial Services LLC and their affiliates, and their employees, agents, representatives, shareholders, successors, and assigns as the context may require; "I," "we," and "account owner" refer to the owner indicated on the account form or duly Authorized agent(s)/Advisor(s); and for any account with more than one owner (such as a joint or trust account), "I," "we," and "account owner" or "account owners" refer to all owners, collectively and individually, or duly Authorized agent(s)/Advisor(s).

1. Important Aspects of the Account(s)

This agreement governs the terms under which I may open multiple Separate Accounts, as defined below, pursuant to which I and/or my Authorized agent(s)/Advisor(s) may 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.

- A. My Authorized agent(s)/Advisor(s) may be a state or federally regulated investment advisor, a state or federally regulated bank or trust company, or another entity that is exempt from registration as an investment advisor under the Investment Advisors Act of 1940.
- B. 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.
- C. All decisions relating to my investment or trading activity shall be made solely by me or my Authorized agent(s)/Advisor(s) or SAMs.
- D. 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, if applicable, 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.
- E. My Authorized agent(s)/Advisor(s) and SAMs are not affiliated with, or an agent of, Fidelity, unless such Authorized agent/Advisor is a Fidelity entity or affiliate. My Authorized agent/advisor is not authorized to act or make representations on Fidelity's behalf.
- F. 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. I understand that Fidelity will process checks only when received in good order from me or my Authorized agent(s)/Advisor(s). I understand that my Authorized agent(s)/Advisor(s) may have its own processes to review checks prior to submitting them to Fidelity on my behalf. I will contact my Authorized agent(s)/Advisors for information on their processes. 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.
- G. Fidelity has no responsibility and will not undertake to review, monitor, or supervise the suitability of the trading decisions made by me, my Authorized agent(s)/Advisor(s), and/or SAM(s), or the frequency of the investment or trading activity in my account, or whether fees negotiated by my Authorized agent(s)/Advisor(s) and/or SAM(s) for Fidelity's services are appropriate, as such responsibility falls solely with my Authorized agent(s)/Advisor(s) and/or SAM(s). My Authorized agent(s)/Advisor(s) and SAM(s) have collected from me such information as is required to determine the suitability of my investment or trading activity, or the appropriateness of applicable fees.
- H. 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.
- I. 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.
- J. 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.
- K. I understand that it is my responsibility to read the prospectus of any mutual fund into which I purchase or exchange.
- L. 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 Advisors 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.
- M. I have consulted with my Authorized agent(s)/Advisor(s) and request that Fidelity open separate brokerage accounts that may 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 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, as applicable, 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. 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 the asset movement authorization granted by me in the Separately Managed Account Application. I understand that each SAM will have trading authorization, as described in Section 31 of this agreement, over the Separate Accounts the SAM has been designated to manage. I represent that I have read Sections 31 and 32 of this Agreement, and that I understand the terms trading authorization and asset movement authorization as they are defined in Sections 31 and 32.

How Fidelity Supports Authorized agent(s)/Advisor(s) and Associated Conflicts of Interest

Fidelity provides Authorized agent(s)/Advisor(s) with a range of support services, incentives, and other benefits (collectively, "Benefits") to help Authorized agent(s)/Advisor(s) conduct its business and serve its customers. The Benefits provided may not necessarily benefit clients' account(s) and present conflicts of interest for Authorized agent(s)/Advisor(s). The following is a description of some of the Benefits that Fidelity makes available. The Benefits vary depending on the business they and their clients conduct with Fidelity and consider various other factors. Fidelity's relationship with an Authorized agent(s)/Advisor(s) can be separately negotiated. To the extent an Authorized agent(s)/Advisor(s) receives Benefits from Fidelity under arrangements with Fidelity, it should disclose these arrangements to its clients. Please contact Fidelity or Authorized agent(s)/Advisor(s) for information about the Benefits and arrangements available to a specific Authorized agent(s)/Advisor(s) in managing accounts through Fidelity and contact the Authorized agent(s)/Advisor(s) directly to further explain any conflicts of interest that may result from the Benefits.

Free or discounted services for Authorized agent's(s')/Advisor's(s') business

Fidelity pays for, and/or provides some Authorized agent(s)/Advisor(s) with access to, Fidelity and third-party products, services, and solutions to help grow its business practices, to provide information and education of industry trends, to create internal efficiencies for Fidelity, and to streamline advisors' operations. These services include, but are not limited to, Fidelity's practice management and consulting services, access and discounts to Fidelity and third-party proprietary products, tools, services, and platforms Fidelity pays some of its affiliates, including eMoney Advisor, and third parties to obtain discounts on products and services for some Authorized agent(s)/Advisor(s). The discounts are negotiated based on various factors, including the Authorized agent's(s')/Advisor's(s') assets under management with Fidelity, the profitability of the Authorized agent's(s')/Advisor's(s') relationship to Fidelity and, at times, non-financial factors such as the Authorized agent's(s')/Advisor's(s') status in the industry. Fidelity also assists some Authorized agent(s)/Advisor(s) with their marketing activities, including, but not limited to, by providing or paying for marketing materials and initiatives, co-sponsoring events, or engaging in joint marketing initiatives.

Transition-related expense payments

Fidelity assists Authorized agent(s)/Advisor(s) in its business, technology, and transitioning client accounts to its platform and in completing documentation to open Fidelity brokerage accounts and enrolling clients in Fidelity services, such as providing or paying for clerical staff to assist in this process or paying account transfer fees or other charges its clients may have to pay when changing custodians or service providers. Fidelity also makes direct payments to some Authorized agent(s)/Advisor(s) in the form of

reimbursements for reasonable travel expenses incurred when reviewing Fidelity business and practices. Fidelity also makes direct payments to some Authorized agent(s)/Advisor(s) for performing back-office, administrative, custodial support, and clerical services for Fidelity in connection with client accounts for which Fidelity acts as custodian. Some Authorized agent(s)/Advisor(s) may already perform, or be obligated to perform, these services when servicing client accounts and receive compensation from clients for the services. To the extent the amount of these direct payments differs based on the types of assets held in client accounts, this differential poses a conflict of interest because the Authorized agent(s)/Advisor(s) have an incentive to favor certain types of investments over others.

Research

Fidelity also offers investment research as an additional resource for Authorized agent(s)/Advisor(s) and provides access to Fidelity representatives to help provide additional support services. These and other services will provide Benefits to Authorized agent(s)/Advisor(s) who receive them and are made available to Authorized agent(s)/Advisor(s) at no fee or at a discounted fee. Fidelity's provision of these services and other Benefits to Authorized agent(s)/Advisor(s) may be based on the Authorized agent's(s')/Advisor's(s') clients placing a certain amount of assets in accounts with Fidelity within a certain period of time. Such arrangements can pose a conflict of interest in connection with an Authorized agent's(s')/Advisor's(s') recommendation or requirement that its clients establish accounts with Fidelity.

Negotiated pricing arrangements and product offerings

Fidelity and an Authorized agent(s)/Advisor(s) agree to a pricing schedule (i.e., transaction-based pricing, asset-based pricing, custody and service fees) for the fees to be paid to Fidelity for the services it provides to client accounts. The pricing schedule is based on the nature and scope of business the Authorized agent(s)/Advisor(s) has with Fidelity, including, but not limited to, the current and future expected amount of the Authorized agent's(s')/Advisor's(s') client assets in Fidelity's custody, the types of securities managed by the Authorized agent/Advisor, the investment products utilized, the asset allocation, and the expected frequency of the Authorized agent's(s')/Advisor's(s') trading. Some Authorized agent(s)/Advisor(s) agree to pricing schedules that are higher than other pricing schedules that are otherwise available in certain circumstances, and/or that limit the investment services and products that are available to its clients. Additionally, Fidelity may change the pricing, investment services and products, and other Benefits it provides if the nature or scope of an Authorized agent's(s')/Advisor's(s') business with Fidelity changes or does not reach certain assumptions or thresholds. In such cases, pricing for the Authorized agent's(s')/Advisor's(s') client accounts, if your Authorized agent(s)/Advisor(s) has such an agreement with Fidelity, may increase to an amount Fidelity decides. These types of arrangements can pose a conflict of interest for Authorized agent(s)/Advisor(s) and may influence the nature and scope of business the Authorized agent(s)/Advisor(s) conduct with Fidelity as well as impact their recommendations or advice they make to clients. For more information on the pricing that applies, clients should contact their Authorized agent(s)/Advisor(s) directly.

Direct payments or benefits

Fidelity provides, from time to time, business loans to Authorized agent(s)/Advisor(s) on commercially reasonable terms that are potentially forgivable to the extent the Authorized agent(s)/Advisor(s) meets certain thresholds during the loan term, including maintaining a certain amount of assets either maintained on, or transferred to, the Fidelity platform. Fidelity also, from time to time, makes payments directly to Authorized agent(s)/Advisor(s), their affiliates, and to third parties on behalf of certain Authorized agent(s)/Advisor(s) for referring new business to Fidelity. Further, Fidelity administers certain business to business introductory and referral programs where, from time to time, it collects a referral fee when new business arrangements result.

Third-party integrations

Fidelity has entered into certain agreements to make the services of various third parties available to Authorized agent(s)/Advisor(s). These services are generally, but not exclusively, accessed via integrations, including, but not limited to, single-sign-on from Fidelity's website, application programming interfaces, and data transmissions. These services allow Authorized agent(s)/Advisor(s) to connect directly with certain third parties to obtain such third parties' services. In some cases, Fidelity receives compensation from these third parties when Authorized agent(s)/Advisor(s) decide to use their services. This compensation can take a variety of forms, including, but not limited to, payments for marketing and referrals, as well as sharing in a third party's revenue attributable to usage of their products and services.

Other

Fidelity may provide information to Authorized agent(s)/Advisor(s) that may be deemed to be the solicitation of a particular security, including proprietary offerings from Fidelity affiliates. In no event does the providing of this information to an Authorized agent(s)/Advisor(s) constitute solicitation of a particular security to the client or account owner by Fidelity, and an Authorized agent(s)/Advisor(s) is responsible for interposing its own judgment when giving recommendations or advice to clients. Any trading decisions are solely between the Authorized agent(s)/Advisor(s) and account owner. Fidelity may accept requests from Authorized agent(s)/Advisor(s) to assist in correcting Authorized agent(s)/Advisor(s)' trade errors. Authorized agent(s)/Advisor(s) may benefit from gains resulting from these trade errors.

To help the government fight financial crimes, federal regulation requires Fidelity to obtain my name, date of birth, address, and a government-issued ID number before opening my account, and to verify the information. In certain circumstances, Fidelity may obtain and verify comparable information for any person authorized to make transactions in an account. Also, federal regulation requires Fidelity to obtain and verify the beneficial owners and control persons of legal entity customers. Requiring the disclosure of key individuals who own or control a legal entity helps law enforcement investigate and prosecute crimes. My account may be restricted or closed if Fidelity cannot obtain and verify this information. Fidelity will not be responsible for any losses or damages (including, but not limited to, lost opportunities) that may result if my account is restricted or closed. Any information I provide to Fidelity may be shared with third parties for the purpose of validating my identity and may be shared for other purposes in accordance with Fidelity's Privacy Policy. Any information I give to Fidelity may be subject to verification, and I authorize Fidelity to obtain a credit report about me at any time. Upon written request, I will be provided the name and address of the credit reporting agency used. You also may monitor or tape-record conversations with me in order to verify data about any transactions I request, and I consent to such monitoring or recording.

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 Fidelity Non-Prototype Retirement Account, your plan/program must meet the requirements as set forth in the Fidelity Non-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 Fidelity non-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 Fidelity Non-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 Accounts require a court appointment/letter of testamentary. Additional paperwork may be required. Fidelity Non-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 the Uniform Gifts to Minors Act ("UGMA") or Uniform Transfers to Minors Act ("UTMA") 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.

I agree that at any time, Fidelity may, in its sole discretion and without prior notice to me, disclose information about the account to the beneficiary. I further agree that when the beneficiary reaches the age of termination, I will undertake to transfer, in an appropriate and timely manner consistent with applicable state law, the custodial property of the account to the beneficiary. In the event that the custodial property of the account is not transferred accordingly, I agree that Fidelity may, in its sole discretion and without prior notice to me, (i) add restrictions to the account to prevent further activity, including trading and/or (ii) in the event I am unable and/or unwilling to transfer the assets, unilaterally transfer the custodial property to the beneficiary. I agree to 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 such restrictions to the account and/or the transfer of the custodial property by Fidelity, including without limitation any claims I may or could have for any expenses incurred in the performance of my custodial duties and/or compensation for services that I have not already deducted from the UGMA/UTMA account prior to such restrictions and/or transfer.

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 notices, confirmations, account statements, shareholder, and any other communications of every kind; and consent to the electronic delivery of such communications in accordance with terms of the Electronic Delivery Agreement, which is incorporated by reference herein.
- 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.
- Designate beneficiaries.

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 percentage 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. I will consult my own legal advisor.

4. Trust, Plan, and Business Account

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); to receive notices, confirmations, account statements, shareholder and communications of every kind on behalf of the trust; and consent to the electronic delivery of such communications in accordance with terms of the Electronic Delivery Agreement, which is incorporated by reference herein; 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.

Please note that Margin privileges on a Fidelity Non-Prototype Account are limited to purchases or sales of securities. Securities purchase on margin may be considered a "debt-financed property" and subject to unrelated business taxable income (UBTI). Any filing or taxes, including UBTI, are the responsibility of You, the account holder; the Plan's trustee; or IRA Custodian. National Financial Services LLC ("NFS") and Fidelity Brokerage Services LLC ("FBS") are not responsible for filing this tax form or remitting the applicable taxes.

The plan's trustee or IRA Custodian is responsible for the administration of the retirement plan or IRA including following the governing plan document or custodial agreement and for additional reporting, tax filing, and disclosures required on this account.

FBS and NFS may not provide necessary information required for me, or my plan's trustee, to complete these additional filings and/or disclosures.

Fidelity Non-Prototype Accounts are not eligible for Non-Purpose Loans.

