

Limited Power of Attorney (LPOA) for Investment Advisor

Investment Advisor ("IA") Information (This portion to be completed by IA.)

IA Firm Name (required)

FA Master Account Number (required)

IA Contact Information (if follow-up is required)

SL Master Account Number (if applicable)

Prior IA Firm Name (Please complete if authorization below replaces authority previously delegated.)

SchwabLink® Investor Checking Master

If you do not have a SchwabLink Master for your Schwab Bank Investor Checking™ ("Investor Checking") account(s), please contact your sales representative to get one established.

Is your firm (or a principal, employee or related person* of your firm) an owner, trustee, executor, guardian, conservator or custodian of this account?

Yes No

If "yes," is it intended that this account will hold assets belonging to persons or entities other than your firm, your firm's employees or yourself, or relatives of you or your firm's members?

Yes No

*A "related person" is defined as any advisory affiliate or any person that is under common control with your firm. See Form ADV for additional information.

Use This Form To:

- Grant limited authority over your existing brokerage account at Charles Schwab & Co., Inc. ("Schwab") and, if applicable, your linked Investor Checking account at Charles Schwab Bank, SSB ("Schwab Bank") to the IA named above.

Options Level Requirements: When linking your Schwab account to an Advisor's trading Master account, the options approval level on the Master account must be equal to or higher than the level on your Schwab account.

- If the Master account's options level is lower, Advisor may submit an Options Trading Application for Investment Advisor Masters form to update the options approval level. Alternatively, client may downgrade or remove options approval if there are no open positions on the account.

Ineligible Accounts for Use with This form:

- Donor-advised fund (DAF) account with DAFgiving360.** To link an IA to your DAFgiving360 account, submit the Update Your Investment Advisor Information form, located on dafgiving360.org.
- Schwab Personal Choice Retirement Account® (PCRA) accounts.** To link an IA to your PCRA account, submit the Schwab Personal Choice Retirement Account® (PCRA) Limited Power of Attorney (LPOA) to Authorize an Investment Advisor form.
- Schwab Health Savings Brokerage Account (HSBA).** To link an IA to your HSBA account, submit the Schwab Health Savings Brokerage Account (HSBA) Limited Power of Attorney (LPOA) Agreement to Authorize an Investment Advisor form.
- Schwab 529 College Savings Plan.** To link an IA on this account type, submit the Schwab 529 College Savings Plan - Agent Authorization/ Limited Power of Attorney form.
- Schwab Intelligent Portfolio Solutions (SIP)** accounts are not eligible to add Investment Advisor access.

Investment and Insurance Products: Not a Deposit ▪ Not FDIC Insured ▪ Not Insured by any Federal Government Agency ▪ No Bank Guarantee ▪ May Lose Value

1. Account Holder Information

Brokerage Account Number(s) Multiple accounts may be listed above if they are household-level accounts owned by related clients at the same home/legal address. Authorities granted to your Brokerage account will apply to the associated Investor Checking account.

Account Holder Name <i>First</i>	<i>Middle</i>	<i>Last</i>
Additional Account Holder Name <i>First</i>	<i>Middle</i>	<i>Last</i>
Additional Account Holder Name <i>First</i>	<i>Middle</i>	<i>Last</i>
Additional Account Holder Name <i>First</i>	<i>Middle</i>	<i>Last</i>
Additional Account Holder Name <i>First</i>	<i>Middle</i>	<i>Last</i>

Trust/Organization Name*

*May require additional documentation; please contact your service team for details.

2. Instructions About IA Authorizations (Optional—please select all that apply.)

You may change or revoke these instructions at any time by contacting Schwab.

Trading and Disbursement Authorization for Checks and Journals. Selecting this option indicates that I have authorized my IA to take the following actions, and I instruct Schwab to permit my IA: (1) to place trades in my account as provided under the Trading Authorization heading in the attached Account Application Agreement; (2) to remit checks to me at my address of record; and (3) to journal cash and/or securities to a Schwab brokerage account on which I am named account holder (known as a first-party transfer).

