

<p>Investment Advisor ("IA") Information (This portion to be completed by IA.)</p> <p>IA Firm Name (Please print.): _____</p> <p>IA Master Account Number: _____ Service Team: _____</p> <p>Advisor Contact Information (if follow-up is required): _____</p>
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Note: If you are submitting a handwritten form, please print in ALL CAPITAL LETTERS.

1. Account Holder Information (For information about Schwab's privacy policy, please refer to the attached IRA Account Application Agreement.)
As required by federal law, Schwab will use the information provided below to verify your identity.

Account Holder/Minor

First Name	Middle	Last	Are you known by another name? (Specify.)	
Home/Legal Street Address (no P.O. boxes, please) Line 1		Line 2		
City		State	Zip Code	
Mailing Address (if different from above; P.O. boxes may be used) Line 1		Line 2		
City		State	Zip Code	
Social Security/Tax ID Number	Date of Birth (mm/dd/yyyy)	Home Telephone Number (xxx-xxx-xxxx)		
Business Telephone Number (xxx-xxx-xxxx)	Ext.	Cellular Telephone Number (xxx-xxx-xxxx)		
<input type="radio"/> USA <input type="radio"/> Other	<input type="radio"/> Other	<input type="radio"/> USA <input type="radio"/> Other	Country of Legal Residence	
Country(ies) of Citizenship (Must list all. If not a U.S. citizen, please complete identification information below.)				
<input type="radio"/> Passport <input type="radio"/> U.S. Driver's License <input type="radio"/> U.S. Gov't Issued ID	Identification Number	State/Country of Issuance	Issue Date	Expiration Date
Identification Type (Complete only if not a U.S. citizen.)				
Employer Name/Industry (If self-employed, indicate nature of business.)		Occupation/Position	Employment Status	
<input type="radio"/> Employed <input type="radio"/> Retired <input type="radio"/> Self-Employed <input type="radio"/> Non-Employed				
Business Street Address (no P.O. boxes, please) Line 1		Line 2		
City		State	Zip Code	

Are you affiliated with or employed by a stock exchange or member firm of an exchange or FINRA, or a municipal securities broker-dealer? No Yes
(If "yes," you must attach a letter from your employer approving the establishment of your account when submitting this application.)

Are you a director, 10% shareholder or policy-making officer of a publicly held company? No Yes
(If "yes," enter company name _____ and trading symbol _____.)

<p>For Charles Schwab Use Only</p> <p>Account Number _____</p>



1. Account Holder Information (Continued)**Custodian Information** Please complete if the account is for a minor.

First Name	Middle	Last	Are you known by another name? (Specify.)
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Home/Legal Street Address (no P.O. boxes, please) Line 1	Line 2
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City	State	Zip Code
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Mailing Address (if different from above; P.O. boxes may be used) Line 1	Line 2
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City	State	Zip Code
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Social Security/Tax ID Number	Date of Birth (mm/dd/yyyy)	Home Telephone Number (xxx-xxx-xxxx)
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Business Telephone Number (xxx-xxx-xxxx)	Ext.	Cellular Telephone Number (xxx-xxx-xxxx)
--	------	--

<input type="radio"/> USA <input type="radio"/> Other	<input type="radio"/> Other	<input type="radio"/> USA <input type="radio"/> Other
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Country(ies) of Citizenship (Must list all. If not a U.S. citizen, please complete identification information below.)	Country of Legal Residence
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<input type="radio"/> Passport <input type="radio"/> U.S. Driver's License <input type="radio"/> U.S. Gov't Issued ID	
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Identification Type (Complete only if not a U.S. citizen.)	Identification Number	State/Country of Issuance	Issue Date	Expiration Date
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Employer Name/Industry (If self-employed, indicate nature of business.)	Occupation/Position	Employment Status
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<input type="radio"/> Employed <input type="radio"/> Retired <input type="radio"/> Self-Employed <input type="radio"/> Non-Employed	
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Business Street Address (no P.O. boxes, please) Line 1	Line 2
--	--------

City	State	Zip Code
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Are you affiliated with or employed by a stock exchange or member firm of an exchange or FINRA, or a municipal securities broker-dealer? No Yes

(If "yes," you must attach a letter from your employer approving the establishment of your account when submitting this application.)

Are you a director, 10% shareholder or policy-making officer of a publicly held company? No Yes

(If "yes," enter company name _____ and trading symbol _____.)

2. Select IRA Type (Select only ONE type of account.)

► **Traditional IRA.** Select only one.

- Contributory IRA
- Rollover IRA
- Rollover from an employer retirement plan

Name of Employer Sponsoring the Plan	\$ _____	Approximate Total Value of Distribution	Expected Distribution Date (mm/dd/yyyy), If Known
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By signing this application, I elect that my IRA assets identified above be considered a rollover. This election is required by the IRS to qualify my contribution as a rollover contribution.

► **Roth IRA.** Select only one.