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 and to receive notices, confirmations, account statements, shareholder and other communications of every kind on behalf of the entity, and consent to the electronic delivery of such communications in accordance with terms of the Electronic Delivery Agreement, which is incorporated by reference herein; 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; and to receive notices, confirmations, account statements, shareholder, and other communications of every kind on behalf of the partnership and set the delivery preferences to electronic or paper for the receipt of such communications 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 or she hereby is authorized, empowered and directed to certify, under the seal of the Entity, or otherwise, to the Brokers:

- (a) a true copy of these resolutions;
- (b) specimen signatures of each and every person by these resolutions empowered;
- (c) a certificate (which, if required by the Brokers, shall be supported by an opinion of the general counsel of the 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. Co-Fiduciaries

If more than one fiduciary is appointed for an estate, a guardian, or a conservator account, the co-fiduciaries represent and agree that they will act in accordance with the applicable appointment documents and state law, including, but not limited to, the authority for each to act separately and without notice to the other co-fiduciaries with respect to instructions each provides to Fidelity.

7. Applicable Laws, Rules, Regulations, and Policies

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. Fidelity reserves the right to restrict my account from withdrawals and/or trades for any reason, including but not limited to if there is a reasonable suspicion of fraud, diminished capacity, or inappropriate activity. Fidelity also reserves the right to restrict my account from withdrawals and/or trades if Fidelity is put on reasonable notice that the ownership of some or all of the assets in the account is in dispute. If I am funding this account from another account, I am aware that if I select an in kind transfer, certain shares may not be transferable. Non transferable shares may be liquidated. I am responsible for confirming the eligibility of shares to be transferred prior to giving funding instructions and understanding any tax or other impact of shares that are liquidated.

I also understand that Fidelity's policy is to not accept orders or instructions via email. Solely at the discretion of Fidelity, and as an accommodation to me, subject to affirmative prior approval from Fidelity, Fidelity may allow me to transmit orders or instructions to Fidelity via Fidelity electronic communications system ("email"); provided, however, that I acknowledge and agree to the following when I elect to transmit electronic orders or instructions: (i) no such order or instruction shall be deemed received or accepted by Fidelity unless and until Fidelity has replied electronically via Fidelity electronic communications system or otherwise in writing affirming that the order or instruction has been received and accepted; (ii) Fidelity in its discretion may reject any email order or wire instruction; and (iii) I am solely responsible for the security and confidentiality of the email order or instruction when I transmit the order or instruction to Fidelity.

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 account. I will comply with such policies, procedures, and documentation requirements with respect to "restricted" and "control" securities (as such terms are contemplated under the Securities Act) as you may require. In order to induce you to accept orders with respect to securities in my account, I represent and agree that, unless I notify you otherwise, such securities or transactions therein are not subject to the laws and regulations regarding "restricted" and "control" securities. I understand that if I engage in transactions that 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.

8. Electronic Delivery

I agree to conduct business with Fidelity and its affiliates electronically, which necessarily includes having my personal financial information transmitted electronically, and to electronic delivery of all documents (including my initial notice of our privacy policy) and communications related to this and all my other Fidelity accounts as detailed in the Electronic Delivery Agreement, which is incorporated herein by reference. I also agree to provide and maintain as current both my mobile number and email address to assist with account security and for the delivery of transactional alerts and communications, and I consent to Fidelity's use of my email address and/or mobile number to message, call, or text me for these purposes. Message and data rates apply and frequency may vary. For help with texts, reply HELP. To opt out of texts, reply STOP. I acknowledge that I can update my contact information through my profile on *Fidelity.com*.

9. Data Security

I agree to keep secure my account number, and will not share any username and password I use in connection with my account with others, including, but not limited to, my Authorized agent/Advisor. I understand that electronic (including wired and wireless) communications may not be encrypted, I acknowledge that there is a risk that data, including email, electronic and wireless communications, and personal data, may be accessed by unauthorized third parties when communicated between me and Fidelity or between me and other parties. I also agree to protect Fidelity against losses arising from my usage of market data and other information provided by third parties.

10. Commissions/Fees/Pricing

I hereby authorize my Authorized agent/Advisor(s) to enter into a schedule of interest rates, commission rates and other fees that Fidelity will charge my account for its services. My Authorized agent/Advisor(s) will direct Fidelity to have my account be subject to an Asset Based Pricing Schedule or a Transaction Based Pricing Schedule [as determined by my Authorized agent/Advisor(s)]. I understand that some accounts that are subject to Transaction Based Pricing will

also be subject to a Custody Fee as determined by my advisor. The Custody Fee will be a flat fee or a fee calculated on the average daily balance of all assets in my account multiplied by the Custody Fee rate, adjusted to a monthly amount and charged quarterly in arrears. The Custody Fee for the quarter will be the sum of the monthly amounts for the quarter. I understand that the Custody Fee is for services Fidelity provides to my account and is in addition to other fees and transaction charges applicable to my account and may be amended from time to time. I represent that my Authorized agent/Advisor(s) has informed me of the pricing schedule applicable to my account and I agree to be bound thereby. I acknowledge, understand, and agree that it is the sole responsibility of my Authorized agent(s)/Advisor(s) to determine whether these applicable fees, as well as any modifications thereto, are appropriate.

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.

11. 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.

12. 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. ET 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.

13. 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 interval 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 cancelled. Retirement accounts are not eligible for this program.

14. Fidelity Equity Dividend Reinvestment Service Agreement

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

Provision of Fidelity Equity 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 Equity 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. ET 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. ET 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.

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). Two (2) 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 Periodic Statements

In lieu of separate immediate trade confirmation statements, all transactions made through the Service will be confirmed on my regular periodic 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. ET 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. ET 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.

Optional Dividends

At times certain issuers that pay dividends may offer shareholders an opportunity to elect to receive stock or cash, or a combination of both. This is known as an "Optional Dividend." The issuer will assign a default if no instruction is received. For example, the default option could be cash, stock or a combination of both. I have the opportunity up until the applicable deadline to make an election to receive the payment of my choice. I have been advised, if I do not make an election prior to the deadline, my account will be assigned a default election based on the dividend reinvestment program instructions I established with respect to my account. **This default election will be utilized in lieu of the issuer's default option being applied to my account.**

Depository Trust Company's (DTC) Dividend Reinvestment Program

For certain securities, dividend reinvestment may occur through the Depository Trust Company dividend reinvestment program. This plan may be utilized if an issuer offers reinvestment at a discount. Eligibility for a security to be enrolled in the DTC Dividend Reinvestment Program or the Fidelity dividend reinvestment program is determined by Fidelity and may change without notice. A dividend reinvestment transaction will post to my account when the shares are made available to Fidelity by DTC. Such transactions are generally posted within 15 days after pay date.

15. 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 to me 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 immediately 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). All account communications for the account being established with this application will be sent to the account address in conjunction with the paper or electronic delivery preference on the account and be deemed to have been received by all account holders at such address.

16. Monitoring My Account and Notifying Fidelity of Errors

As an account owner, I am responsible for monitoring my account. This includes making sure that I am receiving transaction confirmations, account statements, and any other expected communications. It also includes reviewing these documents to see that information about my account is accurate and contains nothing suspicious. In addition, confirmations and statements are legally presumed to be accurate unless I specifically tell Fidelity otherwise. If I have not received a communication I expected, contact Fidelity, then follow up with written confirmation. I agree to notify Fidelity immediately if:

- I placed an order electronically but did not receive a reference number for it (an electronic order is not considered received until Fidelity has issued an acknowledgment)
- I received confirmation of an order I did not place or any similar conflicting report
- There is any other type of discrepancy or suspicious or unexplained occurrence relating to my account

- My password or access device is lost or stolen, or I believe someone has been using it without authorization
- I did not authorize a fee my Authorized agent/Advisor and/or SAM deducted from my Account for its services

If any of these conditions occurs and I fail to notify Fidelity immediately, neither Fidelity nor any other Fidelity affiliate will be liable for any consequences. If I do immediately notify Fidelity, Fidelity's liability is limited as described in this agreement. With any feature or service that is governed by a separate agreement (such as an options trading agreement), note that different policies concerning error resolution and liability may apply, as described in the separate agreement. If, through any error, I have received property that is not rightfully mine, I agree to notify Fidelity and to immediately return the property and any earnings it may have yielded. If Fidelity identifies an error in connection with property I have received from or through us or a Fidelity affiliate and determine it is not rightfully mine, I agree that Fidelity may take action to correct the error, which may include returning such property to the rightful owner.

17. 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(s')/Advisor's(s') and/or SAM's(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.

18. 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.

19. 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.

20. 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 online trading systems cannot specify a particular market center for execution.

21. 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 sipc.org, or call 1-202-371-8300.

22. 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.

23. 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. A more detailed description of the Lottery Process may be accessed by visiting Fidelity.com/callable-securities. You may also request a hard copy of the Lottery Process by writing to National Financial Services LLC, P.O. Box 770001, Cincinnati, OH 45277.

24. Fractional Share Trading

Fidelity's fractional share trading functionality allows me to buy and sell fractional share quantities and dollar amounts of certain securities ("Fractional Trading"). Fractional Trading presents unique risks and has certain limitations that I should understand before placing my first trade.

Trading

Orders to buy or sell may be entered using either a fractional share quantity (e.g., 2.525 shares) or a dollar value (e.g., \$250.00). Share quantities can be specified to three decimal places (.001). Dollar-value orders will be converted into share quantities for execution, again, to three decimal places. In all cases, when converting dollar-value orders into share quantities, the share quantities will be rounded down. For a variety of reasons, including but not limited to this conversion convention, the actual amount of an executed dollar-value trade

may be different from the requested amount. The actual amount of an executed order to buy or sell a dollar value of a security may also be lower than the amount requested due to the deduction of certain commissions, fees (e.g., the Additional Assessment), or taxes. Commissions are calculated on a per order basis and/or based on the number of shares traded. Fractional shares will be treated as whole shares for the commission calculation and any applicable commission charges will apply. I can contact my Authorized agent/Advisor for more information on the commissions and fees that apply to my account. Orders received in good form by Fidelity Brokerage Services LLC (FBS) will be accepted and transmitted to National Financial Services LLC (NFS) for execution. I may attempt to cancel an order, but there is no ability to request that an order be "cancelled and replaced" (i.e., I cannot modify an order once it has been submitted). Instead, I will need to cancel my order and then submit a new one. Fractional Trading supports market and limit orders only for fractional share quantities of a security that are good for that day's trading session, or in the case of an order entered outside of market hours, that are good until the close of the next trading session. Because of this, my ability to buy or sell a security using Fractional Trading may be more restricted than if I were to buy or sell traditional whole share quantities of the same security. In the event of a trading halt of a security, Fractional Trading of that security will also be halted, and my order will be held until trading resumes. However, my order is good only for that day's trading session, or in the case of an order entered outside of market hours, good until the close of the next trading session. If trading does not resume or my order is not executed by the close of that day's Fractional Trading window, it will be cancelled. I can generally trade exchange-listed National Market System ("NMS") stocks using the Fractional Trading functionality. However, certain NMS stocks may not be made available for Fractional Trading, and Fidelity reserves the right to modify the list of eligible NMS stocks at any time without notice to me. Any modification to the list of eligible NMS stocks available for Fractional Trading will not affect any fractional share interests previously acquired by me. Additionally, I may not be able to place trades through some of Fidelity's order entry platforms (e.g., Fractional Trading may be available via mobile device and on Fidelity.com but not through the live representative channel, or if I work with an investment adviser or Family Office, may not be available through those representatives or the platforms they use).

Trade Execution

FBS will act as my agent and NFS will act in either a principal or a mixed capacity (i.e., both as agent and principal) when executing my order. The whole share component of any order will be executed by NFS as agent at the price NFS receives in the market. The fractional share component of any order will be executed by NFS as principal against its principal account. When a fractional share interest is allocated to my account, NFS will maintain custody of the whole share in which I have the fractional interest. Any fractional share interest in the whole share not allocated to my account may be allocated to other customers or to NFS as principal. All orders with a fractional share component will be marked "Not Held," which gives Fidelity the time and price discretion to execute the order without being held to the security's current quote. In connection therewith, each time I submit an order to buy or sell a fractional share quantity or dollar amount of a particular security, I authorize NFS to "work the order." If I do not wish my order to be handled on a Not Held basis, I should not engage in Fractional Trading. In the case of a sale of the fractional component of any order, that sale will be executed at the then current National Best Bid or Offer ("NBBO"). I am aware that this price may be higher or lower than the price at the time I place my order. In the case of a purchase of the fractional component of any order, if NFS has sufficient principal inventory, that purchase will also be executed at the then current NBBO. However, if NFS does not have sufficient principal inventory, that purchase will be executed at the price received in the market. For orders placed prior to market open, Fidelity may wait for the primary exchange to open before commencing trading in a particular security. When trading as principal for its own account, NFS may make a profit or incur a loss on each trade. Additionally, NFS may be required to correct or adjust trades that (for a variety of reasons) have been executed in amounts that either exceed or fall short of the amounts requested. These trade corrections and adjustments

could arise in connection with either or both of the agency and principal components of the executed orders. Regardless, these trade corrections and adjustments will be executed by NFS in a principal capacity, and when trading as principal for its own account, NFS may make a profit or incur a loss.

Shareholder Rights

Fractional share interests in an NMS security generally have different rights from full share interests of the same NMS security. I will read the following information carefully to understand my rights regarding my fractional share interests. Fractional share positions cannot be transferred or certificated. The Automated Customer Account Transfer System does not support fractional share positions. If I want to transfer my account or specific share positions to another broker, I must sell my fractional positions and transfer the cash proceeds. I hereby direct NFS, and NFS hereby agrees, not to vote or take any discretionary or voluntary action with respect to any fractional share position. Furthermore, I acknowledge that I cannot vote or take any discretionary or voluntary action with respect to any fractional share position. Accordingly, while NFS may notify me of issuer meetings, NFS will not solicit proxies in connection with fractional share positions, and neither my Authorized agent/Advisor nor I can vote proxies for fractional share positions. Fractional shareholders will not be able to provide instruction in connection with voluntary corporate actions (e.g., tenders), except for optional dividends; and NFS will not vote proxies for any fractional shares it holds as principal and will not affirmatively participate in any voluntary corporate actions.

In the case of a dividend paid on, or a redemption of, an NMS security, the dividend or redemption proceeds will be passed along to me in proportion to my ownership interest, inclusive of fractional share interests. NFS will only support payments that are equal to or greater than \$0.01 per share. Amounts smaller than that, or nondivisible amounts (based on the .001 rounding convention described above), will be handled in accordance with the process described in the section titled "Undistributable Interests" below.

