

Kentucky Retirement Systems Investment Management and Custody Agreement

AGREEMENT, made and entered into this 7th day of April, 2005, by and between Kentucky Retirement Systems, 1260 Louisville Road, Frankfort, Kentucky 40601, (the "Systems"), and Barclays Global Investors, N.A., (the "Manager").

WHEREAS, the Systems by its Board of Trustees at its meeting held on the 7th day of April, 2005, has by order pursuant to KRS 61.645 selected the Manager to provide investment management and custody services in connection with the investment of funds of the Kentucky Employees Retirement System, County Employees Retirement System, and State Police Retirement System; and

WHEREAS, the Manager is a reputable, qualified, and established investment management and custody firm, and has agreed to provide investment management and custody services to the Systems; and

WHEREAS, the Systems is responsible for management of the funds of the three retirement systems hereinbefore mentioned and to assist in fulfilling its fiduciary responsibility in the management of those trust funds the Systems desires to avail itself of the services of the Manager to provide investment management and custody services for a portion of the Systems assets.

NOW, THEREFORE, the Systems and the Manager agree as follows:

1. The Systems hereby appoints the Manager as an investment manager and custodian with power to invest and manage the assets of the Systems that from time to time constitute the Account (the "Account"). Account shall mean the assets of the Systems that the Systems notify the Manager shall be included in the Account, together with the income, proceeds and profits thereon. The Systems authorize the Manager to invest the assets of the Account, subject to the fiduciary standards of ERISA, in one or more collective investment funds maintained by the Manager for participation solely by employee benefit trusts as the Manager deems appropriate in accordance with the Systems' funding policy and investment guidelines. To the extent that the Account is invested in collective investment funds maintained by the Manager, the Account shall be subject to all of the provisions of the instruments establishing such funds as they may be amended from time to time. Such instruments as they may be amended from time to time are hereby incorporated and made a part of this Agreement as if fully set forth herein.

2. The Manager shall be responsible for proper diversification of the assets in the Account under its discretion; provided, however, the Manager's responsibility for such diversification of the assets in the Account shall be subject to the written investment guidelines (the "Guidelines") communicated from the Systems and agreed to by the Manager from time to time. The Systems, rather than the Manager, is responsible for overall diversification of assets of the System; and provided further, the Systems shall be responsible for compliance of the Kentucky Employees Retirement System, County Employees Retirement System, and State Police Retirement System with their statutory limitations.
3. The Manager shall receive for the Account any money or property, including dividends and interest, due and payable from or on account of the securities and other property in the Account. The Manager shall not, however, be required to enforce collection of such property by legal means or otherwise but shall receive the proceeds of such collections as may be effected by the Manager or its agents in the ordinary course of business.
4. The Systems understand and agree that, from time to time, the Manager may make recommendations to purchase or sell securities, and may purchase or sell securities, in which an affiliate of the Manager underwrites, deals and/or makes a market and/or an affiliate of the Manager may perform or seek to perform investment banking services for issuers of such securities. The Systems also understand and agree that any such purchases or sales may be made for the Account if viewed as advisable by the Manager in light of the Guidelines. The Manager may not engage in transactions hereunder with its affiliates except to the extent permitted by law.
5. The Manager in its discretion may vote upon any stocks, bonds or other securities in the Account, and shall give general or special proxies with or without power of substitution with respect thereto.
6. The Manager shall, in safekeeping and managing the property in the Account, exercise the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. The Manager also hereby acknowledges that Manager is a fiduciary to the Systems, as that term is defined in Section 4975(e)(3) of the 1986 Internal Revenue Code and the rules and regulations promulgated under that Section.
7. The Manager is further authorized as follows:
 - a. to sell by private contract or at public auction, exchange, convey, transfer or otherwise dispose of any property held by it; provided, the Manager shall have no duty to sell

property delivered to it hereunder except in accordance with its customary procedures for effecting participation in its collective investment funds;

- b. to make, execute, acknowledge and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
 - c. to employ suitable agents or custodians, and to employ counsel who may but need not be counsel for the Trustees, and may rely upon the advice of such counsel;
 - d. to register any and all property held under this Agreement in its own name as agent, in the name of its nominee, or in bearer form, and combine certificates representing such investments with certificates of the same issue held by the Manager in other fiduciary capacities, or deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held by any other person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or an agency or instrumentality thereof, or with a federal reserve bank, but the books and records of the Manager shall at all times show that all such investments are a part of the Account;
 - e. to lend, including through a collective investment fund, any securities to brokers, dealers or other borrowers and to permit the loaned securities to be transferred into the name and custody and be voted by the borrower or others;
 - f. to purchase, sell, execute, hold, grant, permit to expire, exercise and generally deal in any manner with contracts for the future delivery of financial instruments or other property and options of any kind; and
 - g. to do all acts, whether or not expressly authorized, which it may deem necessary or proper for the protection of the property held hereunder and generally to exercise any of the powers of an owner with respect to any property held by it.
8. The Manager shall provide a statement of all receipts and disbursements of this Account to the Trustees not less often than monthly.
9. [REDACTED]
[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
10. The Manager shall make such distributions and transfers of funds held hereunder as the Trustees shall from time to time direct in writing.
11. The Manager shall be entitled to reasonable compensation for its services hereunder as agreed between the Manager and the Trustees from time to time.
12. Notwithstanding any other provision of this Agreement, neither the Manager nor its officers, directors, affiliates and employees shall be liable for any loss to the Systems and/or Account caused directly or indirectly by circumstances beyond the Manager's reasonable control, including, but not limited to, government restrictions, exchange or market rulings, actions affecting securities or commodity exchanges including suspensions of trading or extensions of trading hours, acts of civil or military authority, national emergencies, labor difficulties, fires, earthquakes, floods or other catastrophes, acts of God, wars, acts of terrorism, riots or failures of communication or power supply.
13. The Manager's rights, power and duties shall be limited to those specifically listed herein with respect to the System's assets included in the Account, and the Manager shall have no duty, responsibility or liability in connection with the custody, investment or management of other Systems assets and shall have further no duty, responsibility or liability in connection with the operation or administration of the Systems.
14. This Agreement and all information and advice furnished by either party to the other shall be treated as confidential and shall not be disclosed to third parties (including, without limitation, to employees of either party or their respective affiliates, except to the extent that such persons utilize such information in the performance of their duties with respect to this Agreement) except as required by law or as agreed between the parties.