- Roth Contributory
- Roth Conversion (from a Schwab Traditional IRA)

Current Schwab Traditional IRA to convert: _____

Amount to convert to Roth IRA

- Full conversion: The entire balance of your IRA will be converted.
- Partial conversion: Only a portion of your IRA will be converted. Attach a separate sheet of paper listing the name of the asset and number of shares.

Important Tax Withholding Election Notice: Distributions from your IRA are generally subject to federal (and possibly state) income tax. Even if you elect in writing not to have federal and/or state income tax withheld, you are liable for payment of federal and state income taxes, if applicable, on the taxable portion of your distribution. You may also be subject to tax penalties under the estimated tax payment rules if your withholding and payment of estimated tax, if any, are not adequate.

Your tax withholding election will remain in effect on all distributions from your Traditional IRA until you change or revoke it. You may change or revoke your tax withholding election at any time by submitting your requests to Schwab.

2. Select IRA Type (Continued)

Withholding income taxes may subject you to IRS penalties if you are under age 59½, because the amount withheld is considered a distribution. Schwab recommends that you contact your tax advisor regarding your tax withholding election.

Please select a withholding instruction for the taxable distribution that results from the conversion. If you do not make an election or have not previously made an election, Schwab is required to withhold 10% for payment of federal (and possibly state) income tax from your gross distribution.

- Do not withhold tax**
- Withhold tax:** Federal income tax: 10% 15% 20% Other _____% (Federal tax withholding must be a whole number, at least 10%, and not more than 99% when combined with state income tax withholding.) If you reside in AR, CA, DE, GA, IA, KS, MA, ME, NC, NE, OK, OR or VT and federal income tax withholding is applied, Schwab will also apply state income tax withholding based upon your state's minimum tax rate.
- Roth Conversion (from a Schwab Qualified Plan*)**
Current Schwab Qualified Plan to convert: _____ **Note:** You are required to complete and attach the appropriate Schwab qualified plan distribution form. (Tax withholding information will be provided within the distribution form.)
- *A Schwab Qualified Plan is a Schwab Profit Sharing Qualified Retirement Plan or Keogh, a Schwab Individual 401(k), or a Schwab 403(b)(7) Account.

► **Inherited IRA/Spousal Rollover IRA.** Select only one.

Select Spousal Rollover IRA if you are the spouse beneficiary of a qualified retirement plan or you want to roll over or transfer the decedent's account into your own IRA.

- Inherited IRA Spousal Rollover IRA

Decedent's Information

First Name	Middle	Last	Social Security/Tax ID Number
Schwab IRA or Schwab Qualified Plan Account Number		Date of Death	

Check the type of account you are inheriting. Select only one.

- Traditional IRA (includes Rollover, SEP, SIMPLE or Inherited Traditional IRA)
- Roth IRA (includes Inherited Roth IRA)
- Qualified plan† (e.g., profit-sharing, money purchase, 401(k), Individual 401(k), 403(b), and 457 plans)
- Qualified plan† (**Roth elective deferrals only—e.g., Roth 401(k)**)

† If you are uncertain of the type of qualified plan that the decedent held, please contact the plan administrator for further clarification.

► **Custodial IRA.** Select only one. Please complete Section 1 with minor and custodian information.

- Custodial Contributory IRA
- Custodial Roth Contributory IRA
- Education Savings Account

If this is a Custodial IRA for a minor, indicate the age for termination of custodianship and the state law under which this Custodial account will be governed.†

Age of Termination _____ Governing State Law _____

† This is required for minors who are residents of states governed by the Uniform Transfers to Minors Act or by the Uniform Gifts to Minors Act. The age of custodianship termination varies by state, although many states set the maximum age for termination at 21. If you do not indicate an age or governing state law here, the account will be set up using the Custodian's state of residence and that state's default age of custodianship termination (either 18 or 21). If neither the minor nor the Custodian is a U.S. resident, the Custodian must indicate the governing state law in the Governing State Law field above.

I understand that electing to extend custodianship to age 25, if applicable, may cause me to lose my annual exclusion from federal gift tax and that I should consult with an attorney or tax advisor before making this election. (Note: Only certain states allow the custodianship to be extended to the minor's twenty-fifth birthday. This election may be exercised only in those states that specifically provide for it.)

► **SIMPLE IRA.** Please note: This form can only be used to add participants to an existing plan.

- SIMPLE IRA

Name of Business	Employer's Group Plan Number
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► **Simplified Employee Pension (SEP) IRA.** Select only one. (Application must include Adoption Agreement and Employer's Agreement.)

- SEP-IRA SARSEP-IRA

Name of Business



3. Choose Your Cash Feature

Please select below one eligible Cash Feature that may allow you to earn income on the free credit balances in your brokerage account (each, a "Cash Feature"). Eligibility for each Cash Feature is indicated below. For additional information on the eligibility rules for, and important disclosures about, the various alternatives to earn income on your cash, please see the Cash Features Disclosure Statement for Schwab Institutional®. If you do not select a Cash Feature, select more than one Cash Feature, or select a Cash Feature for which you are not eligible, you instruct Schwab to designate the Bank Sweep feature as the Cash Feature for your account. Schwab may make this designation without providing any advance notice to you.