Holders of fractional share positions may participate in dividend reinvestment programs ("DRIPS") to the same extent as if they owned a full share (adjusted for their fractional share interest in the dividend). In the event that the amount is too small to be reinvested (based on the .001 rounding convention described above), but large enough to be distributed as cash (i.e., at least \$0.01), it will be paid to me. Smaller amounts will be handled in accordance with the process described in the section titled "Undistributable Interests" below.

For mandatory reorganizations, such as mergers and acquisitions, or other involuntary corporate actions, such as stock splits or stock dividends, typically NFS will distribute interests in proportion to my ownership interest, inclusive of fractional share interests. NFS will distribute interests in fractional amounts to three decimal places. Amounts smaller than that, or nondivisible amounts, will be handled in accordance with the process described in the section titled "Undistributable Interests" below. The foregoing notwithstanding, these situations are in all cases subject to the terms contained in the materials prepared by the issuer describing the corporate action, as well as NFS's applicable policies and procedures, which may result in a different outcome from what is described herein. Because of the unpredictable nature of corporate actions, there may be situations that arise that are not described previously. Generally, these situations will be handled in accordance with the concepts applicable to dividends and reorganizations. Interests will be divided and distributed where possible in proportion to my ownership interest, and anything that cannot be divided will be handled in accordance with the process described in the section titled "Undistributable Interests" below. The foregoing notwithstanding, these situations are in all cases subject to the terms contained in the materials prepared by the issuer describing the corporate action, as well as NFS's applicable policies and procedures, which may result in a different outcome from what is described above.

Undistributable Interests

NFS will only support payments that are equal to or greater than \$0.01 per share. Amounts smaller than that, or nondivisible amounts (based on the .001 rounding convention described above), will not be distributed. Instead, it is generally but not always the case that

when the aggregate value to be distributed is less than or equal to \$1.00, it will be retained by NFS, and when it exceeds \$1.00, it will be escheated.

Tax Treatment

NFS and I agree to treat me as the owner of all fractional share interests allocated to my account, to file all tax returns in accordance with such treatment, and to take no action inconsistent with such treatment.

Additional Considerations

Fractional share positions may be illiquid. NFS does not guarantee that there will be a market for fractional share positions and makes no representations or warranties about its ability or willingness to continue to trade as principal in fractional share quantities. If my account is closed, my fractional shares may be liquidated and the proceeds distributed to me as cash. The fractional share component of certain orders may not be eligible for "Price Improvement." Also, Price Improvement will operate differently, and in some situations less advantageously, in connection with Fractional Trading from the way it would if I were trading in whole share quantities. Additionally, because in certain situations Price Improvement on the fractional share component of an order will affect the execution price rather than the share quantity of an order, the effect of the improvement on a dollar-value order in those situations will be to increase or decrease the value of the order outside of what was requested. If my account has been approved for margin, notwithstanding the terms of the Customer Agreement, Fidelity will not lend (hypothesize) my fractional share positions. If I hold fractional share positions in my account (these positions come about for a variety of reasons, such as DRIPs or corporate actions), it has been Fidelity's practice to automatically sell these holdings when I place an order to sell my entire whole share position ("Auto-liquidate"). The first time I place an order to buy or sell a security using the Fractional Trading functionality, Fidelity will turn off the Auto-liquidate feature in my account so that going forward, those positions will be handled like any other fractional share position acquired using Fractional Trading (i.e., I will need to affirmatively sell those fractional share positions if I wish to sell my entire position in that security).

25. Fidelity Crypto® for Wealth Managers

The following terms govern when a Fidelity Crypto® for Wealth Managers account with Fidelity Digital Assets Services, LLC ("FDA") ("Crypto Account") is opened and linked to a Fidelity brokerage account ("Brokerage Account").

I understand that while FBS, NFS, and FDA are affiliates of one another, they provide separate and distinct services to me. In particular, my Crypto Account is an account for the custody and trading of digital assets, and is provided by FDA, a New York state-chartered, limited liability trust company (NMLS ID 1773897). Digital assets are not insured by the Federal Deposit Insurance Corporation ("FDIC") nor the SIPC. Brokerage services in support of securities trading are provided by FBS, and related custody services are provided by NFS, each a registered broker-dealer and member NYSE and SIPC. Neither FBS nor NFS offers digital assets; acts as my or FDA's agent for digital asset transactions; receives, acquires, or holds any of my digital assets; nor is otherwise responsible for transactions in my Crypto Account with FDA.

I understand linking my Brokerage Account with my Crypto Account will facilitate money movement functionality between these accounts, and authorize Fidelity and FDA, as the case may be, to take such steps as may be necessary to link my accounts. I further authorize Fidelity to share any information about my account with FDA in order to facilitate the linkage of accounts, servicing, and/or the movement of money between accounts.

I authorize Fidelity to accept instructions from my Authorized agent/Advisor to request the transfer of funds from my Brokerage Account to my Crypto Account, as well as the authority to direct FDA to transfer funds from my Crypto Account to my Brokerage Account. I further authorize Fidelity to follow any such transfer instructions from FDA. All funds in my Core Transaction Account will be subject to such transfers, without cap or limit. I understand that my Authorized agent/Advisor and I are not permitted to use funds borrowed from FDA, FBS, or any of their affiliates ("Fidelity Entities") to purchase digital assets. I agree that I will not borrow funds from any Fidelity Entity and use such funds to fulfill a trade order to purchase digital assets.

I shall indemnify and hold harmless Fidelity from and against any and all losses, claims, or financial obligations, including attorneys' fees, that may arise from the decision to open a Crypto Account, any activity in my Crypto Account, and Fidelity accepting and processing transfer instructions from FDA, from me or my Authorized agent/Advisor, as the case may be.

26. Integrated Wealth Management

Provisions of Enrollment of Account into Integrated Wealth Management

Upon my enrollment, I agree to the following terms and conditions governing the enrollment of accounts on the trust accounting system (the "Enrollment"), to be provided by Fidelity and its affiliate, National Financial Services LLC ("NFS") (collectively, "you" or "Fidelity"):

My Enrollment will be activated one to two business days after receipt of a properly executed Enrollment form. I agree to be bound by the terms and conditions noted herein, as well as any other agreements between us that apply to my brokerage account.

I have discussed with my Authorized agent(s)/Advisor(s) and confirm that my Authorized agent(s)/Advisor(s) is authorized to complete, execute, and/or process any and all related forms, paperwork, and other documentation necessary for me to enroll into Integrated Wealth Management and acknowledge and agree that my Enrollment authorizes you to perform the services I have selected in my brokerage account application for the accounts being enrolled.

I understand and acknowledge that Fidelity is not acting as a trustee, co-trustee, or agent for the trustee(s), and therefore is not acting in a fiduciary capacity to the account.

You reserve the right to terminate or amend my Enrollment at any time. Prior to the effective date of any such material amendments, you shall send prior written notice thereof to me and/or my Authorized agent/Advisor.

I understand that I must notify Fidelity in writing to terminate my Enrollment.

After Fidelity receives such written notice, Fidelity will remove the account from the trust accounting system within a reasonable time period.

I agree to indemnify and hold harmless Fidelity and its affiliates and all officers, directors, employees, successors, and assigns from and against all financial obligations that may arise from any failure to comply with these terms and conditions, or from any act or omission of my Authorized agent/Advisor with respect to this Enrollment.

Eligible Accounts

Fidelity Brokerage customers who maintain a cash, margin, or retirement brokerage account are eligible.

Eligible Securities

Most securities held in a brokerage account are eligible. Additionally, recordkeeping and reporting services are available for any securities, tangible and intangible property that are not held in a Fidelity brokerage account ("Assets Held Away"). Valuations for Assets Held Away will be provided to you by me or my Authorized agent/Advisor, and I understand that Fidelity can neither validate nor certify the accuracy of these valuations.

Principal and Income Accounting

Financial transactions involving eligible securities in a brokerage account will be separated into principal and income components based on general accounting rules applicable to many trusts. The trust accounting system will account for principal and income in all trust accounts, and non-trust accounts as specified, based on rules below.

a. Cash Receipts into a Brokerage Account

Fidelity will credit the principal portfolio of my account for:

- amounts or other property received from the sale, maturity, or exchange of securities.
- amounts received in one distribution or a series of related distributions in exchange for part or all of an account's interest in a security.
- amounts received from a security that is a regulated investment company or a real estate investment trust if the amount distributed is a long-term capital gain dividend for federal income tax purposes.

- amounts received from mortgage-backed securities deemed by the company to be a principal pay down.
- amounts or property received as stock dividends.
- receipt of full or partial liquidations and other corporate distributions.
- amounts received via wire, electronic funds transfer (EFT), check, or ACAT/non-ACAT transfer or account-to-account journal entries.
- and amounts received that do not fall under any other receipt rule or the source of which is unknown.

Fidelity will credit the income portfolio of my account for amounts received from corporations issuing a dividend to shareholders; amounts received as fixed, variable, or floating rate interest of publicly traded securities; and amounts received from a security that is a regulated investment company or a real estate investment trust if the amount distributed is an ordinary or short-term capital gain dividend for federal income tax purposes.

b. Cash Disbursements from a Brokerage Account

Fidelity will debit the principal portfolio of my account for:

- amounts paid as commissions, trading, and broker fees.
- 50% of amounts paid to trustee or co-trustee, agent for trustee.
- 50% of amounts paid as investment management fees to my Authorized agent/Advisor.
- 50% of amounts paid for tax reporting and preparation services; and amounts paid for purchase of securities.

Fidelity will debit the income portfolio of my account for:

- 50% for amounts paid as trustee, co-trustee, agent for trustee.
- 50% of amounts paid as investment management fees to my Authorized agent/Advisor.
- 50% of amounts paid for tax reporting and preparation services.
- amounts paid as accrued interest on purchase of bonds or other debt obligations.
- amounts paid as part of a one-time or recurring distribution to account holders or interested parties.
- and all other amounts paid that do not fall under any other disbursement rule, or the purpose or allocation of which is unknown.

The principal and income rules described above are the default reporting rules. Should you receive a written request from me or my Authorized agent/Advisor to report a transaction's principal and income differently from the default principal and income rules indicated, I hereby authorize such request and ratify any principal and income adjustment done pursuant to such request and agree that Fidelity will not be liable for any loss, liability, cost, or expense for acting on such requests. I acknowledge that Fidelity shall determine the appropriate method of making such adjustments, depending on the nature of the adjustment, and that Fidelity is not responsible for reviewing the adjustment for appropriateness with laws, rules, and regulations or otherwise.

These classifications of principal and income are not intended for tax reporting purposes. I understand that you are not responsible for the accuracy of information I may be required to report to federal, state, and other taxing authorities, and that you make no warranties with respect to, and specifically disclaim any liability arising out of, my use of, or any tax position taken in reliance upon, such information.

Assets Held Away

Assets Held Away are those assets that are not held by or custodied at Fidelity. The information about these assets is provided to Fidelity by me, my Authorized agent/Advisor and/or third-party sources. Fidelity is not able to verify the existence of these Assets Held Away or the accuracy or timeliness of the prices reported for these Assets Held Away. Prices shown do not necessarily reflect the actual current market prices. The Assets Held Away are not part of my brokerage account at Fidelity and therefore any SIPC protection afforded my account through Fidelity does not cover them. Gain/loss information reported on my brokerage statement may include information on Assets Held Away. As a result, this information should not be relied upon for tax reporting purposes.

27. Modification and Miscellaneous

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

The failure of Fidelity at any time to require performance by me or my Authorized agent(s)/Advisor(s) 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.

28. Core Transaction Account

I understand and agree that my Fidelity Account includes a Core Transaction Account that holds assets awaiting further investment or withdrawal. I understand that the Core Transaction Account option for my account is FCASH unless my account is not eligible for FCASH or if my Authorized agent/Advisor has authorization from Fidelity for my account to have access to a different Core Transaction Account option. I understand that FCASH is an interest-bearing free credit balance, it has no separate fees, it is not a money market mutual fund or a bank deposit account, and it is not covered by FDIC insurance. FCASH is a different from the Intra-day Free Credit Balance described in this Agreement. Fidelity may, but is not required to, pay interest on my FCASH balance. Any interest paid on my FCASH balance is taxable. Eligibility for Core Transaction Account options may depend on my account type or if my Authorized agent/Advisor has an arrangement with Fidelity to use a different Core Transaction Account option.

I understand that Fidelity may receive an economic benefit from my Core Transaction Account. If my Core Transaction Account is invested in FCASH, Fidelity and its affiliates earn interest when investing the funds overnight. If my Core Transaction Account is invested in a Fidelity money market fund, Fidelity and its affiliates earn management and other fees as described in the fund's prospectus. If my Core Transaction Account option is a Bank Deposit Sweep Program FDIC-insured deposit account, Fidelity and its affiliates receive a fee and interest payments from the bank receiving deposits through the program. For more information, please refer to the FDIC-Insured Deposit Sweep Program Disclosure document. Current interest rate tiers and yields on Core Transaction Account options are posted on *Fidelity.com*.

In certain circumstances, Fidelity and/or my Authorized agent/Advisor may choose to limit the Core Transaction Account product options available to me. I understand that the Core Transaction Account option for my account is FCASH and that if I select a core transaction option on my account application that is not available to me, my Core Transaction Account will be established with FCASH. I understand that the Core Transaction Account option(s) available to me may compensate Fidelity more than other investment options and yield less to me. I understand that depending on a variety of factors, including but not limited to, market conditions and the interest rate environment, certain Core Transaction Account product options may offer higher yields than others. I will consult with my Authorized agent/Advisor to determine if the Core Transaction Account product option(s) available to me through Fidelity are appropriate for me. I understand that I should compare the

terms, interest rates, APY, rates of return, required minimum amounts, risks, insurance, charges, and other features with other products and investment options before deciding to maintain balances in my Core Transaction Account. I understand that I and/or my Authorized agent/Advisor may take action to move cash from my Core Transaction Account into other investments, including other cash products or cash alternatives. Other products may pay a higher yield than is provided by the Core Transaction Account option available to me. I acknowledge, understand, and agree that the Core Transaction Account option(s) my Authorized agent(s)/Advisor(s) selects for me are appropriate based on my investor profile as such responsibility, obligations, and duty, falls solely with my Authorized agent(s)/Advisor(s).