15. [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

- [REDACTED]
16. [REDACTED]
17. Termination or cancellation of this Agreement may be effected at any time by either party upon thirty (30) days advance written notice of its intent to terminate and the Manager shall promptly return the Account assets to a designated custodian, and from and after such delivery, the Manager shall have no further investment management responsibility for assets in the Account. The notice of intent to terminate shall be served on the other party by registered or certified mail and confirmed by facsimile or email. However, without prior written notice, Systems may orally direct the Manager to cease its management activities with respect to the Systems fund assets, which direction shall be confirmed in writing by facsimile or email as soon as practicable. Upon such termination, fees of the Manager shall be prorated to the date of termination as specified in the notice of termination.
18. Manager hereby certifies Manager is legally entitled to enter into the subject Agreement with the Commonwealth of Kentucky and certifies that Manager is not and will not be violating any conflict of interest statute (KRS 121.056 or any other applicable statute) or principle by the performance of this Agreement. The Systems hereby certify that the Systems are legally entitled to enter into the subject Agreement with the Manager and certify that Systems are not and will not be violating any applicable statutes or principles by the performance of this Agreement. The Manager shall not engage directly or indirectly in any financial or other transaction with a trustee or employee of Systems which would violate standards of the Executive Branch Ethics provisions, as set forth in KRS Chapter 11A.
19. Manager hereby certifies that it will not attempt in any manner to influence any specifications to be restrictive in any way or respect nor will Manager attempt in any way to influence any purchasing of services, commodities or equipment by the Commonwealth of Kentucky.
20. Manager warrants that all work performed by Manager under this Agreement is and shall be performed as an independent contractor. Manager shall be responsible for compliance with all laws.

rules and regulations by its respective employees, including, but not limited to, employment of labor, hours of labor, health and safety, working conditions, worker's compensation insurance, and payment of wages. This Agreement shall not be construed so as to create a partnership or joint venture between Manager and Systems.

21. The period in which subject services are to be performed is April 7, 2005 through June 30, 2009. However, termination or cancellation may be effected at any time by either party as provided in Section 18 below. At the expiration of its term, this Agreement may, at the option of the parties hereto, be extended by negotiation for additional periods. Written modifications, amendments or additions to this Agreement shall be effective only when signed by both parties. At the expiration of its term, this Agreement may, at the option of the parties hereto, be renewed by negotiation for further periods not to exceed 60 months for each such renewal.
22. All notices, instructions and advices with respect to securities transactions or other matters contemplated by this Agreement shall be deemed duly given when delivered to and received by the respective parties in a manner and format as agreed to from time to time between the Systems and the Manager as follows:

To Systems: Mr. John R. Krimmel, CFA, Chief Investment Officer, 1260 Louisville Road, Frankfort, Kentucky 40601.

To the Manager: Barclays Global Investors, N.A., Attention: Legal Department, 45 Fremont Street, San Francisco, CA 94105.

And

Barclays Global Investors, N.A., Attention" [REDACTED] 45 Fremont Street, San Francisco, CA 94105. Phone: (404)942-2325, Facsimile: (415)618-1316.

23. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

- [REDACTED]
24. This contract may not be assigned by Manager without the written consent of the Systems. Any sale, pledge, assignment or other transfer of controlling interest in [REDACTED] Manager shall be deemed an assignment under this clause. Further, the obligations of Manager under this contract shall be considered personal obligations of Manager, performable solely by Manager and Manager may not delegate its duties hereunder to any entity other than an employee of Manager without the express written consent of Systems. Notwithstanding the foregoing, Systems agree that the Manager may subcontract certain administrative and operational functions with its third party services provider, Investors Bank and Trust Company.
25. No waiver of any provision of this Agreement shall be effective unless the same shall be in writing by the party so waiving, and then such waiver shall be effective only in the specific instance and for the specific purpose for which given. No failure to exercise and no delay in exercising, on the part of the Manager or the Systems, any right, remedy, power or privilege hereunder, shall operate as a waiver thereof.
26. The Systems acknowledge that they have received, through one or more separate writings from the Manager certain disclosures whereby the Manager is making disclosure of material facts and the Systems hereby provide their consent as may be required under applicable law for the Manager to engage in the following activities, including through any collective investment fund in which the Systems participates:
- (a) To trade through an affiliated broker-dealer;
 - (b) To acquire securities issued during the existence of an underwriting or selling syndicate in which a U.S. affiliate of the Manager is a member of such underwriting or selling syndicate;
 - (c) To lend securities to one or more borrowers (each a "Borrower"), and to be compensated therefor; to lend securities through a common electronic platform in which the Manager has an equity interest; and to lend securities to a Borrower that is an affiliate of Manager;
 - (d) To lend mortgage backed securities;

- (e) To the extent provided for in the Guidelines, to purchase and sell shares of registered, open-end management investment companies, including exchange-traded funds and mutual funds, managed by an affiliate of the Manager;
 - (f) To buy and sell securities in the Manager's cross-trading program, including as part of any transition services performed for the Plan; and
 - (g) To buy, hold and sell shares of common stock of an affiliate of the Manager.
27. The Systems hereby acknowledge, represent, warrant and agree that (i) the Kentucky Employees Retirement System, County Employees Retirement System, and State Police Retirement System are qualified under Section 401(a) of the Code and exempt from federal income taxation as a governmental Plan within the meaning of Section 401(a) of the Code and (ii) the Systems have the power and authority under applicable law and the documents or instruments governing the Systems to appoint the Manager to hold certain assets of the Systems, and (iii) the Systems may invest in financial futures contracts on an unleveraged basis. The Systems agree to notify the Manager immediately if it has reason to believe that the foregoing may cease to be true.
28. With respect to any transition services performed by the Manager, the Systems agree to be bound by the attached Appendix A.
29. If any provisions of this Agreement are held invalid or unenforceable, such invalidity or unenforceability shall not affect any other provision, and the Agreement shall be construed and enforced as if such provisions had not been included.
30. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.
31. This Agreement and the Guidelines represent the entire understanding of the parties hereto and supersede all prior written or oral agreements with respect to the subject matter hereof.
32. The Manager will annually deliver to the Systems a copy of the SAS 70 report within 30 days of the filing of said report.
33. Except as set forth below, questions as to the execution, validity, interpretation, construction, and performance of this agreement shall be construed in accordance with the laws of the Commonwealth of Kentucky, without regard to conflict of laws principles thereof. The Manager and each of the

Systems hereby consent to the nonexclusive jurisdiction of the federal courts located in the Commonwealth of Kentucky. Notwithstanding the foregoing, to the extent that the assets of the Account are invested in a collective investment fund maintained by the Manager, the construction of the terms of such collective investment fund shall be governed by the laws of the United States, and to the extent not preempted, by the laws of the State of California. The forum for any actions or proceedings with respect to such collective investment funds shall be within California.