Select only one of the following:	Available to:
<input type="radio"/> Bank Sweep feature*	Individuals Only
<input type="radio"/> Schwab Government Money Fund™ (SWGXX)	Clients with Household Balance† >\$100,000
<input type="radio"/> Schwab Advisor Cash Reserves®—Sweep Shares (SWQXX)	Clients with Household Balance† >\$500,000
<input type="radio"/> Schwab Advisor Cash Reserves®—Premier Sweep Shares (SWZXX)	Clients with Household Balance† >\$1,000,000

The Cash Features listed above may not be available to non-U.S. residents. Please contact Schwab for your cash feature eligibility if you reside outside of the United States.

*The Bank Sweep feature automatically makes deposits to and withdrawals from deposit accounts held at Charles Schwab Bank, an FDIC-insured depository institution affiliated with Schwab. Please see Schwab's cash feature disclosure statement for more information about FDIC insurance. We recommend that you assume that coverage of deposit accounts established under the Bank Sweep feature will be limited to FDIC insurance and that you do not expect coverage from SIPC.

†Your Household Balance includes all of your accounts at Schwab that have been linked in accordance with Schwab's householding guidelines.

If you select a Sweep Money Fund, your selection is considered a request for a prospectus. It is an indication of interest only, and you are not obligated to buy any shares. Please read the prospectus carefully. MONEY FUNDS ARE NOT FDIC-INSURED, MAY LOSE VALUE AND ARE NOT BANK-GUARANTEED.

4. Electronic Delivery (eDelivery) Enrollment

Schwab Institutional® offers electronic delivery of your account statements and trade confirmations. Once enrolled, you will receive notifications via email that your statements and confirmations are available via Schwab's secure website, www.schwaballiance.com. Enrolling in eDelivery may also qualify you for lower online equity trade commissions. Please consult your Investment Advisor and/or the *Charles Schwab Institutional Pricing Guide* for more pricing details.

To begin enrollment in eDelivery, provide your email address below and Schwab Institutional will send you an email providing instructions on how to complete your enrollment and electronically consent to eDelivery via www.schwaballiance.com.

Email address: _____

5. Authorizations

Please initial all areas that apply to this account. (An X is not sufficient.) Any of these authorizations may be revoked by providing notice to Schwab.

Select one or more.	Account Holder Initials	Authorization
<input type="radio"/>	_____ Account Holder/Custodian	Trading and Disbursement Authorization. I authorize Schwab (1) to execute trades in my account at the direction of IA as provided under the Trading Authorization heading in the IRA Account Application Agreement; (2) to disburse assets for investment purposes or to me personally, as instructed by IA; and (3) to remit checks, wire funds and make certain disbursements of funds held in the account as regulations permit (i) to banks, broker-dealers, investment companies or other financial institutions for credit to an account of identical registration, or (ii) to me at my address of record. This disbursement authorization does not apply to Schwab MoneyLink® distributions or direct, ongoing electronic payments of dividends, interest and money market income. I acknowledge and agree that Schwab cannot confirm the account registration at the receiving financial institution and will rely solely on the representations of my IA as to the identical registration of the receiving accounts. Note: 1) You acknowledge that any disbursement made to you personally may constitute a taxable distribution. 2) Certain transfers between IRAs may be permitted. Please contact your IA.
<input type="radio"/>	_____ Account Holder/Custodian	Trading Authorization. I authorize Schwab to execute trades in my account at the direction of IA as provided under the Trading Authorization heading in the IRA Account Application Agreement.
<input type="radio"/>	_____ Account Holder/Custodian	Fee Payment Authorization. I authorize Schwab to pay investment advisory and related fees to IA from my account or another account registered to my name over which I have granted IA fee payment authorization in the amount of IA's instructions.

6. Issuer Communications and Related Actions

If you have granted your IA trading authority over your account, and your IA exercises investment discretion for you pursuant to an advisory contract, you can appoint your IA to be sent certain issuer and issuer-related communications (proxies, tender offers, proposed mergers, rights offerings, exchange offers and warrants, among other things) that may require a voting decision or other action regarding investments held in your account.

If you appoint your IA below, your IA will, regarding only those voting decisions or other action communications sent to your IA: (i) be requested to vote proxy ballots; (ii) be requested to provide instructions regarding corporate reorganizations and other corporate actions; and (iii) be sent certain prospectuses and annual reports and other communications. In these cases, you will be authorizing your IA to make all voting decisions and take all actions on your behalf. You will not be sent informational copies of these communications.

Even if you appoint your IA below, you may still be sent certain other issuer and issuer-related communications regarding investments held in your account. You agree that you will be responsible for providing Schwab any applicable instructions or directions on those items.