This Disbursement Authorization does not apply to wire disbursements; Schwab MoneyLink® distributions; or direct, ongoing electronic payments of dividends, interest, and money market income, which use separate forms. (Note: Trading and Disbursement Authorization for Checks and Journals is not available for Estate accounts.)

Trading Authorization. Selecting this option indicates that I have authorized my IA, and I instruct Schwab to permit my IA, to place trades in my account as provided under the Trading Authorization heading in the attached Account Application Agreement.

Fee Payment Authorization. Selecting this option indicates that I have authorized my IA, and I instruct Schwab to permit my IA, 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.

*** Schwab Bank Investor Checking:** If you have granted Disbursement Authorization above to your IA on your Schwab brokerage account, and you have a linked Investor Checking account, you will be deemed to have granted Disbursement Authorization to your IA on your Investor Checking account as well. Under this Disbursement Authorization, your IA will have the ability to transfer money in and out of your Investor Checking account to your linked Schwab brokerage account. However, with respect to your Investor Checking account, your IA will not be issued a debit card and will not have access to Bill Pay services. Your IA may request copies of specific account statements. Any of these authorizations may be revoked by providing notice to Schwab or Schwab Bank. Schwab or Schwab Bank may require that such notice be provided in writing. If any of these authorizations are revoked, the revocation will apply to both the Brokerage and Investor Checking account.

If you have not granted your IA Disbursement Authorization on your Schwab brokerage account, your IA may only have authority to view account information, balances and transactions, but not to make withdrawals or transfer funds in your linked Investor Checking account. Your IA may also request copies of specific account statements.

3. Existing Standing Authorizations (for Primary IA listed on the IA Information Section above)

Check if you wish to transfer previously delegated IA authority to distribute, or contribute via ACH, assets from your account through your existing Standing Authorizations to your new IA. By selecting this authorization, your IA will be granted authority to distribute, or contribute via ACH, cash and/or securities on all Standing Authorizations* for Check, Internal Transfer, Wire or ACH destinations currently established on your account.

***Important Notes:**

- If this box is not checked, all existing Standing Authorizations will be removed, and the new IA will not have access to ACH profiles. ACH connections will remain active unless separately terminated.
- This authorization does not apply to accounts converting from Investor Services. All existing Standing Authorizations will be removed. ACH profiles will remain active without IA authorization.

4. Issuer Communications and Related Actions

If you have granted your Investment Advisor ("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 (such as proxies, corporate reorganizations and other corporate actions, including 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 in Sections A, B and/or C below, your IA will, regarding only those voting decision 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 ("interim mailings"). In these cases, you will be authorizing your IA to make all voting decisions and take all actions on your behalf.

Even if you appoint your IA in any or all of the sections 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 Charles Schwab & Co., Inc. ("Schwab") any applicable instructions or directions on those items.

If you do not make a selection in any, or all, of Sections A, B and/or C below, Schwab will send you the applicable communications and deem you to have indicated that you will be responsible for providing Schwab any applicable instructions or directions on those items, but informational copies of those communications and issuer-related communications may be sent to your IA.

Please indicate whom you authorize to receive and vote proxies, make reorganization decisions and receive interim mailings. Select only one option for each item.

A. Proxy Voting Authorization and Mailing Preferences

Select only **one** who should be sent and vote proxy ballots:

Account Holder IA

Select only **one** who should be sent informational, nonvoting copies:

Account Holder IA (May choose only if Account Holder is voting.) None

B. Corporate Reorganizations and Other Corporate Actions

Select only **one** who should be sent response coupons and make reorganization decisions:

Account Holder IA

Select only **one** who should be sent informational copies:

Account Holder IA (May choose only if Account Holder is voting.) None

C. Interim Mailings

Please indicate only **one** who should be sent interim mailings:

Account Holder IA Both Account Holder and IA

Objection to Release of Information to Issuers

Rule 14b-1 of the Securities Exchange Act of 1934, as amended, requires that, upon the issuer's request, Schwab disclose your name, address and security positions to the issuer of any security held in your Account unless you object to disclosure of this information.