34. In the event the Systems become involved in a class action lawsuit or other proceeding involving securities traded for the Account by the Manager (unless such securities are owned by a collective trust), the Manager agrees to use reasonable efforts to cooperate with the Systems as requested by the Systems in all related matters including, but not limited to, discovery requests and, if required, appearances in court. The Systems shall be responsible for reasonable fees and expenses (on a straight pass-through basis, without mark-up) of the Manager relating to litigation support. This provision shall survive the termination of this Agreement. However, the Manager will not be responsible for taking any direct action to become involved in or rendering any advice with respect to any legal proceedings or bankruptcies involving issuers of securities held in the Account.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective officers thereunto duly authorized as of the day and year first above written.

Kentucky Retirement Systems

By

Name

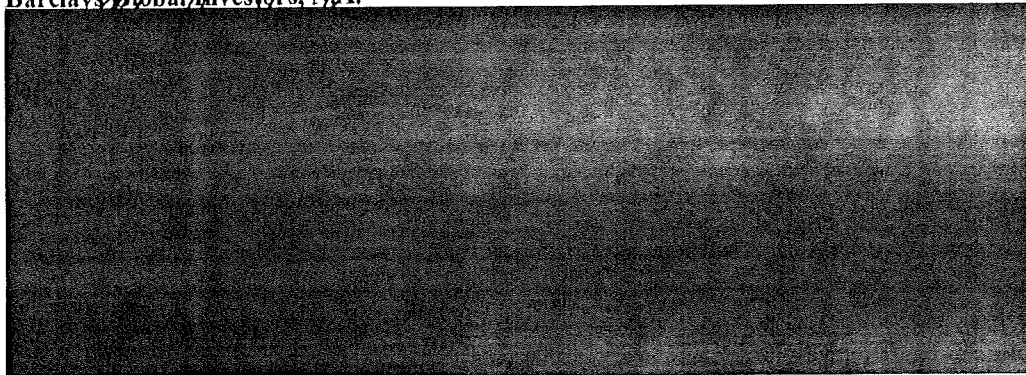
John R. Kimmel

Title

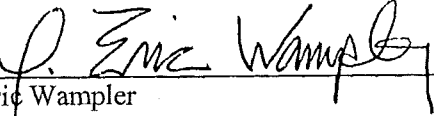
Chief Investment Officer

The undersigned, Barclays Global Investors, N.A., hereby accepts the foregoing appointment as Manager and acknowledges it is a fiduciary with respect to the Systems insofar as the assets subject to its management are concerned.

Barclays Global Investors, N.A.



Approved as to Form and Legality:
KENTUCKY RETIREMENT SYSTEMS

BY: 
J. Eric Wampler
General Counsel

Appendix A Transition Services

From time to time, the Systems may authorize the Manager to provide transition services (a "Transition Assignment") for a portfolio of assets of the Systems (the "Portfolio") when the Systems modify or change the System's existing investment strategy, add or remove investment managers, or otherwise liquidate or restructure the Portfolio. The Systems will commence a Transition Assignment with the Manager by executing a Letter of Authorization ("Letter"), which describes the terms of a specific Transition Assignment.

The Manager may purchase or sell assets in the Portfolio through (i) the Manager's passive cross-trading program for ERISA and ERISA-eligible clients (the "ERISA Crossing Program") — a cross-trade of securities with index or model-driven funds or other accounts that are undergoing transition assignments permitted under Department of Labor Prohibited Transaction Exemption 92-11 ("PTE 92-11") and/or (ii) the Manager's passive cross-trading program for non-ERISA clients — a cross-trade of securities with index or model-driven funds or other accounts that are undergoing transition assignments (the "Non-ERISA Crossing Program" and together with the ERISA Crossing Program, the "Crossing Programs"). The Systems acknowledges that it has received a copy of PTE 92-11 and a description of the Non-ERISA Crossing Program. There are no direct or indirect transaction fees associated with the Crossing Programs other than third-party transfer or custodial movement charges.

[REDACTED]

Portfolio assets may be held in restructuring accounts ("Restructuring Accounts") domiciled at an external custodian (the "Custodian" identified in the Letter) or at the Manager. The Systems authorize the Manager to open and close Restructuring Accounts or the Systems will direct the Custodian to open and close Restructuring Accounts in connection with a Transition Assignment. The Systems acknowledge that third-party expenses (including, but not limited to, custodial and fund accounting fees) and any transition fees that the Systems have agreed to pay the Manager with

respect to the Transition Assignment will accrue in the Restructuring Accounts and may reduce the amount of assets in the Portfolio under transition.

The Systems direct any Custodian or any external manager of Portfolio assets (an "External Manager" identified in the Letter), to: (1) provide the Manager with any information the Manager may reasonably request in order to provide services during the Transition Assignment including, without limitation, a list from the Custodian of assets that are being restructured, and buy or sell lists from the External Manager, that in each case are verified respectively by the Custodian or the External Manager as complete and accurate (each, and any supplement thereto, a "Verified List"); and (2) follow instructions of the Manager, including, without limitation, instructions to deliver (including, without limitation, delivery of non US securities prior to receiving payment, or assist in the delivery of, the Portfolio's assets to the Manager for restructuring or liquidation, and to settle securities trades.

The Systems acknowledge that during the Transition Assignment the Systems will not achieve any stated investment objective. The Systems further acknowledge that certain securities in the Portfolio may be difficult to liquidate due to factors not within the control of the Manager. The Systems further acknowledge and agree that the Manager is not responsible for any errors or omissions that arise from inaccuracies in a Verified List, or liable for any losses directly or indirectly resulting from the Custodian's or the External Manager's acts or omissions. All securities in the Portfolio shall be free of liens, encumbrances or other resale restrictions.. If any of the assets in the Portfolio are not immediately available, it will be the responsibility of the Custodian to notify the Manager in writing when such securities are available for delivery and sale.