Please select only one:

- Yes. I appoint my IA and I will fulfill my responsibilities, as described above. I instruct Schwab not to disclose my name, address and securities positions to any issuer of securities held in my account.
- No. I do not appoint my IA as described above. I wish to be sent all issuer and issuer-related communications, make all voting decisions and take all actions described above. I understand that any issuer of securities held in my account may request that Schwab disclose to it my name, address and securities positions in that issuer.

If you selected "No" above, please select one:

My IA should / should not be sent informational copies of any issuer or issuer-related communications.

If you do not select either "Yes" or "No" above, Schwab will deem you to have indicated "No," but informational copies of issuer and issuer-related communications may be sent to your IA.

7. Designate Your Beneficiary(ies)*

In the event of my death, pay the full value of my account (in equal proportions in the case of multiple beneficiaries unless I indicate otherwise) to the Primary Beneficiary(ies) as designated. I understand that if a Primary Beneficiary predeceases me, the remaining portion will be divided proportionately among any surviving Primary Beneficiaries in the manner provided in the Charles Schwab & Co., Inc. Individual Retirement Plan. If no Primary Beneficiary survives me, pay the full value of my Account (in equal proportions in the case of multiple beneficiaries unless I indicate otherwise) to the Contingent Beneficiary(ies) as designated below. I understand that if a Contingent Beneficiary predeceases me, the remaining portion will be divided proportionately among any surviving Contingent Beneficiaries in the manner provided in the Charles Schwab & Co., Inc. Individual Retirement Plan. If no designated beneficiary survives me, or if I do not designate a beneficiary, pay the full value of my account to my estate.

I understand that I may change or revoke this designation at any time by completing a new IRA Beneficiary Form during my lifetime with Schwab. It will become effective when Schwab receives it.

If I live in a state with community property statutes and do not designate my spouse as the sole Primary Beneficiary, I represent and warrant that my spouse has consented to such designation.

I understand that if Schwab determines that my beneficiary designation is not clear with respect to the amount of the distribution, the date on which the distribution shall be made, or the identity of the party or parties who will receive the distribution, Schwab shall have the right, in its sole discretion, to consult counsel and to institute legal proceedings to determine the proper distribution of the account, all at the expense of the account, before distributing or transferring the account.

Note: If you are submitting a handwritten form, please print in ALL CAPITAL LETTERS.

I designate the individual(s) or entity(ies) below as my beneficiary(ies).[†] Primary Beneficiary(ies) below will receive payment of the value of my IRA upon my death. If no Primary Beneficiary survives me, I designate that the balance of my IRA be distributed to my Contingent Beneficiary(ies) below.

Primary Contingent
Type of Beneficiary Share %[†]

Trust Name (if applicable)[§] Trust Date (mm/dd/yyyy)

Individual First Name Middle Last

Social Security/Tax ID Number Date of Birth (mm/dd/yyyy) Relationship

Primary Contingent
Type of Beneficiary Share %[†]

Trust Name (if applicable)[§] Trust Date (mm/dd/yyyy)

Individual First Name Middle Last

Social Security/Tax ID Number Date of Birth (mm/dd/yyyy) Relationship



7. Designate Your Beneficiary(ies)* (Continued)

Primary Contingent
Type of Beneficiary Share %[†]

Trust Name (if applicable)[§] Trust Date (mm/dd/yyyy)

Individual First Name Middle Last

Social Security/Tax ID Number Date of Birth (mm/dd/yyyy) Relationship

Primary Contingent
Type of Beneficiary Share %[†]

Trust Name (if applicable)[§] Trust Date (mm/dd/yyyy)

Individual First Name Middle Last

Social Security/Tax ID Number Date of Birth (mm/dd/yyyy) Relationship

*If this is a Custodial IRA, I understand that only the minor's estate can be the beneficiary until such time as the minor becomes the owner of the IRA and designates his or her own beneficiaries.

[†] If more than four Primary or Contingent Beneficiaries are designated, attach a separate sheet of paper. Provide all the information above, including percentage of IRA for each beneficiary. (Percentages must total 100%.)

[†] If more than one beneficiary is designated, the percentages must total 100% per beneficiary type. I understand that if I fail to indicate percentage of benefits, Schwab will divide benefits equally among the beneficiaries I designate. **Note:** Benefits cannot be expressed in dollar amounts.

[§] If a trust is designated as a beneficiary, the date of the trust must be provided.

8. Authorization to Open Account

By signing this Application, you hereby adopt the applicable Individual Retirement Plan that names Charles Schwab & Co., Inc. as custodian of this account, as further explained in the Charles Schwab & Co., Inc. Individual Retirement Plan or the SIMPLE Individual Retirement Plan, as applicable.