- Yes, I object to Schwab's release of my name, address and securities positions to issuers whose securities are held in my Account.
- No, I do not object to Schwab's release of my name, address and securities positions to issuers whose securities are held in my Account.

5. Schwab Bank Investor Checking™ Investment Advisor Authorizations

If you do not have an Investor Checking account, please skip this section.

If you have an Investor Checking account that is linked to the Brokerage account listed in Section 1 in this form, please read this section. These Investment Advisor Authorizations are an agreement between Charles Schwab Bank, SSB ("Schwab Bank") and each Account Holder. The terms "I," "me" and "my" refer to each Account Holder or Trustee. By signing in Section 7, I:

- (1) authorize the Investment Advisor (IA) named on this form to exercise the authorities described in Section 2 of this form with respect to the Investor Checking account linked to the Brokerage account listed in Section 1 of this form ("Investor Checking account"), and I authorize Schwab Bank to take such actions as Schwab Bank deems necessary to carry out instructions Schwab Bank receives from me and/or my IA; I further authorize Schwab Bank, in its sole discretion and for whatever reason, to request additional documentation from me prior to executing any transaction requested by my IA;
- (2) acknowledge and agree that:
 - Schwab Bank will merely effect transactions as directed by my IA's Disbursement Authority;
 - Schwab Bank will not give legal or tax advice;
 - Schwab Bank is not acting as a fiduciary;
 - I (and not Schwab Bank) am responsible for investigating and selecting my IA;
 - my IA is not affiliated with, or controlled or employed by, Schwab Bank, and Schwab Bank has not approved, recommended or endorsed my IA;
 - unless required by applicable law, Schwab Bank has no duty to review, supervise or monitor any transaction by my IA in my Investor Checking account; and
 - Schwab Bank reserves the right, in its sole discretion, to no longer honor instructions from my IA and will notify me if it chooses to do so;
- (3) hereby ratify and confirm any and all transactions or dealings effected in and for my Investor Checking account by my IA, and I agree to indemnify and hold harmless Schwab Bank, its affiliates, and their directors, officers, employees and agents from and against all claims, actions, judgments, settlement amounts, costs and liabilities, including attorneys' fees, arising out of or relating to their reliance on this form and these Account Terms, Schwab Bank's execution of my IA's instructions and Schwab Bank's execution of disbursement instructions received from my IA's Disbursement Authority;
- (4) agree to indemnify and hold Schwab Bank harmless from, and to pay Schwab Bank promptly upon demand for, any and all losses or financial obligations which may arise from the acts or omissions of my IA with respect to my Investor Checking account. I also agree that Schwab Bank will not be liable, and I will not attempt to hold Schwab Bank liable, for any transaction or decision made by my IA, whom I have selected, regardless of whether or not any such transaction or decision was specifically authorized by me;
- (5) understand that this authorization and indemnification will remain in effect until Schwab Bank is notified in writing of my death, mental disability, incompetence or incapacity, or until I have revoked it by written notification, and such notification is received by Schwab Bank; such revocation will not affect my obligations resulting from transactions initiated prior to Schwab Bank's receipt of notice of revocation;
- (6) understand that this form supplements and in no way limits or restricts rights which Schwab Bank may have under existing law or any other agreement with me. This form will bind my heirs, executors, administrators, successors and assigns, and will benefit Schwab Bank's successors, affiliates and assigns;
- (7) certify that I have read carefully the provisions of this form and understand that it authorizes my IA, herein named, to exercise all rights and powers set forth above with respect to my Investor Checking account, and I understand that anything my IA may do in the exercise of such rights and powers is fully binding upon me; I hereby authorize the IA named in this form and in such capacity to give instructions to Schwab Bank in connection with my Investor Checking account specified on this form, and to take other actions necessary or incidental to the execution of such instructions; I authorize Schwab Bank, and other persons to whom Schwab Bank has given instructions in order to implement my IA's instructions, to rely on my IA's instructions without obtaining my approval, countersignature or co-signature. **I understand that this is not a Durable Power of Attorney and that all authority granted to my IA shall cease automatically upon Schwab Bank receiving written notification from a licensed physician of my mental disability, incompetence, incapacity or death.**

6. Certification of Trust—Trust Accounts Only

By signing this Limited Power of Attorney form on behalf of a Trust, each Trustee signing below (the "Trustees") certifies that the representations and warranties in the attached Certification of Trust are true and complete.