Non-ERISA Crossing Disclosure

As part of its investment management business, Barclays Global Investors, N.A. ("BGI") may be hired as a "trading advisor" to manage the transition of assets into or out of both BGI and third party-managed funds. To reduce transaction costs in connection with transitions and other account trading, BGI conducts an internal cross (the "non-ERISA cross") between the accounts and funds (collectively, "non ERISA accounts") it manages that are not regulated under ERISA, matching sell orders from certain accounts with purchase orders from other accounts, thereby avoiding brokers' commissions for such crosses (other than third-party transfer or custodial movement charges). This activity is generally available only to accounts with potential crossing activity greater than \$10 million. This activity occurs separate from and subsequent to internal cross trades (the "ERISA cross") among ERISA-regulated accounts in accordance with Prohibited Transaction Exemption ("PTE") 92-11 granted by the Department of Labor. Participation in the non-ERISA cross does not affect a qualified non-ERISA account's eligibility to participate in the ERISA cross.

In addition to "Index" or "Model Driven" accounts and "Large Plan Restructuring Accounts" (as defined in PTE 92-11) that may participate, non-ERISA restructuring accounts that do not qualify for crossing under PTE 92-11 may also participate in the non-ERISA cross. Accounts managed by BGI's non-US affiliates may also participate in both the ERISA (if qualified under PTE 92-11) and non-ERISA crossing programs.

Index or model driven strategies must have a qualifying triggering event to participate. These triggering events include:

- The accumulation of cash in an account in connection with a dividend or other corporate action or coupon payments.
- Changes in the composition or weighting of a third party-provided index against which an account is managed.
- Changes in the model-prescribed portfolio of a model-driven fund.
- Cash contributions to or withdrawals from an account by a client or by another account that owns it.

Triggering events are deemed effective for three business days prior to and three business days after they have occurred, relative to the effective date. Non-ERISA restructuring accounts are not subject to the triggering event restrictions.

BGI seeks advance written approval of BGI's non-ERISA cross-trading from fiduciaries of non-ERISA accounts, and BGI gives written reports to the account fiduciaries of the transaction results of such cross-trading. All cross-trade transactions are priced at the closing price on the trade date. BGI does not receive compensation for non-ERISA cross trading.

Kentucky Retirement Systems Guideline and Fee Agreement

This Guideline and Fee Agreement shall be effective January 2, 2017 and hereby replaces and supersedes all previous Guideline and Fee Agreements. Reference is made to the Investment Management and Custody Agreement (the "Agreement") dated April 7, 2005 by and between Kentucky Retirement Systems (the "Systems") and BlackRock Institutional Trust Company, N.A. (the "Manager"). Capitalized terms used herein and not defined shall be given their meanings as so defined in the Agreement.

SECTION 1, GUIDELINES

To expand on Paragraph Two of the Agreement, the Systems have determined that, pursuant to the Systems' investment policies and objectives, the Systems' investment needs can best be met by investing a portion of its assets in the following collective investment fund(s):

[REDACTED]

[REDACTED]

The above collective funds engage in securities lending and will pay to the Manager a separate securities lending fee as described in Section 2 below.

The investment guidelines for the above referenced collective investment funds can be found in the Plan of BlackRock Institutional Trust Company, N.A. Investment Funds for Employee Benefit Trusts and the Schedule A thereto (collectively the "Plan Document"), a current copy of which may be accessed via the following website link:

www.blackrockdocuments.com

The Manager shall notify the Systems of material changes to the investment guidelines in which the Account is invested.

The above referenced collective investment funds may invest through one or more short term investment funds used for a cash "sweep" vehicle to manage uninvested cash or reinvestment and management of cash collateral associated with securities loans (each, a "STIF Fund").

STIF Funds used for a cash "sweep" vehicle are invested primarily in short term debt securities, such as variable amount notes, commercial paper, U.S. government securities, repurchase agreements, certificates of deposit of banks and savings institutions, and other short term obligations.

STIF Funds used to manage cash collateral associated with securities loans ("Cash Equivalent Funds") invest such cash collateral in short term debt instruments. Additional information relating to the investment philosophy, risk management and guidelines criteria for the STIF Funds, as well as specific guidelines for each STIF Fund can be found in "Short-Term Investment Funds Overview and Guidelines", a current copy of which may be accessed via www.blackrock.com/institutional/documents.

The Systems will notify the Manager if it is determined for any reason that there is a change in the Systems' investment needs affecting the stated objectives.

SECTION 2, FEES

This Guideline and Fee Agreement will also serve as the fee agreement referred to in the Eleventh Section of the Agreement. The fees to be applied to the Systems' investment in the above collective investment fund(s) are as follows:

A. Investment management fees.

[REDACTED]

[REDACTED]

5.5 bps

[REDACTED]

Annual investment management fee rate:

[REDACTED] 6 bps

[REDACTED] 4.5 bps

[REDACTED] 3 bps

Investment management fees are calculated and billed quarterly in arrears (for quarters ending March 31st, June 30th, September 30th and December 31st) by (i) averaging the Plan's proportionate share of the Collective Fund's net asset value, as determined by the Manager, as of the last day of each month in the applicable quarter and (ii) applying the applicable annual investment management fee rate that shall be based on the actual number of days of such calendar quarter (e.g., 91/365). Where the Plan's assets are held for a partial period as a result of the Plan's initial contribution into or final withdrawal from the Collective Fund, the investment management fees will be prorated for such period, based on the actual number of days in the invoice period divided by the actual number of calendar days (e.g., actual days in invoice period/365). The month end market values will be prorated for any daily subscriptions or redemptions that exceed \$5 million during any billing period and for any quarter in which management commences or terminates on a day other than the beginning or end of the quarter. Payment of investment management fees is due to the Manager within thirty (30) days after the invoice date. Investment management fees will be calculated and billed in U.S. Dollars.

B. Securities lending fees.

- i. The lending Collective Fund and the Manager will each receive [REDACTED] of the net income earned from securities lending transactions. If a loan is collateralized with cash, net income is determined by calculating the return received by a lending Collective Fund's investment of cash collateral posted for securities loans in the applicable STIF Fund used to manage cash collateral, net of borrower rebate fees. If a loan is collateralized with assets other than cash, net income equals the loan fee negotiated with the borrower. The net income from securities lending divided between the lending Collective Fund and the Manager is also net of cash collateral management fees paid to the Manager as described below and the other expenses of the STIF Funds used

to manage cash collateral. The Manager bears all operational costs directly related to securities lending transactions from its share of net income. The Trust's portion of lending revenue is retained by the lending Collective Fund and invested in accordance with the relevant Collective Fund Guidelines.