You acknowledge that you have received and read the attached Application Agreement, which contains a predispute arbitration provision. You acknowledge that your signature signifies and constitutes your agreement that this account

and your relationship with Schwab will be governed by the Application Agreement and all incorporated agreements and disclosures, including, but not limited to, the applicable Individual Retirement Plan and Disclosure Statement, the Schwab IRA and ESA Account Agreement and the *Charles Schwab Institutional® Pricing Guide*, each as amended from time to time (the "Agreement and Disclosures"). You understand there are fees associated with establishing, maintaining, engaging in transactions and transferring assets out of this account.

This account is established and effective when you receive your account number. You have the right to cancel the account within seven days from the date the account is established. The revocation will be reported to the Internal Revenue Service as a distribution. For purposes of this Account Application and the attached Application Agreement, the terms "I," "me" and "Account Holder" refer to each person who signs this Account Application. The terms "we," "us," "our" and "Schwab" refer to Charles Schwab & Co., Inc.

I certify under penalty of perjury that (1) the number shown on this Application is my correct taxpayer number; (2) I am not subject to back-up withholding because (a) I am exempt from back-up withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to back-up withholding as a result of a failure to report all interest and dividends, or (c) the IRS has notified me that I am no longer subject to back-up withholding; and (3) I am a U.S. person (including a U.S. resident alien). (I understand that if I have been notified by the IRS that I am subject to back-up withholding as a result of dividend or interest underreporting and I have not received a notice from the IRS advising me that back-up withholding is terminated, I must strike or cross out the information contained in item 2 above.) The IRS does not require my consent to any provision of this document other than the certification required to avoid back-up withholding.

The Agreement with Schwab includes a predispute arbitration clause. I acknowledge receipt of the predispute arbitration clause contained in the Required Arbitration Disclosures and Arbitration Agreement sections, pages 1 and 2, of the IRA Account Application Agreement.

Signature: Account Holder/Custodian Print Name Date (mm/dd/yyyy)

These terms relate to your account and are part of the Account Agreement between each Account Holder and Schwab. Please retain for your files.

- (1) I understand that my agreement with Schwab consists of the terms set forth in this Application Agreement and the terms set forth in the applicable Individual Retirement Plan and Disclosure Statement and the Schwab IRA and ESA Account Agreement, which incorporates the *Charles Schwab Institutional® Pricing Guide* and a number of other important disclosures. The applicable Individual Retirement Plan and Disclosure Statement and the Schwab IRA and ESA Account Agreement are provided with this Application or at the opening of your Account. I agree to contact Schwab if I do not receive the applicable Individual Retirement Plan and Disclosure Statement and the Schwab IRA and ESA Account Agreement. In addition, I may in the future receive from Schwab supplemental terms or disclosures that pertain to certain account types, service features and benefit packages. These supplemental terms and disclosures, this Application Agreement, the applicable Individual Retirement Plan and Disclosure Statement and the Schwab IRA and ESA Account Agreement are collectively referred to as the "Agreement and Disclosures." I agree to read the Agreement and Disclosures carefully and retain copies for my records.
- (2) I agree that the Agreement and Disclosures govern all aspects of my relationship with Schwab, including all transactions between Schwab and me and all products and services now or in the future offered through Schwab. Schwab may rely on my use of Schwab's products and services as evidence of my continued acceptance of the Agreement and Disclosures.
- (3) I understand that the Account will earn income on funds invested in the Schwab Money Fund designated on this Application in accordance with the terms of the prospectus of said fund.

Additional Compensation to Schwab. Schwab shall retain as compensation for services provided to this Account the proportionate share of any interest earned on aggregate cash balances held by this Account in Schwab's bank account with respect to (1) assets awaiting investment or (2) assets pending distribution from this Account. Such interest retained by Schwab shall generally be at money market rates. Schwab's receipt of such compensation is further described in the Account Agreements and Disclosures.

Required Arbitration Disclosures. Regulatory authorities require that any brokerage agreement containing a predispute arbitration agreement must disclose that this agreement contains a predispute arbitration clause. This Agreement contains a predispute arbitration clause. By signing an arbitration agreement, the parties agree as follows:

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

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

1. the class certification is denied;
2. the class is decertified; or
3. 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.

Arbitration Agreement. Any controversy or claim arising out of or relating to (i) this Agreement, any other agreement with Schwab, an instruction or authorization provided to Schwab or the breach of any such agreements, instructions, or authorizations; (ii) the Account, any other Schwab account or Services; (iii) transactions in the Account or any other Schwab account; (iv) or in any way arising from the relationship with Schwab, its parent, subsidiaries, affiliates, officers, directors, employees, agents or service providers ("Related Third Parties"), including any controversy over the arbitrability of a dispute, will be settled by arbitration.

This arbitration agreement will be binding upon and inure to the benefit of the parties hereto and their respective representatives, attorneys-in-fact,

heirs, successors, assigns and any other persons having or claiming to have a legal or beneficial interest in the Account, including court-appointed trustees and receivers. This arbitration agreement will also inure to the benefit of third-party service providers that assist Schwab in providing Services ("Third-Party Service Providers") and such Third-Party Service Providers are deemed to be third-party beneficiaries of this arbitration agreement.