7. Please Read, Sign and Date

The terms "I," "me" and "my" refer to each Account Holder or Trustee. By signing below, I authorize the Investment Advisor ("IA") named on page 1 of this document to be my Agent (attorney-in-fact) to the extent provided in this Limited Power of Attorney ("LPOA") document. Further, I certify that I have read carefully the provisions of this LPOA document. By signing this Limited Power of Attorney, each Trustee signing below (the "Trustees") certifies that the representations and warranties in the attached Certification of Trust are true and complete.

Notice Regarding Access to Historical Account Documentation by Future Account Holders. By signing this form, each account holder acknowledges and agrees that this document pertains to one or more accounts held jointly or with multiple authorized parties and may be retained as part of the permanent account record.

In accordance with applicable privacy laws, regulatory requirements, and the institution's custodial obligations, historical account documentation – including this form– may be disclosed to any individual who is, at the time of request, an authorized owner, tenant in common, joint tenant, or legal representative of the account, regardless of whether they were a party to the account at the time the document was originally executed.

This includes, but is not limited to, circumstances arising from changes in personal relationships (e.g., divorce, legal separation), account restructuring, adding a power of attorney, or the addition or removal of account holders. Any individual subsequently added to an account, may, subject to applicable law, request and receive access to historical records, including this form.

By signing below, the undersigned acknowledge and consent to such access and disclosure as described above.

Furthermore, by signing this Agreement, I acknowledge that these terms relate to my account(s) and are part of (A) the Account Agreement between me and Schwab for my Schwab brokerage account and, if applicable, (B) the Schwab Bank Deposit Account Agreement between me and Charles Schwab Bank, SSB for my Investor Checking account. Additionally, by signing this Agreement, each Account Holder consents to Schwab's: (i) sending, by mail, electronic delivery and/or other means, duplicate copies of account trade confirmations, account statements and any other information relating to the Account Holder and the account to the Account Holder's IA, if and in such manner as requested by the Account Holder's IA; (ii) sending such information about the Account Holder and the account to third parties (such as CPAs or performance-reporting companies) as the Account Holder's IA shall direct Schwab; and (iii) disclosure of information about the Account Holder and the account to other third parties as provided in this LPOA and the Account Agreement. Furthermore, I acknowledge that I have received a copy of the Account Terms to retain for my records.

All Account Holders from each Schwab account listed in Section 1 must sign and date below using black ink. For Schwab Trust, Corporate, Partnership, or other Organization accounts, at least one Trustee or Authorized Agent's signature is required. If this is an Estate, Guardianship or Conservatorship account, all current executors, guardians or conservators must sign, even if not listed on the account registration. If needed, you may attach a separate sheet with additional signatures.

Please Note: By signing below, I authorize Schwab to provide IA any and all requested information of any nature whatsoever regarding my brokerage account, including, but not limited to, copies of my account statements, applications or like documentation, and, if applicable, copies of checks written against my linked Schwab Bank Investor Checking™ account.

X

 Account Holder/Trustee/Custodian/Executor Signature Today's Date (mm/dd/yyyy)

 Print Name

X

 Signature: Additional Account Holder/Co-Trustee/Authorized Individual Today's Date (mm/dd/yyyy)

 Print Name

X

 Signature: Additional Account Holder/Co-Trustee/Authorized Individual Today's Date (mm/dd/yyyy)

 Print Name

X

 Signature: Additional Account Holder/Co-Trustee/Authorized Individual Today's Date (mm/dd/yyyy)

 Print Name

Limited Power of Attorney (LPOA) for Investment Advisor Agreement

Client Copy - These terms relate to your Schwab brokerage account and are part of the Account Agreement ("AA") between each account holder and Schwab. Please retain for your files.