I understand that the Core Transaction account is 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 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.

In the event I hold a money market mutual fund as my Core Transaction Account that is subject to a liquidity fee (as described in more detail in the fund's prospectus), upon notice to Fidelity by the fund that a liquidity fee has been imposed, Fidelity will remove the impacted fund from my Core Transaction Account and I will hold that fund as a non-core position in my account. Any future core transaction sweeps to the impacted money market mutual fund will cease and amounts in my account awaiting reinvestment will be held in a fee credit balance as described in this agreement. The cash available and running collected balance in my account will be reduced by the amount of the value of the impacted money market mutual fund. Payment of debit items from my account will continue to be paid as described in this agreement, but Fidelity will only pay items from a money market fund that has imposed a liquidity fee as part of that payment process after the other sources are attempted. Fidelity and/or my Authorized agent/Advisor will help facilitate the selection of a different Core Transaction Account.

Government Money Market Funds

I understand I could lose money by investing in a money market fund. Although the fund seeks to preserve the value of my investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not a bank account and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor is not required to reimburse the fund for losses, and I should not expect that the sponsor will provide financial support to the fund at any time, including during periods of market stress.

Fidelity's government and U.S. Treasury money market funds will not impose a fee upon the sale of my shares.

I understand and agree that Fidelity may change my core account selection with notice to me when required. 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 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. Cash balances held at each Bank will be eligible for FDIC insurance up to \$250,000 (principal plus accrued interest) per depositor in each insurable capacity (i.e., individual, joint, etc.) per Bank, in accordance with applicable FDIC rules. All deposits (for example, deposits you may make at the Bank outside of the Bank Deposit Sweep Program plus the Bank Deposit Sweep Program cash balance) held by an individual in the same right and legal capacity and at the same Bank are insured up to \$250,000 as described above. Joint accounts owned by two individuals are insured up to \$250,000 as described above for each co-owner (again, in the aggregate for all joint account Bank Deposit Sweep Program and non-Bank Deposit Sweep Program joint account balances) at each Bank. Special rules apply to insurance of trust deposits. The amount of FDIC coverage will be limited by the number of Banks in the Bank Deposit Sweep Program, the number of Banks in which your money is deposited, and other factors as more fully described in the Bank Deposit Sweep Program Disclosure Documents. All FDIC insurance coverage is in accordance with FDIC rules. Beginning on or around June 30, 2022, Cash Balances that cannot be placed at a Program Bank due to capacity limits, shall be swept to a Money Market Overflow as described herein. In the event that I have funds swept to a Money Market Overflow, it will have a material impact on my insurance coverage, how interest is calculated, and how funds are placed and withdrawn.

If at any time a Bank Deposit Sweep Program is not available for investment, including the Money Market Overflow, 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.

Bank(s) 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 a Bank or to opt out of a Bank in my list. I may not be able to opt out of all of the Banks in the program.

Cash balances held on my behalf at a Bank(s) earn a rate of interest that will vary over time and can change without prior notice to me. 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](https://www.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.

Deposits over the maximums or limits will not be FDIC or SIPC insured.

A Bank Deposit Sweep Program is not a security and therefore not SIPC insured. Funds received into an account are immediately covered by SIPC (up to applicable SIPC coverage limits) but 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.

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 [FDIC.gov](https://www.fdic.gov), or call 877-ASK-FDIC.

Money Market Overflow Component of the BDSP

Certain events will result in the sweeping of Cash Balances into a money market mutual fund instead of Program Banks—this feature is called the Money Market Mutual Fund Overflow (“MMKT Overflow”). The events for sweeping of funds into the MMKT Overflow may include: if the Program does not have sufficient deposit capacity to accept deposits, or a Program Bank(s) reduces the deposit capacity available to the Program, any Cash Balances that cannot be placed at a bank(s) will then be swept into the MMKT Overflow. The enhanced sweep process between my Account, the Program Deposit Account, and the MMKT Overflow is referred to together as the “Program” and may also be included in the definition of my “Core Transaction Account.” The Fidelity Government Money Market: “S” Class fund is the money market mutual fund that will be utilized for the MMKT Overflow (the “MMKT Overflow Fund”). Balances will sweep into the Program Banks as described herein. If, however, the Program Banks are unwilling or unable to accept funds, these funds will be swept to the “MMKT Overflow” rather than the Program Bank(s).

My Program Deposit is also automatically “swept out of” a Program Deposit Account as necessary to satisfy debits in my Account. However, in the event I have Cash Balances in the MMKT Overflow, the Cash Balances will first be debited from the MMKT Overflow Fund, then from Program Banks.

Debits in my Account associated with certain actual or anticipated transactions to generate a debit in my Account during the business day will first be settled using proceeds from the redemption of any shares of the MMKT Overflow Fund first, then withdrawal of Program Deposits that are swept out on such business day. Other debits will be settled using proceeds from redemption of any shares of the MMKT Overflow Fund first, then the withdrawal of Program Deposits that are swept out on the next business day.

In the event that additional capacity becomes available at the Program Banks, any Cash balances in the MMKT Overflow Fund will remain and will not automatically be transferred or rebalanced into newly open and/or available Program Banks. Other than being used to satisfy debits or withdrawals in the account, funds will remain in the MMKT Overflow.

In the event there is a Cash Balance held in the MMKT Overflow, the rate of return for a money market fund is typically shown for a seven-day period. It is typically expressed as an annual percentage rate. It is referred to as the “7-day yield” and may change at any time based on the performance of the investments held by the money market fund. The effective yield on a money market fund reflects the effect of compounding of interest over a one-year period.

In general, a money market mutual fund earns interest, dividends, and other income from its investments, and distributes this income (less expenses) to shareholders as dividends. Each fund may also realize capital gains from its investments, and distributes these gains (less losses), if any, to shareholders as capital gain distributions.

Distributions from a money market fund consist primarily of dividends. A money market fund normally declares dividends daily and pays them monthly. Funds held in the MMKT Overflow begin earning the dividend accruals on the day they are received by the MMKT Overflow Fund and stop accruing dividends on the day they are withdrawn. For additional information on returns of the MMKT Overflow Fund, see

the fund's prospectus. The statement for my Account will indicate the balance in my core account including my Program Deposit balance at each Program Bank and MMKT Overflow (if applicable) as of the last business day of each monthly statement period.

If funds are swept from a Program Deposit Account into the MMKT Overflow, such funds will no longer be eligible for FDIC insurance but will be subject to SIPC protection, up to certain limits as further described above. More details about the MMKT Overflow Fund can be found in the MMKT Overflow Fund's prospectus, which will be made available to me when applicable. From time to time, and as part of the management of the Program, if additional deposit capacity becomes available, Fidelity may periodically sweep funds out of the MMKT Overflow. I will be notified in advance of any MMKT Overflow Fund Rebalance Event. Notice will be provided to me in writing. In addition, the notice will inform me of approximately when such Rebalance Event will be implemented. Continued use of my Account and/or the Program after notice of a Rebalance Event will constitute my consent to such an event and the changes described therein.

The MMKT Overflow Fund is a money market mutual fund offered by Fidelity Management and Research Company ("FMR Co."). FMR Co. will receive management and other fees for assets held in the MMKT Overflow Fund, as more fully described in the fund's prospectus. I will review the BDSP Disclosure Document for more details.

Core Options for Non-U.S. Customers

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

If I have an existing account that utilizes any option for my core option other than the Taxable Interest Bearing Option, FCASH, the process of sweeping the Intra-day Free Credit Balance to my core account will be suspended. 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, uninvested cash 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.

In the event I hold an offshore fund as my Core Transaction Account that is subject to changes that impact Fidelity's ability to support that fund as the core option, upon notice to Fidelity by the fund that such a change has been imposed, Fidelity will remove the impacted fund from my Core Transaction Account and I will hold that fund as a non-core position in my account. Any future core transaction sweeps to the impacted money market mutual fund will cease and amounts in my account awaiting reinvestment will be held in a fee credit balance as described in this agreement. The cash available and running collected balance in my account will be reduced by the amount of the value of the impacted money market mutual fund.

Payment of debit items from my account will continue to be paid as described in this agreement, but Fidelity may only pay items from a money market fund that has imposed a liquidity fee as part of that payment process after the other sources are attempted. Fidelity and/or my Authorized agent/Advisor will help facilitate the selection of a different Core Transaction Account.

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 defaulted into, and on a going-forward basis my account will operate as otherwise described herein.

Credits to My Account

During normal business hours ("Intra-day"), activity in my account such as deposits and the receipt of settlement proceeds are credited to my account and may be held as a free credit balance (the "Intra-day Free Credit Balance").

Activity in my account such as deposits and the receipt of settlement proceeds may also occur after the cut-offs described above, or on days the market is not open and the Fedwire Funds Service is not operating (collectively "After-hours"). Those amounts are credited to my account and may be held as a free credit balance (the "After-hours Free Credit Balance").

Like any free credit balance, the Intra-day and After-hours Free Credit Balances represent amounts payable to me on demand by Fidelity. Subject to applicable law, Fidelity may use these free credit balances in connection with its business. Fidelity may, but is not required to, pay me interest on free credit balances held in my account overnight, provided that the accrued interest for a given day is at least half a cent. Interest, if paid, will be based upon a schedule set by Fidelity, which may change from time to time at Fidelity's sole discretion.

Interest paid on free credit balances will be labeled "Credit Interest" in the Investment Activity section of my account statement. Interest is calculated on a periodic basis and credited to my account on the next business day after the end of the period. This period typically runs from approximately the 20th day of one month to the 20th day of the next month, provided, however, that the beginning and ending periods each year run, respectively, from the 1st of the year to approximately the 20th of January, and approximately the 20th of December to the end of the year. Interest is calculated by multiplying my average overnight free credit balance during the period by the applicable interest rate, provided, however, that if more than one interest rate is applicable during the period, this calculation will be modified to account for the number of days each period during which each interest rate is applicable.

If I Utilize a Fidelity Money Market Fund as My Core Position

If I utilize a Fidelity money market fund as my core position, the Intra-day Free Credit Balance, if any, generated by activity occurring prior to the market close each business day (or 4:00 p.m. ET on business days when the market is closed and the Fedwire Funds Service is operating) is automatically swept into my core account and invested in my core position at the market close.

There will be additional automatic sweeps into my core account early in the morning prior to the start of business on each business day that will also be invested in my core position at that time. These will include my After-hours Free Credit Balance along with credit amounts attributed to certain actual or anticipated transactions that would otherwise generate an Intra-day Free Credit Balance on such business day.

If I Utilize the BDSP as My Core Position

If I utilize the BDSP as my core position, the Intra-day Free Credit Balance, if any, as well as any After-hours Free Credit Balance generated by activity occurring prior to Fidelity's nightly processing cycle are automatically swept into my core account as part of that nightly cycle (the "Evening Bank Sweep") and reflected in my Account as Program Deposits in anticipation of the deposit process described below occurring on the next business day.

There will be an additional automatic sweep into my core account early in the morning prior to the start of business on each business day that will also be invested in my core position at that time (the "Morning Bank Sweep"). This will include credit amounts attributed to certain actual or anticipated transactions that would otherwise generate an Intra-day Free Credit Balance on such business day.

The total amount of the Evening Bank Sweep and the Morning Bank Sweep is referred to as my Cash Balance. In the morning of the business day of the Morning Bank Sweep, my Cash Balance will be deposited in an FDIC-insured interest-bearing account (a "Program Deposit Account") at one or more participating banks (each, a "Program Bank"). The amounts on deposit are collectively referred to as my Program Deposits, and Program Deposits are eligible for FDIC insurance. My Program Deposit will earn interest, provided that the accrued interest for a given day is at least one cent.

If I Utilize the Interest Bearing Option (FCASH) as My Core Position

If I utilize FCASH as my core position, the Intra-day Free Credit Balance, if any, as well as any After-hours Free Credit Balance generated by activity occurring prior to Fidelity's nightly processing cycle is automatically swept into my core account as part of that nightly cycle and held in the Interest Bearing option.

Each check or Automated Clearing House deposit (ACH) deposited is promptly credited to my account. However, the money may not be available to use until up to six business days later, and Fidelity may decline to honor any debit that is applied against the money before the deposited check or ACH has cleared. If a deposited check or ACH does not clear, the deposit will be removed from my account, and I am responsible for returning any interest I received on it. Note that Fidelity only can accept checks denominated in U.S. dollars and drawn on a U.S. bank account (including a U.S. branch of a foreign bank). In addition, if Fidelity has reason to believe that assets were incorrectly credited to your account, Fidelity may restrict such assets and/or return such assets to the account from which they were transferred.

Debits to My Account

Deferred debit card charges are debited monthly. All other debit items (including checks, debit card transactions, bill payments, securities purchases, electronic transfers of money, levies, court orders or other legal process payments) are paid daily to the extent that sufficient funds are available. Note that debits to resolve securities transactions (including margin calls) will be given priority over other debits, such as checks or debit card transactions.

As an account owner, I am responsible for satisfying all debits in my account, including any debit balance outstanding after all assets have been removed from an account, any margin interest (at prevailing margin rates) that has accrued on that debit and any costs (such as legal fees) that Fidelity incurs collecting the debit. I am responsible for ensuring that checks issued to me representing distributions from my account are promptly presented for payment. If a check issued to me from my account remains uncashed and outstanding for at least six months, I authorize and instruct Fidelity, in its sole discretion, to cancel the check and return the underlying proceeds to me by depositing the proceeds into my 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, over-drafts 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 *Fidelity.com*. Making the first investment into that fund is my acknowledgment that I have received and read a prospectus for that fund.

29. Payment of Items

If I Utilize a Fidelity Money Market Fund As My Core Position

If I utilize a Fidelity money market fund as my core position and there are debits in my account generated by account activity occurring prior to the market close each business day (or 4:00 p.m. ET on business days when the market is closed and the Fedwire Funds Service is operating) these debits will be settled at the market close using the following sources, in this order, subject to the qualifications below:

1. Free Credit Balance: any Intra-day Free Credit Balances,
2. Core Position: redemption proceeds from the sale of my core position at the market close,
3. Auto Liquidation: redemption proceeds from the sale of any shares of a Fidelity money market mutual fund held in the account that maintains a stable (i.e., \$1.00/share) net asset value and is not subject to a liquidity fee or similar fee or assessment,
4. Margin Surplus: if I have a margin account, any margin surplus available, which will increase my margin balance.