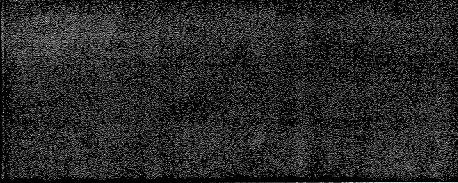
- ii. STIF Funds used to manage cash collateral associated with securities loans are subject to a management fee, payable to the Manager, accrued daily on the net assets of such fund at either (a) an annual rate of [REDACTED], or (b) an annual rate of [REDACTED], if such fund may engage in "synthetic" transactions. "Synthetic" transactions are further described in the STIF Guidelines.

C. **Administrative expenses.** Each of the Collective Funds is subject to administrative expenses, including, but not limited to accounting, custody and audit fees. The administrative expenses are accrued daily against the Collective Fund, which results in an adjustment in the Collective Fund's unit value to reflect such expenses accrued.

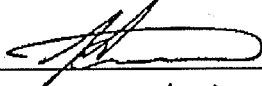
- D. The Systems acknowledge that it has received and reviewed the description of the Manager's cross trading program in *Managing ERISA Assets*. The Systems hereby authorize participation in the Manager's cross-trading program in accordance with PTE 2002-12 and the performance by the Manager of any act necessary or proper to enable it to purchase or sell securities to another account or fund managed by the Manager or its affiliates at prevailing market levels in accordance with applicable law, including PTE 2002-12, and the Manager's cross-trading policies and procedures.

This Agreement shall also serve as standing authorization for Manager to accept investment direction from the Systems' account representatives designated in Appendix B ("Representatives"). Such directions as Manager may receive from the Representatives shall be subject to the Systems' overall investment strategy and may include purchase and sale directives, wire instructions, and such other instructions as may be necessary or appropriate to manage the account. This authorization shall continue until revoked in writing by the Systems or Manager.

BLACKROCK INSTITUTIONAL TRUST COMPANY, N.A.



AGREED AND ACCEPTED:
KENTUCKY RETIREMENT SYSTEMS

By:  Date: 3/28/17

Name: Frederick
Title: Director of Equity

Kentucky Retirement Systems Insurance Trust Fund**Grantor Trust Agreement**

This GRANTOR TRUST AGREEMENT, is entered into this 22 day of MARCH, 2012, by and between the Kentucky Retirement Systems Insurance Trust Fund (the "Grantor") and BlackRock Institutional Trust Company, N.A., a national banking association (the "Trustee").

1. Establishment of Trust. This Trust shall be called [REDACTED]. The Grantor and the Trustee hereby establish the Trust. The Trustee agrees to use its best professional judgment to implement, manage and invest the Trust in accordance with the provisions of this Trust Agreement. Trustee acknowledges that the Trust assets are those of a statutorily mandated trust governed by the provisions of Chapter 161 of the Kentucky Revised Statutes, and subject to fiduciary responsibility and other provisions similar in purpose and intent to those of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). The Trustee acknowledges receipt of a copy of Chapter 161 of the Kentucky Revised Statutes and agrees to adhere to the standard of care and conduct required of a fiduciary under applicable federal and state law. Grantor shall notify Trustee if Chapter 161 is amended as to investment authority or other investment related matters and agrees to provide copies of applicable amendments.
2. Purpose. The purpose of this Trust shall be to enable the Grantor to provide for the management of a portion of its funds by the Trustee in accordance with investment guidelines and objectives (the "Guidelines") agreed to between the Grantor and the Trustee from time to time (the agreement setting forth such Guidelines, the "Guideline and Fee Agreement").
3. Principal. The Trust's principal shall consist of cash, securities and other property acceptable to the Trustee that the Grantor may from time to time transfer to the Trust.
4. Administration. The income and principal of the Trust shall be held and administered by the Trustee solely for the benefit of the Grantor. The Trustee shall make distributions of income and principal to the Grantor in accordance with the Grantor's written directions. Any income not distributed shall be accumulated and added to the principal of the Trust. The Trustee

shall have no duty or responsibility with respect to the use or application of distributions that it makes to the Grantor at its direction.

5. Trustee Powers; Investments. The Trustee shall have full power and authority to invest and reinvest the assets of the Trust in investments of any kind in accordance with the Guidelines. To the extent that any assets of the Trust are invested in collective or common trust funds of securities (each, a "Collective Fund") maintained by the Trustee, the Trust shall be subject to all of the provisions of the instruments establishing such Collective Funds as they may be amended from time to time. Such amendments as they may be amended from time to time are hereby incorporated and made part of this Trust Agreement as if fully set forth herein. Subject to the Guidelines, the Trustee shall have full power and authority with respect to any and all property at any time received or held in the Trust to do all such acts, take all such proceedings and exercise all such rights and privileges, whether herein specifically referred to or not, as could be done, taken or exercised by the absolute owner thereof, including, without in any way limiting or impairing the generality of the foregoing, the following powers and authority:

- a. To retain the same for such period of time as it deems appropriate;
- b. To invest and reinvest the Trust in investments of any kind without being restricted by any statutory limitations on investments by a trustee, including a portfolio of securities or Collective Funds; provided, however, that notwithstanding any provision of the Trust Agreement which restricts the activity of the Trustee, to the extent that property is transferred hereunder to any such Collective Fund, the terms and conditions of the instruments establishing such Collective Fund, as they may be amended from time to time, shall solely govern the investment duties, responsibilities and powers of the trustee of such Collective Fund;
- c. To sell the same, at either public or private sale, at such time or times and on such terms and conditions as to credit or otherwise as it may deem appropriate;
- d. To consent to or participate in any plan for the reorganization, consolidation or merger of any corporation any security of which is held in the Trust, to pay any and all calls and assessments imposed upon the owners of such securities as a condition of their participating therein, and to consent to any contract, lease,

mortgage, purchase or sale of property, by or between such corporation and any other corporation or person;