The parties agree that this arbitration agreement will apply even if the application to open the Account is denied and will survive the closure of your Account and/or the termination of services rendered under this Agreement.

Such arbitration will be conducted by, and according to the securities arbitration rules and regulations then in effect of, the Financial Industry Regulatory Authority (FINRA) or any national securities exchange that provides a forum for the arbitration of disputes, provided that Schwab is a member of such national securities exchange at the time the arbitration is initiated. Any party may initiate arbitration by filing a written claim with FINRA or such eligible national securities exchange. If arbitration before FINRA or an eligible national securities exchange is unavailable or impossible for any reason, then such arbitration will be conducted by, and according to the rules and regulations then in effect of, the American Arbitration Association (AAA). If arbitration before the AAA is unavailable or impossible for any reason, the parties agree to have a court of competent jurisdiction appoint three (3) arbitrators to resolve any and all disputes or controversies between or among the parties. Each party shall bear its own initial arbitration costs, which are determined by the rules and regulations of the arbitration forum. In the event of financial hardship, the arbitration forum may waive certain costs in accordance with such rules. At the conclusion of the hearing, the arbitrators will decide how to assess the costs of the arbitration among the parties.

Any award the arbitrator makes shall be final and binding, and judgment on it may be entered in any court having jurisdiction. This arbitration agreement shall be enforced and interpreted exclusively in accordance with applicable federal laws of the United States, including the Federal Arbitration Act. Any costs, fees or taxes involved in enforcing the award shall be fully assessed against and paid by the party resisting enforcement of said award.

For FINRA arbitrations, FINRA will appoint a single public arbitrator in customer cases decided by one arbitrator. In customer cases decided by three arbitrators, investors have the option of choosing an arbitration panel with two public arbitrators and one non-public arbitrator (Majority-Public Panel Rule) or a panel of all public arbitrators (Optional All-Public Panel Rule). If the customer declines to elect a panel selection method in writing by the applicable

deadline, the Majority-Public Panel Rule for selecting arbitrators will apply.

All notices from one party to the other involving arbitration shall be considered to have been fully given when so served, mailed by first-class, certified or registered mail, or otherwise given by other commercially accepted medium of written notification.

In addition to the above provisions, if a party to this Agreement is or becomes a non-U.S. resident at the time of any controversy subject to this arbitration agreement, such party acknowledges and agrees to the following additional provisions:

- (1) The rules of the organization administering the arbitration specifically provide for the formal designation of the place at which the arbitration is to be held.
- (2) Entering into this Agreement constitutes consent to submit to the personal jurisdiction of the courts of the state of California, U.S.A., to interpret or enforce any or all of these arbitration provisions. Judgment on any arbitration award may be entered in any court having jurisdiction, or application may be made to such court for judicial acceptance of the award and an order of enforcement, as the case may be.
- (3) The exclusive language to be used by the parties and the arbitrators in the arbitration proceedings shall be English. Any party wishing an interpreter shall make all arrangements directly with the interpreter and shall assume all costs of the service.
- (4) If a party is a foreign government or state, state-owned or state-operated enterprise or other instrumentality of a foreign government or state, such party waives all rights of sovereign immunity and neither the Federal Act of State doctrine nor the doctrine of sovereign immunity shall apply insofar as any enforcement in courts located in the U.S.A. is concerned.

Waiver of Class Action or Representative Action. Neither you nor Schwab shall be entitled to arbitrate any claims as a class action or representative action, and the arbitrator(s) shall have no authority to consolidate more than one parties' claims or to proceed on a representative or class action basis.

You and Schwab agree that any actions between us and/or Related Third Parties shall be brought solely in our individual capacities. You and Schwab hereby waive any right to bring a class action, or any type of representative action against each other or any Related Third Parties in court. You and Schwab waive any right to participate as a class member, or in any other capacity, in any class action or representative action brought by any other person, entity or agency against Schwab or you.

Trading Authorization. If I have indicated on this Account Application ("AA") that the Investment Advisor ("IA") named above, which I understand may be referred to as "Investment Manager" or "IM" in other documentation relating to my Account, will have the authority to direct Schwab to execute trades in my Account, I authorize Schwab to accept instructions from IA regarding my Account, and to take all other actions necessary or incidental to the execution of such instructions, as IA shall direct. If my Account is

authorized for option trading, Schwab is authorized to accept instructions from IA to purchase and sell (write) covered options contracts on securities and securities-related indexes, up to my approved level of option trading strategy. Schwab, and other people to whom Schwab has given instructions in order to implement the IA's instructions, may rely on IA's instructions without obtaining my approval, counter-signature or co-signature. IA's authority will include, without limitation: the authority to give instructions for transactions in securities and financial instruments, including the buying and selling of stocks, bonds, debentures, notes, subscription warrants, stock purchase warrants, options (if I have authorized trading options), mutual fund shares, evidences of indebtedness and any other securities, instruments or contracts relating to securities.