There will be additional sweeps early in the morning prior to the start of business on each business day, and certain unsettled debits in my account along with debits associated with certain actual or anticipated transactions that would otherwise generate a debit in your account during the business day will be settled using redemption proceeds from the sale my core position early in the morning prior to the start of business.

I understand and agree that Fidelity may, in its sole discretion, exclude sources for settling debits in my account, including limiting or removing certain auto-liquidation options. Further, I authorize my Authorized agent/Advisor to request Fidelity to exclude sources for settling debits in my account, including limiting or removing certain auto-liquidation options; however, such a request must be agreed to by Fidelity in its sole discretion.

If I Utilize the Bank Sweep As My Core Position

If I utilize the Bank Sweep as my core position and there are debits in my account generated by account activity occurring prior to Fidelity's nightly processing cycle these debits will be settled using the following sources, in this order, subject to the qualifications below:

1. Money Market Overflow: redemption proceeds from shares held in the MMKT Overflow Fund,
2. Free Credit Balance: any Intra-day or After-hours Free Credit Balances proceeds from the withdrawal of Program Deposits occurring on the next business day (not including bank holidays or days on which the New York Stock Exchange is closed, such as Good Friday),
3. Auto Liquidation: redemption proceeds from the sale of any shares of a Fidelity money market mutual fund held in the account that maintains a stable (i.e., \$1.00/share) net asset value and is not subject to a liquidity fee or similar fee or assessment,
4. Margin Surplus: if I have a margin account, any margin surplus available, which will increase my margin balance.

In addition, early in the morning prior to the start of business on each business day, certain unsettled debits in my account along with debits associated with certain actual or anticipated transactions that would otherwise generate a debit in my account during the business day will be settled using redemption proceeds from the sale of shares in the MMKT Overflow Fund, early in the morning prior to the start of business, if applicable, and then the withdrawal of Program Deposits occurring that business day (not including bank holidays or days on which the New York Stock Exchange is closed, such as Good Friday).

I understand and agree that Fidelity may, in its sole discretion, exclude sources for settling debits in my account, including limiting or removing certain auto-liquidation options. Further, I authorize my Authorized agent/Advisor to request Fidelity to exclude sources for settling debits in my account, including limiting or removing certain auto-liquidation options; however, such a request must be agreed to by Fidelity in its sole discretion.

If I Utilize the Interest Bearing Option ("FCASH") As My Core Position

If I utilize the Interest Bearing option as my core position and there are debits in my account generated by account activity occurring prior to Fidelity's nightly processing cycle these debits will be settled using the following sources, in this order, subject to the qualifications below:

1. FCASH Balance: any Intra-day or After-hours Free Credit Balances funds held in FCASH,
2. Auto Liquidation: redemption proceeds from the sale of any shares of a Fidelity money market mutual fund held in the account that maintains a stable (i.e., \$1.00/share) net asset value and is not subject to a liquidity fee or similar fee or assessment,

3. **Margin Surplus:** if I have a margin account, any margin surplus available, which will increase my margin balance.

In addition to the foregoing, we may turn to the following sources: redemption proceeds from the sale of any shares of a Fidelity money market fund held in another non-retirement account with the same registration (which I authorize you to sell for this purpose when I sign the application), and any securities in any other account at Fidelity in which I have an interest.

I understand and agree that Fidelity may, in its sole discretion, exclude sources for settling debits in my account, including limiting or removing certain auto-liquidation options. Further, I authorize my Authorized agent/Advisor to request Fidelity to exclude sources for settling debits in my account, including limiting or removing certain auto-liquidation options; however, such a request must be agreed to by Fidelity in its sole discretion.

If I want to opt out of the foregoing, I will contact Fidelity for more information. In the event that my account does not contain sufficient cash, Fidelity may liquidate securities to satisfy a court order, levy, or any other legal process payment.

As used in this Agreement, the total cash and margin loan value shall be the "Collected Balance."

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.

In the event I hold a money market mutual fund in my account that impacts my cash available and is subject to a liquidity fee (as described in more detail in the fund's prospectus), upon notice to Fidelity by the fund that a liquidity fee has been imposed, the cash available and running collected balance in my account will be reduced by the amount of the value of the impacted money market mutual fund and payment of debit items from my account will continue to be paid as described in this agreement, but Fidelity will only pay items from a money market fund that has imposed a liquidity fee as part of that payment process after the other sources are attempted.

I acknowledge that if a money market mutual fund held in my account imposes a liquidity fee, the money market mutual fund may not provide Fidelity with advance notice of such liquidity fee. As a result, I may not be notified of such liquidity fee when I submit a trade. However, as instructed by the fund (and disclosed in the fund prospectus), my trade will be subject to such liquidity fee, and it may be applied to my trade retroactively.

30. 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.

31. Trading Authorization

A. By opening these accounts, I understand that I am granting my Authorized agent(s)/Advisor(s) trading authorization over my 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, or account-related 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) 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 for through a separate Asset Movement Authorization, the Authorized agent(s)/Advisor(s) and/or SAM(s) are not authorized to withdraw, or direct the withdrawal of, assets from my account as part of the servicing instructions.

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) 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 if I have provided EFT instructions to Fidelity.
3. Fidelity is further authorized to act upon my Authorized agent(s)/Advisor(s) and SAM(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.

32. 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 Limited (First Party Only)

By selecting Level I Limited asset movement authorization on my account application, I authorize and direct Fidelity to accept instructions from my Authorized agent(s)/Advisor(s) for one time disbursements and the establishment of and changes to periodic disbursements (Periodic Distribution Plans) from my account, including: (1) for redemptions and payment of monies from my account by check made payable to me and sent to me at my address of record, (2) to disburse funds electronically, including bank wires and Electronic Funds Transfers (EFTs), to any first-party bank account pursuant to a standing written instruction provided to Fidelity and signed by me, and first-party 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 account (accounts owned by me individually), contributions from this account to any IRA I own at Fidelity.

Level I (First and Third Party)

By granting Level I asset movement authorization, I authorize and direct Fidelity to accept instructions from my Authorized agent(s)/Advisor(s) as described in Level I Limited and, in addition, to accept instructions from my Authorized agent(s)/Advisor(s), without receiving instructions directly from me, to (1) disburse funds electronically, including bank wires or Electronic Funds Transfers (EFTs) to any third-party account I have authorized through standing written instructions and third-party check disbursements to any payee and address I have authorized through standing written instructions, and (2) transfers of cash or securities from this account to other third-party accounts at Fidelity I have authorized through standing written instructions. Periodic Distribution Plans is a plan which enables scheduled recurring distributions of predetermined amounts from my 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 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)'s instructions, at its own discretion.

33. Authorization to Pay Fees to Advisor

By signing the account application, I authorize Fidelity to accept instructions from my Authorized agent(s)/Advisor(s) and/or SAM(s) to deduct its management fees from my account. Fidelity may use money from the Core Transaction Account and/or cash in my account to the extent necessary to pay such fees. Fidelity may rely on the management fee deduction request submitted by the Authorized agent(s)/Advisor(s) and/or SAM(s) to Fidelity and will not be responsible for validating any instruction with me or otherwise verifying such fees. I understand that it is solely my responsibility to verify the management fee and that Fidelity will not determine whether the fee is accurate or appropriate. I agree to 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 acting in accordance with the authority I grant to Fidelity to accept any management fee deduction request from my account from my Authorized agent(s)/Advisor(s) and/or SAM(s).

Fidelity may terminate any fee deduction authorization at any time in its sole discretion without notice. Authorized agent(s)/Advisor(s), SAM(s), or I may terminate a fee deduction authorization with written notice to Fidelity. Such termination shall not affect any obligation or liabilities arising prior to termination.

34. Outsourced Agent Authorization ("OAA")

By selecting OAA, I authorize Fidelity to accept instructions from the Primary Authorized agent/Advisor on my Account to add or remove other eligible Authorized agent(s)/Advisor(s) to or from my Account without direct instruction from me. I understand and agree that any Authorized agents/Advisors added to my Account pursuant to OAA will have the same trading, asset movement, and fee deduction authorization I grant to my Primary Authorized agent/Advisor. I agree that all of representations I make in this Agreement with respect to my

Authorized agents/Advisors and any of the authorizations referenced herein also apply to all Authorized agents/Advisors added to my account pursuant to this OAA. I further agree that Fidelity has no role in, nor any duty to monitor or oversee the addition or removal by my Primary Authorized agent/Advisor of any Authorized agent/Advisor pursuant to this OAA.

35. 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.

36. Consumer Reporting Agencies

Fidelity may report information about my account to credit bureaus. Late payments, missed payments, or other defaults on my account may be reflected in my credit report.

Fidelity may also provide information about me and my account, as well as the activity in my account, to one or more consumer reporting agencies. If I believe that information Fidelity has provided about me or my account, or the activity in my account, is not accurate, I may notify Fidelity at:

Fidelity Investments
 Attn: Customer Data Disputes
 PO Box 770001
 Cincinnati, OH 45277-0045

In order for Fidelity to investigate any dispute that I may submit to Fidelity with respect to information that Fidelity has provided, I will provide Fidelity with the following information:

- (1) My name, address, and account number;
- (2) An identification of the specific information that I believe is not accurate; and
- (3) An explanation of the basis for my dispute.

37. Assignment

The Authorized agent(s)/Advisor(s) and/or SAM(s) shall not assign this Agreement or any of its rights hereunder, nor delegate any of its obligations hereunder, without the prior written consent of me and Fidelity; provided, however, consent shall not be required in the case of assignment where Authorized agent(s)/Advisor(s) and/or SAM(s) assigns its rights in whole (but not in part) under this Agreement in the event of any assignment by merger, acquisition, or otherwise by operation of law. Any assignment by the Authorized agent(s)/Advisor(s) and/or SAM(s) in contravention of the foregoing shall be deemed null and void. The provisions of the Agreement will be binding upon and inure to the benefit of the respective successors and permitted assigns.

38. 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.

Texas Residents only: In accordance with Texas House Bill 1454, I, as an account owner, may designate a representative for the purpose of receiving a due diligence notice. If I add a designated representative, Fidelity is required to mail the written notice upon presumption of abandonment to the representative, in addition to mailing the notice to me, the account owner.

39. 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. Upon written notice of my death, I understand that any authorization that I have granted herein to my Authorized agent(s)/Advisor(s) will terminate. I understand that Fidelity will require the assets in the account be transferred to my estate or beneficiaries, as applicable, and no longer will accept instructions from my Authorized agent(s)/Advisor(s) on my account. 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 Fidelity may terminate its relationship with my Authorized agent(s)/Advisor(s) and/or SAM(s) at any time for any reason without notice to me. If Fidelity terminates its relationship with my Authorized agent/Advisor and/or SAM, or if my Authorized agent/Advisor and/or SAM is otherwise removed from my Account, 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, the fees, commissions, and other features applicable to my account will change as a result, and I can view the Fidelity retail brokerage account fees and commissions, as well as the applicable Form CRS, on *Fidelity.com*, or obtain them from Fidelity by calling 800-343-3548.

40. 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, distribution, rollover, advice interaction 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.



Supplement to the Separately Managed Account Customer Application and Client Agreements

The terms and disclosures below apply to my Fidelity Managed Account XchangeSM ("FMAX") Account or other Separately Managed Account when my Authorized agent/Advisor selects Fidelity Institutional Wealth Adviser LLC ("FIWA") as a Separate Account Manager ("SAM"). All instructions and account features not otherwise contained herein will be provided to Fidelity by me or my Authorized Agent/Advisor as applicable. To the extent there are any conflicts between the terms or elections contained in the applicable Separately Managed Account Customer Application and Client Agreement for Managed Accounts ("SAM Application and Agreement") and this Supplement, the terms of this Supplement shall rule and control. All capitalized terms set forth herein not otherwise defined shall have the meaning ascribed thereto in the applicable Client Agreement.

1. Fidelity Institutional Wealth Adviser LLC as Separate Account Manager

As set forth in the applicable Client Agreement, in certain circumstances, Fidelity may be affiliated with my SAMs. I hereby acknowledge and agree that FIWA is a wholly owned subsidiary of FMR LLC and an affiliate of Fidelity. Notwithstanding FIWA's role as Sponsor of FMAX, FIWA may also serve in a separate capacity as a SAM outside FMAX or within FMAX. I hereby grant FIWA, in its capacity as a SAM, a limited power of attorney to solely hire, replace, or remove SAMs from time to time who will have certain authority as described in the SAM Application and Agreement and the power to establish new accounts for additional SAMs, with these accounts having the same features, authorizations, and registrations as those initially established with this application, or as subsequently amended. Initially, FIWA has appointed Fidelity Management & Research Company LLC as a SAM. In consideration of Fidelity accepting my grant of a limited power of attorney to FIWA as described herein, 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.

2. Dividend Interest and Capital Gains Account Service Instruction

For Accounts on which FIWA, FMR, or other SAM appointed by FIWA serves as a SAM, I understand and agree that the dividend, interest, and capital gains account service will be limited solely to paying all to the Account and none will be distributed by Check.

3. Proxy and Related Material Delivery and Voting Authority

Unless otherwise elected in the SAM Application and Agreement, I authorize and instruct Fidelity, (1) to forward all proxy and related materials (including annual reports, information statements, and other material sent to stockholders) it receives on my behalf to any SAM FIWA appoints, in lieu of forwarding such materials to me; and (2) to accept votes or take other actions from any SAM FIWA appoints, regarding such proxies and related material on my behalf. I understand that I will not be sent informational copies of these communications. To the extent I elect for Corporate Actions to be sent to me, I understand and agree that I will receive copies of the corporate actions and that FIWA or the SAM appointed by FIWA will also receive corporate actions to exercise.

In connection with your authorization to direct proxy and related materials and to accept proxy votes from any SAM FIWA appoints, I represent to NFS the following:

- A. Each of FIWA and any SAM it appoints is an investment advisor registered with the Securities and Exchange Commission ("SEC"); and
- B. Any SAM FIWA appoints exercises limited trading authority over the account designated; and
- C. I am designating the SAM FIWA appoints to receive and vote proxy and related materials on my behalf; and
- D. I understand that FIWA and any SAM it appoints may delegate certain administrative functions to its third-party agent. Such delegation does not include the right to vote on my behalf; and
- E. I will notify NFS in writing in the event that A, B, or C ceases to be true.