- e. To exercise or dispose of any right it may have as the holder of any security, to convert the same into another or to acquire any additional security or securities, to make any payments, to exchange any security or to do any other act with reference thereto;
- f. To renew, modify or extend the time of payment of any obligation due or becoming due;
- g. To purchase, sell, execute, hold, grant, permit to expire, exercise and generally deal in any manner with contracts for the future delivery of financial instruments or other property and options of any kind;
- h. To compromise, arbitrate or otherwise adjust or settle claims in favor of or against the Trust and to deliver or accept in either total or partial satisfaction of any indebtedness or other obligation any property, and to continue to hold any property so received for such period of time as the Trustee may deem appropriate;
- i. To exchange any property for other property upon such terms and conditions as the Trustee may deem proper, and to give or receive money to effect equality in price;
- j. To foreclose any obligation by judicial proceeding or otherwise;
- k. To sue or defend in connection with any and all securities or property at any time received or held in the Trust and to charge against the Trust all reasonable expenses and attorney's fees in connection therewith;
- l. To deposit any security with any protective or reorganization committee, and to delegate to such committee such power and authority with relation thereto as it may deem proper, and to agree to pay and to pay out of the Trust such portion of the expenses and compensation of such committee as the Trustee may deem proper;

- m. To execute and deliver any proxies or powers of attorney to such person or persons as the Trustee may deem proper, granting to such persons such power and authority with relation to any property or securities at any time held in the Trust as it may deem proper;
- n. To vote, either in person or by general or limited proxy, or to refrain from voting, any security held in the Trust;
- o. To appoint agents as may be reasonably necessary;
- p. To hold such portion of the Trust as may reasonably be necessary for ordinary administration and for the disbursement of funds in cash, without liability for interest, by depositing the same in short-term securities or deposits which bear a reasonable rate of interest in a bank or similar financial institution supervised by the United States or a state, notwithstanding that the bank or financial institution is the Trustee;
- q. To lend, including through a Collective Fund, any securities held to brokers, dealers or other borrowers and to permit the loaned securities to be transferred into the name and custody and be voted by the borrower or others, and to invest any collateral provided by any borrower in any security or other asset; and
- r. To do all acts, whether or not expressly authorized, which it may deem necessary or proper for the protection of the property held hereunder and generally to exercise any of the powers of an owner with respect to any property held by it.

The Grantor hereby authorizes the Trustee to commence effecting trades for investments in the Collective Funds without sufficient funds being available in the Trust to cover such trades. The Grantor agrees that the Grantor shall be liable for any and all claims, losses (including any losses related to market movement), costs, damages, fees (including but not limited to reasonable attorneys fees), expenses and liabilities (collectively, "Losses") which the Trustee and its affiliates may incur in connection with the Trustee's commencement of trading hereunder, and such Losses will not be used in the calculation of performance with respect to any performance benchmark for the Trust.

Notwithstanding anything in this Trust Agreement to the contrary, the Trustee may, at its own discretion, delegate any or all of its discretionary investment, advisory and other rights, powers, functions and obligations hereunder to any affiliate of the Trustee under the control of BlackRock, Inc.; provided that any such delegation shall be revocable by the Trustee and that the Trustee shall always remain liable to the ~~Grantor for the Trustee's obligations hereunder and for all actions of any such affiliates to the same extent as the Trustee is liable for its own actions hereunder.~~ The Grantor further agrees that the Trustee may utilize affiliated or unaffiliated third party service providers to perform certain administrative and operational functions for the Trust.

6. Trustee Dealings with Third Parties. The Trustee is entitled to deal with third parties which may rely on representations made by the Trustee and such third parties are released from inquiring into the decision or authority of the Trustee and from seeing to the proper application of any monies paid or securities or other property delivered to the Trustee.
7. Grantor's Authorized Signatories. The Grantor shall certify to the Trustee the names of a person or persons with power to act on behalf of the Grantor with respect to this Trust Agreement, including those persons authorized to sign this Trust Agreement and instructions on behalf of the Trust, and the current contact information for the foregoing person(s). Such certification may be in the form of a certified copy of the board resolution or a certificate of incumbency of the Grantor or the third party, as applicable, or other documentation acceptable to the Trustee in its sole discretion. The Grantor shall provide a specimen signature form identifying those officers and employees of the Grantor or any third party authorized by the Grantor to place trade orders on behalf of the Trust. The Grantor shall immediately notify the Trustee in writing of any change to such foregoing persons. The Trustee shall not be charged with knowledge of any such change until it receives written notice from the Grantor.
8. Legal Counsel. The Trustee may consult with legal counsel of its choice, including counsel for the Grantor or the Trustee, upon any question or matter arising hereunder and shall be fully protected in acting in good faith upon advice of such counsel.
9. Bond. The Trustee shall not be required to furnish any bond or surety.

10. Trustee's Fiduciary Capacity. The powers given to the Trustee in this Trust Agreement and any additional powers conferred by law shall be exercised by the Trustee solely in its fiduciary capacity. In exercising its powers hereunder, the Trustee shall be subject to the rules and regulations of the U.S. Comptroller of the Currency, including, but not limited to, 12 C.F.R. Part 9. For the avoidance of doubt, the Grantor and the Trustee acknowledge ~~that, under such rules and regulations, the Trustee has exclusive management over any~~ Collective Fund and the provisions of this Trust Agreement shall have no effect on the terms of any document or instrument governing such Collective Fund.

11. Trustee's Representations and Covenants. The Trustee represents and warrants and covenants the following on a continuous basis that (a) as required under Section 161.430 of the Kentucky Revised Statutes, it is a "fiduciary" as defined in Section 3(12)(A) of ERISA with respect to the assets held in the Trust and will conduct itself in accordance with such requirements, including those contained in Section 161.430(3)(b) of Kentucky Revised Statutes, and will not delegate its fiduciary responsibilities; (b) this Trust Agreement has been duly authorized, executed and delivered by the Trustee and constitutes its legal, binding and valid obligation; (c) it has or will obtain all governmental authorizations, approvals, consents or filings required in connection with the execution, delivery or performance of this Trust Agreement by the Trustee; (d) it shall purchase and maintain at its own expense the insurance identified on Appendix A. In the event that the Trustee's policy is written on a "Claims Made" form, Trustee shall, upon written request of the Grantor, furnish evidence that the liability coverage has been maintained for at least five (5) years after this Trust Agreement's expiration or cancellation date, either by submitting renewal policies with a retroactive date of not later than the date work commenced under this contract, or by evidence that the Trustee has purchased an extended reporting period endorsement that will apply to any and all claims arising from work performed under this Trust Agreement. Upon request of the Grantor, Trustee shall provide certificates of insurance on an annual basis to the Grantor so that continuous coverage is provided during the term of this Trust Agreement; (e) it has not and will not pay or cause to be paid any money, fees, political contributions or other things of value to any third party as a direct result of, or in direct relation to, investment management services provided to the Grantor without the Grantor's informed written consent. Notwithstanding the foregoing, the Trustee may select its own service providers and agents as determined in the Trustee's sole discretion in order to carry out the investment management services to be provided under this Trust Agreement; (f) it has not and will not accept any money, fees or other things of value from any third party as

