

2. POWER OF ATTORNEY

I hereby agree to indemnify and hold DST Asset Manager Solutions, Inc. and the above-named mutual fund(s) harmless from acting upon instructions, either oral or in writing, believed to have originated from said Agent and from any and all acts of said Agent with respect to the shares held in my account(s) with any of these mutual funds. Nuveen Funds, in its sole discretion and for whatever reason, may request additional documentation from you prior to effecting any instruction, including but not limited to executing any transaction, requested by Agent.

This authorization and indemnity is a continuing one and shall remain in full force and effect and shall be binding upon the undersigned's heirs, executors, successors, beneficiaries, or assigns until revoked by the undersigned by a written notice addressed to DST Asset Manager Solutions, Inc. and delivered to its main office. Such revocation shall not affect any liability in any way resulting from transactions initiated prior to DST Asset Manager Solutions, Inc. acting on such revocation within a reasonable amount of time. In case of the death, disability or incompetence of the undersigned, this authorization shall continue and DST Asset Manager Solutions, Inc. and the above-named mutual funds(s) shall not be responsible for any action taken on the basis of this authorization until DST Asset Manager Solutions, Inc. has received written notice thereof addressed to DST Asset Manager Solutions, Inc. and delivered to its main office.

If the Account is a trust account, you certify that the trust document permits the appointment of the Agent by you and certify the trust document permits the Agent to exercise the authorities set forth in this form over the Account. You also warrant and represent that your appointment is consistent with the terms of the trust. **For trust accounts, please complete section 3 on page 4 instead of the notary certification in this section.**

I, do hereby make, constitute and appoint

whose address is

Social Security Number

Date of Birth (mm/dd/yyyy)

/ /

my true and lawful attorney or agent ("Agent") for me and in my name, place and stead:

- (1) to transmit to the transfer agent and its service company, DST Asset Manager Solutions, Inc., either orally or in writing in accordance with procedures established by either DST Asset Manager Solutions, Inc. from time to time, instructions for the purchase, sale, exchange or transfer of shares with respect to any account(s) I may hold with the above-named mutual fund(s);
- (2) to make, draw, sign, endorse, negotiate, cash, deliver and make a stop payment of checks drawn on any of my accounts with said mutual fund(s); and
- (3) to enter into all other lawful transactions with respect to any of my said mutual fund account(s).

The undersigned has read the foregoing in its entirety before signing. IN WITNESS WHEREOF, I have hereunto set my hand and seal the

day of , 20

Signature of Shareholder/Grantor of Power of Attorney



NOTARY CERTIFICATION

STATE OF COUNTY OF S.S.:

On this day of , 20 , before me personally appeared , to me personally known to be the individual described herein and who executed the foregoing instrument, and acknowledged that he or she executed the same.

Notary Public

My Commission Expires (mm/dd/yyyy)
 / /

INFORMATION FOR AND AFFIDAVIT OF ATTORNEY-IN-FACT

Must be completed by the Attorney-in-Fact.

Name of Attorney-in-Fact

STATE OF COUNTY OF S.S.:

Being duly sworn and deposed, I affirm that:

as principal, who resides at
 did, on this day of , 20 , appoint me his true and lawful attorney by the foregoing instrument hereby made a part hereof. I further certify, under penalty of perjury, that the personal information I have provided above is true and accurate.

Signature of Attorney-in-Fact

Sworn to before me this day of , 20 ,

Notary Public

My Commission Expires (mm/dd/yyyy)
 / /



3. MEDALLION SIGNATURE GUARANTEE (REQUIRED FOR A TRUSTEE ONLY)

A Medallion Signature Guarantee is not the same as a notarized signature. You must obtain a medallion signature from a national or state bank, federal savings and loan association, savings bank, or member of a national stock exchange who is a member of the medallion signature program. A notary public is not an acceptable Medallion Signature guarantor.

I certify that the above-named person as described and whose identity is known or proven to me personally appeared before me on the date and location listed below.

Medallion Signature Guarantee for Trustee requesting to add an Attorney-in-Fact as an agent in their capacity as a trustee to the Trust account.

Today's Date (mm/dd/yyyy)

/ / 20

City

State

Zip

Print Name of Certifying Officer

Title of Certifying Officer

RETURN COMPLETED FORM(S) TO:

Please return ALL numbered pages, including any pages you did not need to complete.

STANDARD MAIL:

Nuveen Funds
P.O. Box 219140
Kansas City, MO 64121-9140

OVERNIGHT:

Nuveen Funds
801 Pennsylvania Ave
Suite 219140
Kansas City, MO 64105-1307