4. Margin Privileges

I understand that accounts with a margin feature generally are not supported by FIWA or SAMs appointed by FIWA.

5. Cost Basis Method

I understand and agree that FIWA or any SAM appointed by FIWA will instruct Fidelity to apply the Tax Sensitive cost basis method to my account(s) managed by FIWA or a SAM appointed by FIWA. I further agree that FIWA or a SAM appointed by FIWA has provided such details to me as appropriate on the impact of this cost basis method to my account(s).

6. General

The terms of this Supplement are made part of the applicable Separately Managed Account Application and Agreement when FIWA is selected as a SAM.

Fidelity Family Office Services 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 carefully examined my financial resources, investment objectives, and tolerance for risk along with the terms of the margin agreement and have determined that margin financing is appropriate for me. I understand that investing on margin involves the extension of credit to me and that my financial exposure could exceed the value of my securities. Any information I give you on this account agreement will be subject to verification, and I authorize you to obtain a credit report about me at any time. Upon written request, you will provide the name and address of the credit reporting agency used.

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

Loan of Margin Securities: Security Interest

Any and all credit balances, securities, or contracts relating thereto, and all other property of whatsoever kind belonging to me or in which I may have an interest held by you or carried for my accounts, shall be subject to a general lien for the discharge of my obligations to you (including un-matured and contingent obligations), however arising and without regard to whether or not you have made advances with respect to such property and without notice to me, may be carried in your general loans, and all securities may be pledged, re-pledged, hypothecated or re-hypothecated, separately or in common with other securities or any other property, for the sum due to you thereon or for a greater sum and without retaining in your possession and control for delivery a like amount of similar securities or other property. Fidelity may use certain securities in my Margin Account for, among other things, settling short sales and lending the securities for short sales, and as a result may receive compensation in connection therewith. At any time and from time to time you may, at your discretion, without notice to me, apply and/or transfer any securities, contracts relating thereto, cash or any other property therein, interchangeably between any of my accounts, whether individual or joint from any of my accounts, to any account guaranteed by me. You are specifically authorized to transfer to my Cash Account, on the settlement day following a purchase made in that brokerage account, excess funds available in any of my other accounts, including, but not limited to, any free balances in any margin account, sufficient to make full payment of this cash purchase. I agree that any debit occurring in any of my accounts may be transferred by you at your option to my Margin Account.

Shares of any investment company in which the account holder(s) 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, an account owner's death, including a transfer arising in connection therewith, or a petition for bankruptcy 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, at or 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 unmatured and contingent obligations) now or hereafter owed by me to Fidelity, any of Fidelity's affiliates, or any broker/dealer, including, but not limited to, any such indebtedness, liabilities or other obligations arising under this Agreement.

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

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

Settlement of Transactions

In the absence of a specific demand, all transactions in any of my accounts are to be paid for, securities delivered or required margin deposited no later than 2 p.m. Eastern time on the settlement date. And I agree to deliver my securities I have in my possession in sufficient time to be received by Fidelity one day before the settlement date. Fidelity reserves the right to cancel or liquidate, at my risk, any transaction not timely settled. Margin calls are due on or before the date indicated regardless of the settlement date of the transaction. 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 Fed Fund Rate. 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 Fed Fund Rate. Note for the purposes of determining interest to be applied for any credit extended or maintained this rate shall not fall below 0.00%. With

the exception of credit balances in the type 3- short account and type 9- income accounts, all other balances in all of my accounts opened through my Authorized agent(s)/Advisor(s) are combined to determine the daily balance, and interest is charged to the Margin Account based on the average of any resulting daily debit balance. Interest is computed monthly on the average debit balances during the month. If during the month there is a change in interest rates, separate charges will be shown for each interest period under the different rate. Interest on International balances is calculated daily according to actual daily debit balances during the month and the interest rate applicable to each currency in the account. Interest rates will vary according to actual daily debit balances and applicable international interest rates, and therefore may change without notice to me. Separate charges will be shown for each currency in the account at the end of the month. The combining of balances, as well as the actual interest calculations, are done by computer, but the interest is arrived at by multiplying the average debit balance for U.S. dollar balances by the effective rate of interest, dividing by 360, and multiplying by the number of days a daily debit balance was maintained during the interest period. Interest from International balances are calculated by multiplying the daily debit of International balances by the effective rate of interest, dividing by 360 and summing for each day a daily debit balance was maintained.

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

Maintenance of Margin Requirements

In the event there is a decline in the market value of the securities in the margin account, Fidelity may have to request additional collateral. Fidelity retains the right to require additional margin at any time you deem it necessary or advisable. Any such call for additional collateral may be met by delivery of additional marginable securities or cash. Any securities in any of the accounts of the undersigned are collateral for any debit balances in the account with you. A lien is created by these debits to secure the amount of money owed you. This means that, in accordance with the terms of this agreement, securities in the said accounts can be sold by you to redeem or to liquidate any debit balances in these accounts. Fidelity reserves the right to increase maintenance requirements and to request additional collateral at any time at Fidelity's discretion. I understand that you may borrow securities in the amount and class for which I may be carrying a short position and that you may be forced to liquidate all or part of my short position if the lender recalls the borrowed securities, which liquidation may result in a loss to me. The Federal Equal Credit Opportunity Act prohibits creditors from discriminating against credit applicants on the basis of race, color, religion, national origin, sex, marital status, age (provided the applicant has the capacity to enter into a binding contract); because all or part of the applicant's income derives from a public assistance program, or because the applicant has, in good faith, exercised any right under the Consumer Credit Protection Act. The Federal agency that administers compliance with this law concerning this creditor is:

Securities and Exchange Commission, 450 Fifth Street NW, Washington, DC 20549.

Disclosure of Credit Terms on Margin Transactions

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

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

If a referenced base rate is removed or no longer in existence, the Fidelity Family Office Services Base Lending Rate will be applied, which is set at the discretion of Fidelity Family Office Services with references to commercially recognized interest rates, industry conditions regarding the extension of margin credit, and general credit conditions.

Standard rates are below. See your account statement for your rate.

Interest to be Charged for Debit Balance In:

- United States Dollars will be charged 2.5% above the Fed Funds Rate
- Australian Dollar will be charged 3.5% above RBA Cash Rate
- Canadian Dollar will be charged 3.5% above CAD FFOSBLR
- Swiss Franc will be charged 3.5% above Swiss Average Rate Overnight (SARON)
- Danish Krone will be charged 3.5% above DKK Discount Rate
- Euro will be charged 3.5% above Euro Short-Term Rate (ESTR)
- British Pound will be charged 3.5% above Sterling Overnight Index Average (SONIA)
- Hong Kong Dollar will be charged 3.5% above HKAB HKD Settlement 1M
- Japanese Yen will be charged 3.5% above Tokyo Overnight Average Rate (TONAR)
- Mexican Peso will be charged 3.5% above TIIE-MXN 28 DAY
- Norwegian Krone will be charged 3.5% above Norway Lending Rate
- New Zealand Dollar will be charged 3.5% above NZD OCR
- Polish Zloty will be charged 3.5% above PLN FFOSBLR
- Swedish Krona will be charged 3.5% above SEK Deposit Rate
- Singapore Dollar will be charged 3.5% above SGD FFOSBLR
- South African Rand will be charged 3.5% above ZAR Prime
- Debits in all other currencies will be charged 6.5% above Euro Short-Term Rate (ESTR)

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 applicable base rates 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 base rate 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.

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.

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

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 2.5% above The Fed Funds Rate may be made in the type 1-cash account in connection with:

- (a) Prepayments (by approval only) – payments to a customer of the proceeds of a security sale before the regular settlement date.
- (b) When-issued" transactions – when the market price of the "when-issued" security deteriorates from the customer's contract price by an amount that exceeds the customer's cash deposit, interest may be charged on such excess.
- (c) Late payments – payments for securities purchased 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: Fed Funds Rate of 7.5% – Applicable Interest Rate 10%

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

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

International Interest Computation

Interest on 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:

<u>Date</u>	<u>CAD Daily Debit Balance</u>	<u>CAD FFOSBLR</u>	<u>Applicable Interest Rate</u>	<u>Interest to be Charged</u>
June 17	\$ 0	5.3%	0.0%	\$ 0.00
June 18	\$90,000	3.7%	7.2%	\$18.00
June 19	\$120,000	3.2%	6.7%	\$22.33
June 20	\$85,000	3.6%	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 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:

- (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, distribution, rollover, advice interaction 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 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 additional 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.

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, check-writing 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.



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 Agreement with Fidelity Brokerage Services LLC ("FBS") and National Financial Services LLC ("NFS") (together, "Fidelity"). Unless otherwise defined in this Supplement, defined terms have the same meaning as in my Client Agreement. In the event any provision in this Supplement conflicts or is inconsistent with any provision of my applicable Client Agreement, the provisions of this Supplement will control for matters related to me or my Authorized agent(s)/Advisor(s) having chosen Asset-Based Pricing ("ABP") for my Account(s). In the event that any provisions in this Supplement or my Client 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 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. Account(s) chosen for Asset-Based Pricing ("ABP Account(s)") will, subject to certain restrictions, receive FBS's customary securities brokerage services, as set forth in the Client Agreement, 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 to FBS at the time of each transaction. See Paragraph 3 below for a description of other fees and charges not included in the ABF.

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 and core sweep vehicles (including core money market funds), non-core Fidelity money market funds, no transaction fee (NTF) mutual funds, mutual funds with a load or sales charge, Fidelity mutual funds, alternative investments, 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 period 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 FBS 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 period. 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 dependent 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. FBS 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 schedule of my Authorized agent/Advisor. The ABF for the billing period will be the sum of the monthly amounts for the billing period. This shall be the ABF fee billed for the 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 by FBS 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 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 payable to FBS applied to all trades in excess of the trade cap ("Trade Cap Fee"). 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 FBS 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. The amounts charged for ABF or Minimum Fees, if applicable, will be shown on my account statement.

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 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 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.** FBS 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 FBS 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 by NFS 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 NFS generally will receive a markup, charged

directly to me at time of trade, as compensation for its services in executing 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.

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. FBS'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.

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 FBS under this Supplement – I recognize that my Authorized agent(s)/Advisor(s) could 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, if available. Otherwise, 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 to FBS 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 FBS 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 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 ABP 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 and except as otherwise specified herein, Fidelity provides securities brokerage 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 charges are paid on a per-trade basis. Neither Fidelity nor any of its 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 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 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 at any time. 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 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.

The following applies only to accounts established in the Managed Account Solutions (formerly Managed Account Resources Platform ("MAS Platform")): Be advised that the billing period 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.



Important Information about Electronic Funds Transfer

This document provides important information regarding electronic funds transfers performed via the Automated Clearing House network, including transfers initiated by me or my Authorized agent(s)/Advisor(s). Such transfers are governed by Regulation E, as issued by the Bureau of Consumer Financial Protection pursuant to the Electronic Fund Transfer Act, and other related laws and regulations. This information is provided to me in compliance with these rules and regulations. Similar information regarding transfers initiated using a debit card will be sent to me separately with my debit card.

Privacy Statement

I understand Fidelity Brokerage Services LLC (Fidelity) will disclose information to third parties about my account or the transfers I or my Authorized agent(s)/Advisor(s) make:

- (i) Where it is necessary for completing transfers, or
- (ii) In order to verify the existence and condition of my account for a third party, such as a credit bureau or merchant, or
- (iii) In order to comply with a government agency or court order, or
- (iv) For my Authorized agent(s)/Advisor(s) give Fidelity written permission, or
- (v) For other purposes in accordance with Fidelity's privacy statement

Redemptions

The minimum Electronic Funds Transfer (EFT) transaction initiated on Fidelity.com is \$10 for redemptions and deposits, and the maximum is \$100,000 for redemptions.

Fees

There is no fee to transfer funds electronically, although my financial institution may charge transaction fees.

EFT Transactions Initiated on Fidelity.com

If I establish EFT on Fidelity.com, I or my Authorized agent(s)/Advisor(s) may be able to immediately transfer funds from my bank account to my Fidelity Brokerage Account ("Immediate Funding EFT"). All Immediate Funding EFTs processed during the first seven (7) business days after I or my Authorized agent(s)/Advisor(s) establish EFT on Fidelity.com, will be limited to a maximum transaction amount of \$25,000 per day for customers with an existing relationship; for new customers, the maximum transaction amount is \$15,000 per day. On the eighth business day following my or my Authorized agent(s)/Advisor(s)' request, the maximum transaction amount for EFTs initiated on Fidelity.com will increase to \$100,000 per day. Transfers from my Fidelity Brokerage Account to my bank account will not be allowed until the eighth business day.

EFT Transactions Initiated by my Authorized agent(s)/Advisor(s)

There are no minimums or maximums for EFT transactions initiated by my Authorized agent/Advisor on my behalf. However, Fidelity reserves the right, but is not obligated, to confirm with me any of my Authorized agent(s)/Advisor(s)' instructions prior to acting upon such instructions.

Brokerage Account Minimum Balances

There is no minimum account balance to process an EFT transaction; however, my core account must have adequate funds to cover the redemption of funds.

Business Days

For purposes of these disclosures, Fidelity's business days are Monday through Friday. Bank and New York Stock Exchange holidays are not included.

Documentation Periodic Statement

I will receive a monthly account statement from Fidelity. If there is no activity in my account, I can receive my statement quarterly if elected.

Direct Deposits

If I have arranged to have direct deposits made to my Fidelity Brokerage Account at least once every sixty (60) days from the same person or company, I can call Fidelity at 800-343-3548 to find out whether or not the deposit has been made.

Special Disclosure for Covered Transfers

In general, my use of the EFT service for transfer of funds electronically other than those for which the primary purpose is the purchase or sale of securities ("Covered Transfers") is covered under the Electronic Funds Transfer Act and the Bureau of Consumer Financial Protection's Regulation E and related laws and regulations. The following terms and disclosures apply to Covered Transfers:

Unauthorized Transfers:

I will tell Fidelity promptly if I believe my PIN to authorize an EFT has been lost or stolen or may have been used without my permission. Telephoning Fidelity at the number listed below is the best way of keeping my possible losses down. If I believe my PIN has been lost or stolen, and I tell Fidelity within two (2) business days after I learn of the loss or theft, I can lose no more than \$50 for transfers if someone used my PIN without my permission. If I do NOT tell Fidelity within two (2) business days after I learn of the loss or theft of my PIN, and Fidelity can prove Fidelity could have prevented any unauthorized use if I had told Fidelity, I could lose as much as \$500. Also, if my statement shows transfers that I or my Authorized agent(s)/Advisor(s) did not make, I will tell Fidelity promptly. If I do not tell Fidelity within sixty (60) days after the first statement was mailed to me, I may not get back any money I lost after sixty (60) days if Fidelity can prove that Fidelity could have stopped someone from taking the money if I had told Fidelity in time. In extenuating circumstances Fidelity may extend such time periods. Additional protection may be available from Fidelity for specific accounts under certain circumstances.