I authorize Schwab to take such actions as Schwab deems reasonably necessary to carry out instructions Schwab receives from me and/or IA. I further authorize Schwab, acting upon IA's instructions, to aggregate transaction orders for my Account with orders for one or more other accounts over which IA has trading authorization or to accept or deliver assets in transactions executed by other broker-dealers where IA has so aggregated orders. I agree that if any such aggregated order is executed in more than one transaction, my portion of such order may be deemed to have been executed at the weighted average of the prices at which all of such transactions were executed.

Fee Payment Authorization. If I have indicated on this Application that my IA will have fee payment authority over my Account, I authorize Schwab to pay investment advisory and related fees from my Account or another account registered to my name over which I have granted IA Fee Payment Authorization in the amount of my IA's instructions. I have authorized my IA in writing to receive fee payments directly from my Account. Schwab may rely on the instructions submitted by my IA, and will have no responsibility to confirm those instructions with me or verify the fees. Schwab may redeem money market fund shares in my Account to the extent necessary to pay these fees. My IA's fees debited from my Account will appear on Schwab's statements of my Account.

Disbursement Authorization. If I have indicated on this Application that my IA will have trading and disbursement authority over my Account, I authorize Schwab to disburse assets from my Account for investment purposes, and funds to me personally, as instructed by my IA. On my IA's instruction, Schwab is authorized to remit checks, wire funds, and make certain disbursements of funds held in the Account as regulations permit (i) to banks, broker-dealers, investment companies or other financial institutions for credit to an account of identical registration, or (ii) to me at my address of record. This disbursement authorization does not apply to Schwab MoneyLink® distributions or direct, ongoing electronic payments of dividends, interest and money market income. I acknowledge and agree that Schwab cannot confirm the account registration at the receiving financial institution and will rely solely on the representations of my IA as to the identical registration of the receiving accounts.

Note: 1) You acknowledge that any disbursement made to you personally may constitute a taxable distribution. 2) Certain transfers between IRAs may be permitted. Please contact your IA.

Role of Charles Schwab & Co., Inc. I acknowledge and agree that: Schwab will merely carry out transactions as directed by me and/or IA as the case may be; I (and not Schwab) am responsible for investigating and selecting IA except in the case of Schwab's affiliated IA, Windhaven Investment Management, Inc. ("Windhaven"); IA is not affiliated with, or controlled or employed by, Schwab; and Schwab has no duty to supervise or monitor trading by me or by IA, including Windhaven, in my Account. Schwab will send me written confirmations of my trades executed through Schwab and monthly statements of all activity in my Account. I authorize Schwab to obtain from IA, and IA to provide to Schwab, information regarding my Account as Schwab may reasonably request. If any of IA's employees is associated with a member of FINRA, NYSE or affiliate, Schwab is authorized to deliver information concerning my Account to such member upon request.

If my IA and/or I direct Schwab to act as custodian of non-publicly traded assets, I acknowledge and agree: (1) that non-publicly traded assets generally lack a liquid market and that the value of such assets may be difficult to ascertain; (2) that any estimated value reflected on my account statement or other communication from Schwab is for informational purposes only and may be significantly different from the actual market value or the liquidation value of such assets; (3) that I will provide Schwab with annual instruction, no later than January 15 each year, regarding the fair market value of these assets as of the preceding December 31, for purposes of Internal Revenue Service (IRS) reporting, and I agree to indemnify and hold Schwab harmless from any consequences, including penalties assessed by the IRS, resulting from following my valuation instructions; (4) that if I do not provide Schwab with valuation instructions by the due date, Schwab may request an appraisal from a third party and charge the cost of the appraisal to my IRA; (5) that Schwab reserves the right to require an appraisal, in form and substance satisfactory to Schwab in its sole discretion, before complying with any direction to make a distribution of any non-traded asset from the IRA; (6) that Schwab may require that I sign an addendum to my Account Agreement if Schwab agrees, in the exercise of its discretion, to accept custody of any non-publicly traded assets in my Account. I authorize Schwab to obtain from IA, and IA to provide to Schwab, information regarding my Account as Schwab may reasonably request. If any of IA's employees is associated with a member of FINRA, NYSE or affiliate, Schwab is authorized to deliver information concerning my Account to such member upon request. I acknowledge, understand and agree that (1) Schwab Advisor Network® ("Network") member advisors pay Schwab fees to be members; (2) Network member advisors, including IA, are independent and not employees or agents of Schwab; (3) Schwab prescreens Network member advisors and

checks their experience and credentials against criteria Schwab sets; (4) neither an IA's membership in Schwab Advisor Network® nor Windhaven's affiliation with Schwab changes that (A) I am solely responsible for (i) the decision to hire IA, (ii) what authority to give IA and (iii) evaluating IA's services and performance; and (B) Schwab (i) does not supervise IA and (ii) takes no responsibility to monitor IA's performance or transactions in the Account; and (5) if I was referred to IA through the Schwab Advisor Network or referred to Windhaven, I have received, read and understood either the Schwab Advisor Network Disclosure Document or the Schwab Disclosure Brochure for the Windhaven Investment Management, Inc. Referral Program.