This LPOA amends the Account Holder's Account Agreement.

Trading Authorization.

If I have indicated on this LPOA 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 Charles Schwab & Co., Inc. ("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 has a margin feature, Schwab is authorized to accept instructions from IA to trade on margin, to sell short, to borrow securities, to otherwise cause credit to be extended through the Account, and to secure the performance of obligations in the Account with any assets held in the Account (the "Account Assets"). If my Account is authorized for option trading, Schwab is authorized to accept instructions from IA to purchase and sell (write) index participation contracts and covered and uncovered option contracts on securities and securities-related indexes, up to my approved level of options 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, countersignature 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, covered and uncovered options (if I have authorized trading covered and uncovered options, and only up to my approved level of options trading strategy), 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) to my IA 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 (or another account registered to my name over which I have granted IA fee payment authorization).

Disbursement Authorization.

If I have indicated on this AA that my IA will have trading and disbursement authority over my Account, I have authorized my IA to take the following actions, and I instruct Schwab to permit my IA to (1) place trades in my account as provided under the Trading Authorization heading in this Account Application Agreement; (2) remit checks to me at my address of record; and (3) journal cash and/or securities to a Schwab brokerage account on which I am named account holder (known as a first-party transfer). This disbursement authorization does not apply to wire disbursements; Schwab MoneyLink® distributions; or direct, ongoing electronic payments of dividends, interest, and money market income, which use separate forms.

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, Charles Schwab Investment Management, Inc. ("CSIM"), IAs are 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 CSIM, 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 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 Schwab has no responsibility for, nor does Schwab guarantee the accuracy of, any such valuation of assets, even if the assets have been valued by a pricing service selected by Schwab; (4) 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 the Financial Industry Regulatory Authority (FINRA) or affiliate, Schwab is authorized to deliver information concerning my Account to such member upon request. 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. These products and services may not necessarily benefit my Account.

I acknowledge, understand and agree that (1) Schwab Advisor Network® ("Network") member advisors ("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 CSIM'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® Strategies or ThomasPartners® Strategies that are managed by CSIM, I have received, read and understood the Schwab Advisor Network Disclosure Documents and the Disclosure Brochures for Windhaven® and ThomasPartners® Strategies managed by CSIM.

Termination of Authorizations.

The authorizations I have granted in this LPOA 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 this is not a Durable Power of Attorney and that all authority granted to my IA shall cease automatically upon Schwab receiving written notification from a licensed physician of my mental disability, incompetence, incapacity or upon Schwab receiving notification of my death. I understand that if Schwab terminates its IA 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.

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 change or do 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 Pricing Guide*.

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 LPOA and (2) Schwab's execution of IA's instructions.

These terms relate to your Schwab Bank Investor Checking™ account and are part of the Deposit Account Agreement between each Account

Holder and Schwab Bank. Please retain for your files.

Investor Advisor Authorizations.

These Investment Advisor Authorizations are an agreement between Charles Schwab Bank, SSB ("Schwab Bank") and each Account Holder. The terms "I," "me" and "my" refer to each Account Holder or trustee. By signing these Investment Advisor Authorizations, I:

- (1) authorize the Investment Advisor (IA) named on this form to exercise the authorities described in Section 2 of this form with respect to my Investor Checking account, and I authorize Schwab Bank to take such actions as Schwab Bank deems necessary to carry out instructions Schwab Bank receives from me and/or my IA; I further authorize Schwab Bank, in its sole discretion and for whatever reason, to request additional documentation from me prior to executing any transaction requested by my IA;
- (2) acknowledge and agree that:
 - Schwab Bank will merely effect transactions as directed by my IA's Disbursement Authority;
 - Schwab Bank will not give legal or tax advice;
 - Schwab Bank is not acting as a fiduciary;
 - I (and not Schwab Bank) am responsible for investigating and selecting my IA;
 - my IA is not affiliated with, or controlled or employed by, Schwab Bank, and Schwab Bank has not approved, recommended or endorsed my IA;
 - unless required by applicable law, Schwab Bank has no duty to review, supervise or monitor any transaction by my IA in my Investor Checking account; and
 - Schwab Bank reserves the right, in its sole discretion, to no longer honor instructions from my IA and will notify me if it chooses to do so;
- (3) hereby ratify and confirm any and all transactions or dealings effected in and for my Investor Checking account by my IA, and I agree to indemnify and hold harmless Schwab Bank, its affiliates, and their directors, officers, employees and agents from and against all claims, actions, judgments, settlement amounts, costs and liabilities, including attorneys' fees, arising out of or relating to their reliance on this form and these Account Terms, Schwab Bank's execution of my IA's instructions and Schwab Bank's execution of disbursement instructions received from my IA's Disbursement Authority;
- (4) agree to indemnify and hold Schwab Bank harmless from, and to pay Schwab Bank promptly upon demand for, any and all losses or financial obligations which may arise from the acts or omissions of my IA with respect to my Investor Checking account. I also agree that Schwab Bank will not be liable, and I will not attempt to hold Schwab Bank liable, for any transaction or decision made by my IA, whom I have selected, regardless of whether or not any such transaction or decision was specifically authorized by me;
- (5) understand that this authorization and indemnification will remain in effect until Schwab Bank is notified in writing of my death, mental disability, incompetence or incapacity, or until I have revoked it by written notification, and such notification is received by Schwab Bank; such revocation will not affect my obligations resulting from transactions initiated prior to Schwab Bank's receipt of notice of revocation;
- (6) understand that this form supplements and in no way limits or restricts rights which Schwab Bank may have under existing law or any other agreement with me. This form will bind my heirs, executors, administrators, successors and assigns, and will benefit Schwab Bank's successors, affiliates and assigns;

(7) certify that I have read carefully the provisions of this form and understand that it authorizes my IA, herein named, to exercise all rights and powers set forth above with respect to my Investor Checking account, and I understand that anything my IA may do in the exercise of such rights and powers is fully binding upon me; I hereby authorize the IA named in this form and in such capacity to give instructions to Schwab Bank in connection with my Investor Checking account specified on this form, and to take other actions necessary or incidental to the execution of such instructions; I authorize Schwab Bank, and other persons to whom Schwab Bank has given instructions in order to implement my IA's instructions, to rely on my IA's instructions without obtaining my approval, countersignature or co-signature.

I understand that this is not a Durable Power of Attorney and that all authority granted to my IA shall cease automatically upon Schwab Bank receiving written notification from a licensed physician of my mental disability, incompetence, incapacity or death.

Certification of Trust—Trust Accounts Only

This Certification sets forth the Trustees' representations and warranties regarding their authority under the Trust. Please retain for your files.

By signing the Application, each Trustee represents and warrants that Charles Schwab & Co., Inc. ("Schwab") is authorized, as a brokerage firm, to open and maintain the Account on behalf of the Trust identified in this Application (the "Trust") in accordance with the account agreements applicable to this Account, including without limitation, the authority to accept, hold and deliver assets belonging to the Trust, and to accept orders and other instructions relating to the Trust from any of the Trustees. The Trustees represent, warrant and certify that either the Trust Agreement or applicable law grants the Trustees the power to delegate to others (such as a financial advisor) the authority to give trading instructions with respect to the Trust's Account with Schwab and, if so initiated in Section 2 of this Application, to authorize Schwab to: (1) execute trades in the Account at the direction of IA (as defined in the Application) as provided under the Trading Authorization heading in the attached Schwab One® Account Application Agreement; (2) disburse assets for investment purposes or to Trustees personally, as instructed by IA; (3) 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 registrations, or (ii) to Trustees personally at their addresses of record; and (4) to pay investment advisory and related fees from the Account in the amount of IA's instructions. The disbursement authorization does not apply to Schwab MoneyLink® distributions or direct, ongoing electronic payments of dividends, interest, and money market income. Note: Trustees acknowledge and agree that Schwab cannot confirm the account registration at the receiving financial institution and will rely solely on the representations of the IA as to the identical registration of the receiving accounts.