a direct result of, or in direct relation to, investment management services provided to the Grantor, without providing disclosure or notice or otherwise without the Grantor's informed written consent, except to the extent not prohibited by applicable law. In addition, Trustee agrees to exercise independent professional judgment in providing investment management services to the Grantor. The Trustee maintains a Code of Business Conduct and Ethics policy, a copy of which has been provided to the Grantor. No less than annually, Trustee shall certify to the Grantor as to its compliance with this section and its Code of Business Conduct and Ethics policy; (g) it is legally entitled to enter into this Trust Agreement with the Grantor and it is not and will not be violating any conflict of interest statute (KRS 121.056 or any other applicable statute) or principle by the performance of this Trust Agreement, including based on and subject to disclosure and/or notice furnished to the Grantor or its legal representative and/or consent obtained or presumed (as permitted by applicable law) for purposes of hiring and monitoring the Trustee in relation to investment management services provided to the Grantor; (h) to the best of its knowledge neither it nor its employees have knowingly violated any of the Executive Branch Ethics provisions as set forth in KRS Chapter 11A; [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Except as otherwise required by law, the Grantor shall maintain the confidentiality of all such information until the investigating entity makes the information public; (j) it has disclosed in writing through its disclosure document [REDACTED], to the Grantor interests or circumstances that may give rise to an actual, potential or perceived conflict of interest, and, thereafter, shall update the Grantor in writing of any changes in circumstances affecting the matter disclosed; [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] and (n) to the extent permitted by law, it will promptly advise the Grantor if any of the foregoing representations are no longer true.

12. Placement Agents. The Trustee agrees that it will remain in compliance with the Grantor's Statement of Disclosure and Placement Agent policy, which is attached hereto as Appendix B. The Trustee will not be responsible for complying with any updates to the Grantor's Statement of Disclosure and Placement Agent policy until it is notified in writing of such changes by the Grantor. The Trustee warrants that no person or selling agency has been employed or retained to solicit and secure this Trust Agreement upon an agreement or understanding for commission, percentage, brokerage or contingency; excepting bona fide employees or selling agents maintained by the Trustee for the purpose of securing business unless disclosed in writing, prior to the engagement. The Trustee has not paid any placement fees, finder's fees, or gratuities (including gifts and entertainment) to any fiduciary, trustee or employee of Grantor.
13. Grantor's Representations and Covenants. The Grantor hereby acknowledges, represents, warrants, covenants and agrees on a continuous basis that (a) the Grantor is exempt from federal income taxation under Section 115 of the Code; (b) the Grantor has the power and authority under applicable law and the documents or instruments governing the Grantor to form a trust and appoint the Trustee to hold certain assets of the Grantor; (c) the Trust may invest in financial futures contracts on an unleveraged basis; (d) the Grantor is making the decision to invest in the investment strategies contained in the Guidelines (including any Collective Fund) for its own account, as principal, for investment purposes and not with a view to the resale or distribution of all or any interests in such fund(s); (e) participation in any Collective Funds is available only to certain qualified entities, there is no secondary market in interests in Collective Funds, and interests in a Collective Fund are non-transferable and may be redeemed only in accordance with the provisions of the instruments establishing

such Collective Funds; (f) the Grantor is not investing in interests in a Collective Fund as a result of or subsequent to any advertisement, article, notice or other communication published in any newspaper, magazine, broadcast media, or presented at any seminar or general meeting, or any solicitation by a person not previously known to the Grantor in connection with investments generally; (g) the Grantor, or each person making the ~~investment decision to invest in the investment strategies contained in the Guidelines (and~~ any such Collective Fund) and thereby acquire the interests in Collective Funds on behalf of the Trust, alone or together (as the case may be) have such knowledge and experience in financial and business matters that they together are capable of evaluating the merits and risks of an investment in the investments set forth in the Guidelines (including any interests in Collective Funds) and of making an informed decision regarding the investments set forth in the Guidelines (and purchase of any interests in Collective Funds) and understand and have considered the various risks of an investment in Collective Funds; and (h) the Grantor owns and invests more than \$100 million in aggregate. The assets allocated to the Trust are not regulated under the U.S. Employment Retirement Income Security Act of 1974, as amended ("ERISA") and to the extent assets of the Trust are allocated from any employee benefit plan or pension fund or scheme, there are no U.S. residents or citizens that are participants or beneficiaries of such plan, fund or scheme. The Grantor has determined that, in view of such considerations, the proposed Guidelines are consistent with the Grantor's fiduciary's responsibilities. The Grantor agrees to notify the Trustee promptly if it has reason to believe that the foregoing may cease to be true

14. Reporting. The Trustee shall provide a statement of all receipts and disbursements and a valued list of assets of this Trust to the Grantor monthly. The Trustee shall provide to the Grantor or its delegate upon request such additional information (including without limitation the information described in Appendix C) with respect to the Trust assets as is available in its ordinary business records.
15. Revocable Trust. This Trust shall be revocable at any time by action of the Grantor and in the event of revocation the ownership of all cash, bonds, securities, and any other property held in trust under this Trust Agreement shall revert immediately to the Grantor and such cash, securities, and other property shall be delivered promptly to the Grantor. Upon revocation, the Trustee shall make an appropriate accounting to the Grantor.

16. Responsibilities upon Termination. Upon expiration or termination of this Trust Agreement for any reason, and except as otherwise expressly directed by the Grantor, the Trustee shall, in accordance with the instruments governing the Collective Funds: (i) cooperate with the Grantor in good faith to effect a smooth and orderly transfer of the Trust, all services and all applicable records; and (ii) retain all the Trust records according to the record retention provisions set forth in Paragraph 14 of this Trust Agreement.