Products and Services Provided to IA. Schwab may provide IA, at no fee or at a discounted fee, with research, software and other technology, information and consulting services, and other products and services that benefit IA. Schwab's provision of these products and services to IA may be based upon clients of IA placing a certain amount of assets in their brokerage accounts at Schwab (i.e., custodial assets at Schwab) within a certain period of time. IA may be influenced by this commitment in recommending or requiring that its clients establish brokerage accounts at Schwab. These products and services may not necessarily benefit my Account.

Pricing. Schwab and IA may agree to pricing (including commissions and transaction account and service fees) for my Account and IA's other clients' accounts at Schwab based upon the nature and scope of business that IA transacts with Schwab, including the current and future expected amount of IA's clients' assets custodied at Schwab, the types of securities managed by IA and/or expected frequency of IA's trading. Schwab may change this pricing if the nature and scope of business that IA transacts with Schwab changes or does not reach agreed-upon levels, in which case pricing for IA's clients' accounts, including my Account, may increase to an amount determined by Schwab not to exceed Schwab's standard pricing as published in the then-current *Charles Schwab Institutional® Pricing Guide*.

Schwab's Privacy Policy and Disclosure of Information. Schwab respects your privacy. Schwab will use the information you provide to

open and service your Account, to communicate with you when necessary, to provide you with additional information about products and services and to provide to your IA, and certain third parties as your IA directs Schwab, information as provided in this AA. Pursuant to your Account Agreement, Schwab may disclose information about you and your Account to certain other third parties. Please call Schwab at 1-800-515-2157 for a copy of Schwab's privacy policy.

Termination of Authorizations. The authorizations I have granted in this AA will remain effective until I or IA have revoked or terminated any of them by giving notice to Schwab, either by mail, telephone, facsimile, telegraph, messenger, electronic mail, voice mail or otherwise; provided, however, that Schwab reserves the right to require written notice or confirmation that such authorization has been terminated or revoked. I understand that I may revoke or terminate all authorizations or designations conferred herein at any time. Unless revoked or terminated by me, all authorizations and designations conferred herein to IA shall continue to apply to IA's successors or assigns. Such revocation will not affect my obligation resulting from transactions initiated prior to Schwab's receipt of such notice. I understand that if Schwab terminates its Investment Manager Service Agreement with IA, Schwab will not be obligated to honor any further instructions from IA; I will have exclusive control over, and responsibility for, my Account; and unless Schwab notifies me otherwise, my Account will become a Schwab retail brokerage account subject to all terms and conditions applicable thereto, including fees and commissions, investment products and other services available to Schwab retail customers. Schwab will notify me as soon as reasonably possible after any such termination.

Indemnification. I agree to indemnify and hold harmless Schwab, its affiliates and their directors, officers, employees and agents from and against all claims, actions, costs and liabilities, including attorneys' fees, arising out of or relating to: (1) their reliance on this AA and (2) Schwab's execution of my or my IA's instructions.

Verification. I authorize Schwab to inquire from any source, including a consumer reporting agency, as to my identity (as required by federal

law), creditworthiness and ongoing eligibility for the Account (and that of my spouse, if I live in a community property state) at Account opening, at any time throughout the life of the Account, and thereafter for debt collection or investigative purposes.

Suitability. From time to time, Schwab may make available investment research and information ("Schwab research"). I agree and acknowledge that my IA and I are responsible for the transactions in my Account, including assessing the suitability of transactions for my Account, even if Schwab research was used in making the investment decisions for my Account.

Account Ownership. If this is an IRA established by a custodian for a minor, I agree and acknowledge that the IRA is governed by the Uniform Transfers to Minors Act (UTMA) or the Uniform Gifts to Minors Act (UGMA). I agree that the Account is irrevocably vested in and belongs to the minor, to be used for the sole benefit of the minor, and delivered to the minor promptly upon attaining the age of majority (or other age specified for termination under applicable state law).

I consent to Schwab: (i) sending, by mail, electronic delivery and/or other means, duplicate copies of account trade confirmations, account statements and any other information relating to me and my Accounts to my IA and MM, if and in such manner as requested by my IA and MM; (ii) sending such information about me and my Accounts to third parties as my IA or MM shall direct Schwab; and (iii) disclosing information about me and my Accounts to other third parties as provided in Schwab's privacy policy, this Account Application and the Account Agreement.

Unclaimed Property. If no activity occurs in the Account within the time period specified by applicable state law, the Account may be transferred to the appropriate state.

Information About SIPC. To obtain information about Securities Investor Protection Corporation (SIPC), including an explanatory SIPC brochure, please contact SIPC at www.sipc.org or 1-202-371-8300.