Stop Payment Procedures. If I or my Authorized agent(s)/Advisor(s) have told Fidelity in advance to make regular transfers out of my Fidelity Brokerage Account, I can stop any of these payments. Here's how: I can call or write to Fidelity using the Contact Information listed below. My notice must be made in time for Fidelity to receive my request at least three (3) business days or more before the payment is scheduled to be made. If I call, Fidelity may, as an additional measure, require me to put my request in writing and get it to Fidelity within fourteen (14) days after I call. Unless otherwise provided, I may not stop payment of electronic funds transfers; therefore I should not employ electronic access for purchases or services unless I am satisfied that I will not need to stop payment.

Fidelity's Liability for Failure to Complete a Transfer. If Fidelity does not complete a Covered Transfer to or from my Fidelity Brokerage Account on time or in the correct amount, according to Fidelity's agreement with me, Fidelity may reimburse me for my losses or damages. However, there are some exceptions. Fidelity will not be liable for instance:

- If, through no fault of Fidelity's, I do not have enough money in my Fidelity Brokerage Account to make the Covered Transfer.
- If the money in my Fidelity Brokerage Account is subject to legal process or other claim restricting such transfer.
- If the transfer would exceed my margin availability, if any.
- If the bank account information I or my Authorized agent(s)/Advisor(s) provided to Fidelity when I or my Authorized agent(s)/Advisor(s) established EFT was incorrect or has subsequently become incorrect.

- If circumstances beyond Fidelity's control (such as fire or flood) prevent the transaction, despite reasonable precautions taken by Fidelity.
- If there was a technical malfunction that was known to me at the time I or my Authorized agent(s)/Advisor(s) attempted to initiate a Covered Transfer or, in the case of a preauthorized Covered Transfer, at the time the transfer should have occurred.

There may be other exceptions stated in Fidelity's agreement with me.

Error Resolution. In the case of errors or questions about my Covered Transfers, I will call or write Fidelity using the contact information listed below. I will call or write Fidelity promptly if I think my statement is wrong or if I need more information about a Covered Transfer on the statement.

Fidelity must hear from me no later than 60 days after Fidelity sent the FIRST statement on which the problem or error appeared.

I will:

- Tell Fidelity my name and account number.
- Describe the error or the Covered Transfer that I am unsure about, and explain as clearly as I can why I believe it is an error or why I need more information.
- Tell Fidelity the dollar amount of the suspected error.

If I notify Fidelity verbally, Fidelity may require that I send my complaint or question in writing within ten (10) business days. Fidelity will tell me the results of its investigation within ten (10) business days after Fidelity hears from me and will correct any error promptly. If Fidelity needs more time, however, Fidelity may take up to forty-five (45) days to investigate my complaint or question. If Fidelity decides to do this, Fidelity will credit my account within ten (10) business days for the amount that I think is in error, so that I will have the use of the money during the time it takes Fidelity to complete its investigation. If Fidelity asks me to put my request or question in writing and does not receive it within ten (10) business days, or if my account is a brokerage account subject to Regulation T of the Board of Governors of the Federal Reserve System (Credit By Brokers and Dealers, 12 CFR 220), Fidelity may not credit my account. If Fidelity decides that there was no error, Fidelity will send me a written explanation within three (3) business days after Fidelity finishes the investigation. I may ask for copies of the documents that Fidelity used in the investigation.

Fidelity Contact Information

By Mail: Fidelity Investments
P.O. Box 770001
Cincinnati, OH 45277-0045

By Phone: 800-343-3548



Trade-Away Securities Transactions Supplement

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

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

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

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

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

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

I understand that I may be subject to additional trade-away fees for Trade-Away Transactions executed by Executing Brokers, including any penalties for failure to settle such transactions, and my Authorized agent(s)/Advisor(s) have informed me of the trade-away fees that may apply to my account and I agree to be bound thereby.

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

I understand that Fidelity may limit or restrict the number or volume of Trade-Away Transactions in my account. I also understand that I may be required to maintain minimum net equity levels in my Fidelity brokerage

account. I understand that any such limitations or requirements will be communicated to me on an initial and ongoing basis through my Authorized agent/Advisor.

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

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

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



Statement of Business Resiliency

Continued service to our customers is the main tenet of Fidelity's business continuity management program. Priority is given to critical activities that include, but are not limited to, trading, account maintenance, and customer service. Business Continuity, Resiliency Planning & Testing are integrated to deliver customer service with minimal disruption. Fidelity implements the measures described below as part of our overall continuity plan to ensure that critical services are maintained for our customers.

Resiliency Program

Fidelity uses a resiliency model that includes architecting the environment with the ability to absorb shocks in the technologies being used. Our primary goal is to mitigate all failure points internally that would require us to activate contingency plans. Due to the critical nature of our processing, Fidelity's core systems, applications, and network infrastructure are designed with the objective of eliminating single points of failure. In addition, we have an oversight function, Enterprise Business Resiliency (EBR), as the second line of defense monitoring the Resiliency Program at Fidelity. EBR includes Business Continuity and Technology Resiliency and Recovery teams providing Business Recovery and Resiliency standards and compliance tracking. We apply our resiliency compliance standards across the Fidelity ecosystem, and as required with partners, and vendors.

Mainframe systems are in two redundant Fidelity-owned data centers, and distributed platforms are spread within two redundant data centers, across the United States. In addition, our applications in the Cloud utilize multiregional zones and multiple geo physical locations provided by our Cloud providers.

- The data centers are equipped with redundant power and cooling systems, high-speed network connectivity, and 24/7 on-site monitoring and maintenance.
- In the event of a hardware or application failure, the redundant node within these centers will assume processing capabilities of the failed node. Regional failure will result in switching to the alternate region.
- Fidelity uses multiple application replication techniques, advanced storage, and database replication technology to ensure continuous availability of storage and data resources to our systems.

Fidelity's online services rely on a distributed, redundant infrastructure and are architected to be available 24/7 apart from scheduled weekly and monthly maintenance windows. Design consideration is given to every system component so that each is highly available.

Our distributed consumer platforms are spread across redundant data centers, and redundancy is provided within and across sites. In the event of an outage, consumer application traffic is routed away from the impacted region and the remaining sites handle full production loads. This feature is exercised monthly, consistent with our software and infrastructure resiliency standards.

In the event of a complete site failure, traffic is redirected to the alternate region/zone using application and network load balancing technologies. Fidelity maintains a fault-tolerant, high-speed network:

- The availability and utilization of Fidelity's proprietary network is monitored 24/7/365, and we respond to changes in usage and business requirements.
- Our network capacity model provides adequate bandwidth, even in contingency situations.
- Our network is designed to be fully redundant. Components such as switches, routers, and load balancers have redundancy to mitigate single points of failure.
- We use redundant Internet Service Providers to mitigate potential provider network issues.

Fidelity executes multiple exercises throughout each calendar year. Fidelity's business processes, critical infrastructure, application and data environments are exercised based on defined criticality and in accordance with our Resiliency standards.

Business Continuity

Fidelity's business continuity management program focuses on maintaining and recovering critical business processes that enable uninterrupted service to customers.

- A Business Impact Analysis (BIA) is conducted annually to determine the criticality of business processes.
- Risk assessments are conducted to identify threats requiring mitigation, and recovery plans are adjusted accordingly.
- Customer-facing business processes operate in at least two geographically diverse locations that are fully equipped and staffed. For example, Fidelity hosts several call centers, which are distributed across the United States.
- Back-office operations operate in multiple locations and/or have capability to work remotely and/or move work.
- Business recovery exercises are required at least annually. Recovery strategies of critical processes are required semiannually. Quarterly Emergency Notification System tests are performed to assess the ability to contact key managers and associates. Recovery exercises consist of performing critical process activities and validating the operating status of working remotely, application accessibility, data accessibility, and business processing capability.
- Third-party suppliers are subject to contract provisions requiring information security and business continuity capabilities consistent with service expectations. Critical suppliers are subjected to periodic risk-based assessments, with additional actions taken as needed to ensure the resiliency of our supply chains.

In support of the business continuity programs, each Fidelity business unit is required to exercise recovery of critical functions at least annually. This includes, but is not limited to, employee notification validation, event management education and training, functional recovery exercises, and tabletop exercises.

Our continuity planning teams work closely with local governments and officials in the event of an outage impacting our operations. Additionally, NFS has identified three large-scale scenarios that require particular focus: pandemics, events impacting market operations, and cyber events. Detailed response plans have been developed, and cross-disciplinary teams have been trained to address disruptions as well as these specific events.

Each Fidelity business unit has developed the capabilities to recover both operations and systems. All continuity plans are designed to account for disruptions of various lengths and scopes, and to ensure that critical functions are recovered to meet their business objectives. Dedicated teams within our technology organizations ensure that critical applications and data have sufficient redundancy and availability to minimize the impact of an event. Key components of NFS's business continuity plan include:

- Alternate physical locations and preparedness
- Alternative means to communicate with our customers and employees
- Strategies to address loss or impact to technology/applications

Fidelity is focused on addressing the potential risks associated with a contagious illness outbreak, including the impact on our employees, our customers, and continuity of operations. A firm-wide, cross-disciplinary team maintains a comprehensive, globally integrated strategy designed to prepare Fidelity Investments to respond effectively to a contagious illness. We are also in close contact with industry and health experts and closely monitor information provided by the Centers for Disease Control and Prevention and the World Health Organization.

Our approach centers around augmentation of our existing continuity program, which focuses on a variety of continuity solutions for process, system, and infrastructure outages, as well as reduced staffing scenarios.

Telecommuting

- Geographic diversification of critical functions
- Extended and flexible operating hours
- Regional work sharing

Because contagious illness scenarios can vary widely, our continuity teams work closely with management to implement any strategy

and take necessary steps to maintain business operations based on consultation with our enterprise teams and external resources.

Fidelity's Enterprise Business Resiliency program has been certified ISO 22301 compliant by BSI Americas.

This certification process requires regular program auditing by BSI Americas and, in addition to regular reviews by regulatory agencies and Corporate Audit, demonstrates the rigorous review of our resiliency program.

To obtain a copy of this notice at any time, contact NFS directly.

Clearing, custody or other brokerage services may be provided by National Financial Services LLC, Member NYSE, SIPC.

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Prime Brokerage Services Agreement

This Prime Brokerage Services Agreement (“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 Client Account Agreement, the provisions of this Supplement will control for matters or services related to this Supplement.