The Trustees represent, warrant and certify that the Trust Agreement expressly grants them the power to buy, sell (including short sales), exchange, convert, tender, redeem and withdraw assets (including delivery of assets to and from the Account and to a Trustee personally), and, if the Margin Borrowing feature is not declined, to trade securities on margin or otherwise (including the purchase and/or sale of options contracts) for and at the risk of the Trust and to grant authority to a brokerage firm, acting as principal or otherwise, to pledge, repledge, hypothecate or rehypothecate assets of the Trust. **The Trustees agree to decline the Margin Borrowing feature if such authorizations for borrowing are not contained in the Trust. Note: Additional documents are required to add someone as Power of Attorney. In order to trade options in a Trust Account through Schwab, the Trust must meet certain financial requirements, and the Trustee(s) must meet certain investment experience requirements and complete a separate Schwab Option, Margin and Short Account Application.** The Trustees further represent, warrant and certify that, if the Trustees pledge

Trust assets (including securities owned by the Trust) to secure obligations owed to Schwab, the Trust expressly authorizes the Trustees to enter into such pledges. The Trustees further represent, warrant and certify that the Trust authorizes the Trustee(s) to grant a lien and right of set-off in favor of Schwab to secure the repayment of all present or future indebtedness.

The Trustees represent, warrant and certify that Schwab is authorized to follow the instructions of any Trustee to deliver funds, securities and other assets in the Account to any Trustee or on any Trustee's instructions, because either (1) the Trust expressly authorizes that each Trustee, if more than one, is authorized to act individually, independently and without consent of the other Trustees; or (2) the Trustees have consented to each Trustee acting individually, independently and without the consent of the other Trustees with respect to the Account and that such delegation of authority is expressly authorized by the Trust and applicable law. The Trustees agree that any notice sent to one Trustee will constitute notice to all Trustees. Schwab, in its sole discretion and for its sole protection, may require the written consent of any or all Trustees prior to acting upon any instructions of any Trustee.

The Trustees represent, warrant and certify that neither they nor the Trust impose any obligation upon Schwab for determining the purpose or propriety (i) of any instructions received from any Trustee or (ii) of payments or deliveries to or among the Trustees. By signing this Application, each Trustee further represents, warrants and certifies that there are no other currently acting Trustee(s) of the Trust other than those signing this Application. Should only one person execute this Application, it is a representation that the signer is the sole current acting Trustee. Finally, the Trustees represent, warrant and certify that the Trust has not been revoked, modified or amended in any manner which would cause the representations contained in this Certification to become incorrect or incomplete. Each Trustee agrees to notify Schwab immediately in writing of any change that would cause this Certification to become incorrect or incomplete.

The Trustees acknowledge and agree that all prior designations, consents and authorizations which may have previously been agreed to by any prior trustee(s) acting on behalf of the Account(s) shall continue to apply both with respect to the Trust and to the Trustees. The Trustees further acknowledge and agree that the Account will remain subject to any prior agreements (including any addenda, and/or amendments thereto) as may currently be applicable to the Account(s), including, but not limited to, the terms and conditions of any Account Agreement(s) and Disclosures relating to the Trust, as each may be amended from time to time. The Trustees agree to assume by way of assignment from any prior trustee(s) all trustee obligations and liabilities set forth in any of the applicable Trust Agreement(s), whether or not each Trustee personally executed such applications or agreement(s) on behalf of the Trust.

Each Trustee hereby, jointly and severally, in both personal and representative capacities, agrees to indemnify Schwab, its affiliates, officers, directors, employees and agents from, and to hold such persons harmless against, any claims, judgments, surcharges, settlements or other liabilities or costs of defense or settlement (including investigative and attorneys' fees) arising out of or related to any act or omission to act by any Trustee with respect to the Account.

The representations and obligations stated in this Certification will survive the termination of the Account.