1. In connection with my account (“Account”), I acknowledge that, under the direction of my Authorized agent(s)/Advisors, I may maintain brokerage accounts with a number of brokers outside of Fidelity (“Executing Brokers”) and that my Authorized agent(s)/Advisors may from time to time place orders to be executed with one or more of these Executing Brokers. I hereby appoint you to act as prime broker for my account, to establish a prime brokerage account and to perform certain services (“Prime Brokerage Services”) in accordance with the terms of this Supplement, your internal policies and procedures, applicable laws and regulations and the Securities and Exchange Commission staff’s No-Action Letter, dated January 25, 1994, with respect to the provision of prime brokerage services, as the same may be amended, modified, or supplemented from time to time (“SEC Letter”). I acknowledge that I have read and am familiar with the terms of the SEC Letter and that I undertake to carry out prime brokerage transactions in accordance with the terms of the SEC Letter and to inform you promptly if this undertaking is not met. For purposes of this Supplement, “I” and “me” also refers to my Authorized agent(s)/Advisor(s).
 2. With regard to my Account, I authorize the Authorized agent(s)/Advisor(s) designated to oversee the my account as my agent and attorney-in-fact, and in such capacity, the Authorized agent(s)/Advisor(s) may give instructions to you and take all actions regarding the execution, clearance and settlement of prime brokerage transactions, including all actions necessary or incidental to the completion thereof on my behalf. You may act upon any instruction(s) the Authorized agent(s)/Advisor(s) may give to you regarding my Account, without obtaining my authorization, signature, co-signature, or in any further way verifying such instructions with me. I hereby authorize you to commingle my prime brokerage transactions with those of other accounts managed by my Authorized agent(s)/Advisor(s) for settlement in bulk with you in accordance with the Authorized agent(s)/Advisor(s) instructions.
 3. I authorize and direct my Authorized agent(s)/Advisor(s) to give you notice of the Executing Brokers with whom I or my Authorized agent(s)/Advisor(s) intend to place prime brokerage orders. I acknowledge that, in order to provide Prime Brokerage Services, you are required to execute an agreement with each Executing Broker with whom my Authorized agent(s)/Advisor(s) engage in prime brokerage transactions and that all prime brokerage transactions shall be subject to such agreement, as the same may be amended, modified, or supplemented from time to time (“Prime Brokerage Agreement”). I agree that, at your sole discretion, you may decline to enter into a Prime Brokerage Agreement with any Executing Broker, and you will not engage in prime brokerage transactions with any Executing Broker with whom you have not entered into a Prime Brokerage Agreement. I agree to accept any restrictions or limitations affecting my account which may result from such Prime Brokerage Agreements and your dealings with Executing Brokers. I further agree that, as between you and me, any loss resulting from any action or failure to take action by an Executing Broker or its agents or other third party with respect to me or my account, including, without limitation, the insolvency of any such party or the failure of any such party to fulfill its settlement obligations, will be borne solely by me, and I agree to indemnify you as provided below.
 4. I agree that you may be required by the SEC Letter, applicable law or the Prime Brokerage Agreements, or that you may otherwise deem it necessary or appropriate, to communicate information concerning me and my account to Executing Brokers. Such information may include, but is not limited to: (i) whether the net equity in the account falls below certain minimums set forth in the SEC Letter; (ii) information regarding the allocation of prime brokerage transactions to my Account (iii) other matters requested by Executing Brokers, after consultation with me; and (iv) such other information as you may deem necessary or appropriate. I consent to, and agree to hold you harmless with respect to, the release to Executing Brokers of any and all information in your possession regarding me and my account in accordance with this paragraph. As between you and the Executing Broker, the Executing Broker will be acting as my agent for the purpose of carrying out my directions with respect to the purchase, sale, and settlement of securities.
 5. I acknowledge that you have not recommended or endorsed any Executing Brokers, and you shall not be responsible or liable for any acts or omissions of any Executing Broker or its employees. I understand that you do not act as an investment advisor, give investment advice, make recommendations, or solicit orders. Nor do you advise prime brokerage customers, perform any analysis, or make any judgment on any matters pertaining to the suitability of any order, or offer any opinion, judgment, or other type of information pertaining to the nature, value, potential, or suitability of any particular investment or transaction. I also acknowledge that you have no responsibility for the trading activity in my account or the suitability thereof, or for monitoring such trading activity, and that your role is limited to carrying out the Prime Brokerage Services as described in this Supplement.
 6. I agree to indemnify and hold you harmless from any loss, claim or expense, including attorneys’ fees, incurred by you in connection with your acting or declining to act as prime broker for me and to fully reimburse you for any legal or other expenses (including the cost of any investigation and preparation) which you may incur in connection with any claim, action, proceeding, or investigation arising out of or in connection with this Supplement, the Prime Brokerage Services or any transactions hereunder.
 7. My Authorized agent(s)/Advisor(s) will advise you by 4:30 p.m. on any trade date of the details of all transactions effected by Executing Brokers on my behalf for such date, as required by the SEC Letter (the “Trade Data”). I or my Authorized agent(s)/Advisor(s) will supply you with the following information to the extent known for each transaction: (i) account name; (ii) name of Executing Broker (and clearing broker, if different); (iii) security name, quantity, and security symbol (or CUSIP number, if no security symbol exists or is known); (iv) whether the transaction is a buy, buy to cover, sell, or sell short transaction; (v) price per share or other unit (if a trade is to be reported on an average price basis, I must compute the average price to four decimal places); (vi) exchange or other market where executed; (vii) commission rate; (viii) total execution and commission costs; (ix) if an options transaction is involved, whether the transaction is an opening or closing transaction; (x) the trade date and settlement date; (xi) for trades in non-U.S. markets, all other information required for you to settle such trades; and (xii) settlement instructions. You are authorized to acknowledge, affirm, settle, and clear all such transactions that are accepted by you. I agree that, subject to the provisions of this Supplement, you will affirm and settle transactions with an Executing Broker only to the extent that the information provided by such Executing Broker matches the trade information submitted by me or my Authorized agent(s)/Advisor(s) to you. I acknowledge and agree that you may disaffirm, “DK” (indicate that you “do not know”), or decline to affirm, clear or settle any prime brokerage order or transaction, as provided in the SEC Letter, the Prime Brokerage Agreement or this Supplement, including where I or my Authorized agent(s)/Advisor(s) have provided information to you that does not match the information provided by the Executing Broker. In such event, I shall be required to clear or settle such prime brokerage transaction with the applicable Executing Broker, and I shall be liable to you for any loss resulting therefrom.
 8. You are authorized to undertake to resolve any unmatched trade reports received by you from an Executing Broker; however, I agree that I shall remain responsible for the ultimate resolution thereof. I agree that I am responsible and liable to you for all costs, losses, and fees (including, but not limited to, those associated with buy-ins and sell outs and those resulting from an Executing Broker’s inability to settle a transaction) arising out of the orders placed by my Authorized agent(s)/Advisor(s) or any action not taken by an Executing Broker with respect to my account. I acknowledge that is the responsibility of the Executing Broker, working with my Authorized agent(s)/Advisor(s), to confirm to you each transaction through the ID System of Depository Trust Company (“DTC”). You shall have no responsibility with respect to Trade Data not correctly transmitted to you on a timely basis by any person or entity, including DTC.
 9. I understand and agree that I shall be required to maintain in my prime brokerage account a minimum net equity as agreed upon in cash and securities with a ready market (“Minimum Net Equity”), but in no event less than that required in the SEC Letter, and that settlement of such transactions accepted by you will be made by you only if sufficient funds, or securities, as applicable, are maintained in an account with you or if I make other arrangements for settlement which are satisfactory to you; provided, however, that in no event shall you accept any transaction if I maintain, or the settlement of such transaction would cause me to maintain, a net equity less than the minimum required by the SEC Letter. I acknowledge that you may establish a higher Minimum Net Equity than that established by the SEC Letter. I understand that, in the event my account falls below the Minimum Net Equity established by you, I shall bring my account into compliance in a timely fashion, which in no event shall be later than the time required by the SEC Letter. I also understand that you reserve the right at any time to place a limit on the size of transactions executed by any Executing Brokers which are to be settled and cleared by you as prime broker.
- In the event that my account falls below the Minimum Net Equity, I hereby authorize you to notify promptly all Executing Brokers with whom you have a Prime Brokerage Agreement on my behalf of such event. If I fail to restore my account to compliance with the Minimum Net Equity, I further understand and agree that you may, without notice to me, disaffirm, DK, or decline to affirm, clear or settle any specified transaction effected by an Executing Broker on my behalf in accordance with the terms of the SEC Letter. I understand that, should you disaffirm or decline to affirm, clear or settle any transaction of mine, all of my transactions that day shall be disaffirmed, or not affirmed. I understand that I must settle outstanding trades directly with the Executing Broker and hereby authorize you to provide the Executing Broker with such Trade Data and account information as you deem necessary for the Executing Broker to settle such trades. I further understand that you will not be bound to make any investigation into the facts surrounding any transaction to which I am a party.

10. I agree to pay all fees agreed to by you and me. I understand and agree that you may charge an additional fee for each transaction effected through a prime brokerage relationship. These fees may be in addition to your usual fees for performing brokerage custody services on my behalf, and I agree to pay these additional charges. Further, I understand that Executing Brokers may charge commissions and fees for execution and clearance, and I agree to make any necessary arrangements with Executing Brokers concerning the payment of such fees, including the deduction of any such amounts from commissions charged by the Executing Brokers.
11. If I have instructed Executing Brokers to send trade confirmations to me in care of you, I understand that such confirmations are available to me without charge upon request. On the day following your receipt of information from me regarding any prime brokerage transaction, you agree to send me a notification of each such trade based on the information supplied to you by me or my Authorized agent(s)/Advisor(s). Any trade notifications issued by you as prime broker shall indicate the name of the Executing Broker involved and the other information required by the SEC Letter, provided that you will have received such information in the manner and to the extent provided herein from me. I acknowledge that you have requested that I provide you with all information required by Rule 10b-10 under the Securities Exchange Act of 1934 with respect to each prime brokerage transaction. I agree that the notifications sent by you will be based solely upon the information supplied by me or my Authorized agent(s)/Advisor(s) and that you assume no responsibility, and I will hold you harmless in connection therewith.
12. I understand that, unless I have selected to participate in the Prime Brokerage Services in the Account Characteristics section of the Application, Executing Brokers will send trade confirmations to me (either directly or, as discussed above in paragraph 11, to me in care of you) for all trades they have executed. If I have selected to participate in the Prime Brokerage Services in the Account Characteristics section of the Application, you will send all trade confirmations to my Authorized agent(s)/Advisor(s) instead of me, and I will rely upon quarterly account statements to monitor the trading activities of my Authorized agent(s)/Advisor(s) and Executing Brokers. I understand that receiving quarterly account statements in lieu of confirmations affects my ability to monitor the trading activity and investment decisions made by my Authorized agent(s)/Advisor(s) and executed by my Executing Brokers. I acknowledge that the Authorized agent(s)/Advisor(s) is(are) my fiduciary(ies) and have discretion over my Account.
13. This Supplement will apply only to transactions in debt and equity securities cleared and settled through U.S. clearance and settlement systems and in such other securities and instruments as are otherwise specifically approved by you for clearance pursuant to a separate written amendment to this Supplement. It is expressly agreed that, with respect to transactions in securities not covered by the preceding sentence, you will have no obligation to me or any third party to clear or settle trades executed by me, and I will inform the Executing Brokers in such transactions that the Executing Broker may only look to me for the settlement of such transactions and the resolution of any claim or dispute relating thereto.
14. I agree that, pursuant to your internal policies and procedures, the SEC Letter, the Prime Brokerage Agreements or applicable law, you may, at any time, cease to act as prime broker for my account or you may decline to affirm, clear, and settle any prime brokerage transaction or transactions effected by an Executing Broker on my behalf. If you do cease to act or so decline, you will make reasonable efforts promptly to notify me, but such notice will not be a condition to your right to cease to act as prime broker or to decline to affirm, clear or settle prime brokerage transactions, and you will incur no liability to me or any third party for exercising such right. In any such case and in the case of any termination of this Supplement, I agree that I must settle outstanding trades that have been "DK'd" or disaffirmed, and all future trades (in the event this Supplement is terminated) directly with the Executing Broker.

**FACTS**

What do Fidelity Investments and the Fidelity Funds do with your personal information?

WHY?

Financial companies choose how they share your personal information. Federal law gives consumers the right to limit some but not all sharing. Federal law also requires us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand what we do.

WHAT?

The types of personal information we collect and share depend on the product or service you have with us. This information can include:

- Social Security number and employment information
- assets and income
- account balances and transaction history

When you are *no longer* our customer, we continue to share your information as described in this notice.

HOW?

All financial companies need to share customers' personal information to run their everyday business. In the section below, we list the reasons financial companies can share their customers' personal information, the reasons Fidelity Investments and the Fidelity Funds (hereinafter referred to as "Fidelity") choose to share, and whether you can limit this sharing.

REASONS WE CAN SHARE YOUR PERSONAL INFORMATION	DOES FIDELITY SHARE?	CAN YOU LIMIT THIS SHARING?
For our everyday business purposes — such as to process your transactions, maintain your account(s), respond to court orders and legal investigations, or report to credit bureaus	Yes	No
For our marketing purposes — to offer our products and services to you	Yes	No
For joint marketing with other financial companies	No	We don't share
For our affiliates' everyday business purposes — information about your transactions and experiences	Yes	No
For our affiliates' everyday business purposes — information about your creditworthiness	No	We don't share
For nonaffiliates to market to you	No	We don't share

QUESTIONS?

Call 800.343.3548. If we serve you through an investment professional, please contact them directly. Specific Internet addresses, mailing addresses, and telephone numbers are listed on your statements and other correspondence.

WHO WE ARE	
Who is providing this notice?	Companies owned by Fidelity Investments and using the Fidelity name to provide financial services to customers, and the Fidelity Funds. A list of companies is located at the end of this notice.
WHAT WE DO	
How does Fidelity protect my personal information?	To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer safeguards and secured files and buildings.
How does Fidelity collect my personal information?	<p>We collect your personal information, for example, when you</p> <ul style="list-style-type: none"> ■ open an account or direct us to buy/sell your securities ■ provide account information or give us your contact information ■ tell us about your investment portfolio <p>We also collect your personal information from others, such as credit bureaus, affiliates, or other companies.</p>
Why can't I limit all sharing?	<p>Federal law gives you the right to limit only</p> <ul style="list-style-type: none"> ■ sharing for affiliates' everyday business purposes—information about your creditworthiness ■ affiliates from using certain information to market to you ■ sharing for nonaffiliates to market to you <p>State laws and individual companies may give you additional rights to limit sharing.</p>
DEFINITIONS	
Affiliates	<p>Companies related by common ownership or control. They can be financial and nonfinancial companies.</p> <ul style="list-style-type: none"> ■ Fidelity Investments affiliates include companies with the Fidelity name (excluding the Fidelity Funds), as listed below, and other financial companies such as Green Pier Fintech LLC, National Financial Services LLC, Strategic Advisers LLC, and FIAM LLC.
Nonaffiliates	<p>Companies not related by common ownership or control. They can be financial and nonfinancial companies.</p> <ul style="list-style-type: none"> ■ Fidelity does not share with nonaffiliates so they can market to you.
Joint marketing	<p>A formal agreement between nonaffiliated financial companies that together market financial products or services to you.</p> <ul style="list-style-type: none"> ■ Fidelity doesn't jointly market.
OTHER IMPORTANT INFORMATION	
<p>If you transact business through Fidelity Investments life insurance companies, we may validate and obtain information about you from an insurance support organization. The insurance support organization may further share your information with other insurers, as permitted by law. We may share medical information about you to learn if you qualify for coverage, to process claims, to prevent fraud, or otherwise at your direction, as permitted by law. You are entitled to receive, upon written request, a record of any disclosures of your medical record information. Please refer to your statements and other correspondence for mailing addresses.</p> <p>If you establish an account in connection with your employer, your employer may request and receive certain information relevant to the administration of employee accounts.</p> <p>If you interact with Fidelity Investments directly as an individual investor (including joint account holders), we may exchange certain information about you with Fidelity Investments financial services affiliates, such as our brokerage and insurance companies, for their use in marketing products and services, as allowable by law. Information collected from investment professionals' customers is not shared with Fidelity Investments affiliates for marketing purposes, except with your consent and as allowed by law.</p> <p>The Fidelity Funds have entered into a number of arrangements with Fidelity Investments companies to provide for investment management, distribution, and servicing of the Funds. The Fidelity Funds do not share personal information about you with other entities for any reason, except for everyday business purposes in order to service your account.</p> <p>For additional information, please visit Fidelity.com/privacy.</p>	
WHO IS PROVIDING THIS NOTICE?	
<p>Empire Fidelity Investments Life Insurance Company®; FIAM LLC; Fidelity Brokerage Services LLC; Fidelity Distributors Company LLC; Fidelity Diversifying Solutions LLC; Fidelity Funds, which include funds advised by Strategic Advisers LLC and Fidelity Diversifying Solutions LLC; Fidelity Health Insurance Services, LLC; Fidelity Institutional Wealth Adviser LLC; Fidelity Insurance Agency, Inc.; Fidelity Investments Institutional Operations Company LLC; Fidelity Investments Life Insurance Company; Fidelity Management Trust Company; Fidelity Personal and Workplace Advisors LLC; Fidelity Personal Trust Company, FSB; Fidelity Wealth Technologies LLC; Green Pier Fintech LLC; National Financial Services LLC and Strategic Advisers LLC.</p>	