17. Confidentiality.

a. This Trust Agreement and all information and advice furnished by either party to the other shall be treated as confidential and shall not be disclosed to third parties (including, without limitation, to employees of either party or their respective affiliates), except to the extent that such persons utilize such information in the performance of their duties with respect to this Trust Agreement or except as required by law or as agreed between the parties.

b. Without limiting the foregoing, the Grantor shall treat as confidential, to the extent provided to the Grantor by the Trustee, the identity of securities holdings and other investments and positions therein and the issuers thereof contained in securities holdings reports for the Trust provided by the Trustee, certain portfolio information and trade data, historical trade data and historical portfolio positions, and any non-public financial and operating data and other proprietary and confidential business information relating to the Trustee, the Trust and any investment therein.

c. Notwithstanding paragraphs 17.a and 17.b, the Trustee acknowledges that the Grantor must comply with all applicable laws (including any statute, governmental rule or regulation, or judicial or governmental order, judgment or decree) (collectively, "Open Records Laws"). In order for the Grantor to comply with the Open Records Laws, the Trustee authorizes the Grantor to disclose the following information to any person at any time, without notice to the Trustee: (i) the fact that the Grantor has entered into this Trust Agreement with the Trustee, (ii) the amount of the Grantor's assets held in the Trust, (iii) contributions to, and distributions from, the Grantor's investment in the Trust, (iv) a description of the investment strategy of the Trustee, and (v) the fair market value of the Trust. Additionally (unless exemptions for trade secrets, commercially sensitive information, or other exemptions apply) compliance with the Open Record Laws may require Grantor to disclose confidential or proprietary business information relating to the services or products

of the Trustee or any Collective Fund ("Sensitive Information"). The Trustee authorizes Grantor to disclose Sensitive Information that Grantor determines, in good faith, is required to be disclosed under applicable Open Records Laws, provided that the Grantor will give prior written notice (if permitted by applicable law) of any request for disclosure under the Open Records Laws to the Trustee and shall permit the Trustee a reasonable period of time ~~(if and to the extent permitted by applicable law) to seek a protective order prohibiting or~~ limiting such disclosure.

d. Subject to any applicable law, and notwithstanding anything contrary herein, the Trustee may disclose client information to its employees, agents or affiliates pursuant to its internal record-keeping or data collection rules or policies as required to support the Trust and any Collective Fund managed by the Trustee in which the Trust invests. The Trustee is also hereby authorized (which may be withdrawn at any time upon written notice from the Grantor to the Trustee) after the date of initial funding to publicly disclose that it has been awarded a mandate to provide investment management services to the Grantor. The Trustee may also release confidential information if directed to do so by the Grantor, if compelled to do so by law, or in connection with any government or self-regulatory organization request or investigation. The Grantor shall promptly notify the Trustee in writing of any known unauthorized, negligent or inadvertent use or disclosure of any confidential information and cooperate with the Trustee to prevent disclosure of confidential information.

18. Amendment. This Trust Agreement may be amended by the Grantor in writing at any time provided that no amendment shall increase the duties of the Trustee without its written consent.

19. Survival of Provisions. The provisions of paragraphs 11, 13, 17, 22 and 31 hereof shall survive the expiration or termination of this Trust Agreement.

20. Waiver. No waiver of any provision of this Trust Agreement shall be effective unless the same shall be in writing by the party so waiving, and then such waiver shall be effective only in the specific instance and for the specific purpose for which given. No failure to exercise and no delay in exercising, on the part of the Grantor or Trustee, any right, remedy, power or privilege hereunder, shall operate as a waiver thereof.

21. Trustee Resignation. The Trustee may at any time resign by written notice to the Grantor, and such resignation shall take effect at the expiration of thirty (30) days from the date of such notice. Upon such resignation, the Grantor may appoint a successor Trustee. Upon resignation, the Trustee shall make an appropriate accounting to the Grantor. A successor Trustee shall not be personally liable for any act or omission of any predecessor. Any ~~successor Trustee may act in the same manner as though originally named the Trustee~~ hereunder.

22. [REDACTED]

23. Force Majeure. Notwithstanding any other provision of this Trust Agreement, neither the Trustee nor its officers, directors, affiliates and employees shall be liable for any loss to the Trust and/or Grantor caused directly or indirectly by circumstances beyond the Trustee's control, including, but not limited to, government restrictions, exchange or market rulings, actions affecting securities or commodity exchanges including suspensions of trading or extensions of trading hours, acts of civil or military authority, national emergencies, labor difficulties not related to the Trustee, fires, earthquakes, floods or other catastrophes, acts of God, wars, acts of terrorism, riots or failures of communication or power supply.

24. Client Identification; Anti-Money Laundering. To help the government fight the funding of terrorism and money laundering activities, Federal law requires all financial institutions to obtain, verify and record information that identifies each client that opens an account. In this regard, when the client seeks to open an account, the Trustee will ask for a completed form

W-9, which includes the name, address, Tax ID/Employer ID number of each client (or any other registration number issued in the jurisdiction of location or incorporation) and other information that will allow the Trustee to identify the client. The Trustee will also ask for legal documents that establish the identity of the client and may ask for information and documentation regarding the source of funds to be invested. The Trustee also reserves the right to ask for more information on the individuals who are beneficial owners of the client, exercise control over the Trust, or are signatories to this Trust Agreement. At a minimum the Trustee will ask for the names of these individuals but may also ask for address, date of birth, and other information that will allow the Trustee to identify the signatories. The Trustee may also request such other information as may be necessary to comply with applicable law. Furthermore, the Trustee may verify any of the aforementioned information using third-party sources.

The Grantor represents, warrants and covenants (1) that it has provided the Trustee with the identity of any Politically Exposed Persons (as that term is defined below) who either own or have a controlling interest in the Grantor or the Grantor's; and (2) that it has disclosed to the Trustee if (a) the Grantor is located in any of the Jurisdictions (as that term is defined below); (b) the Grantor is owned or controlled by another entity located or incorporated in any of the Jurisdictions; (c) the Grantor has a trading interest or significant business activity in any of the Jurisdictions; or (d) the Grantor's owners and/or controllers and those who are authorized to place trades on behalf of the Trust have any of the Jurisdictions as their country of nationality, residency, or birth. The Grantor agrees to notify the Trustee promptly if any of the above representations, warranties or covenants are no longer true or have changed.

For purposes of this Trust Agreement, a Politically Exposed Person is defined as an individual (including his or her parents, spouse or partner, and children and their spouses or partners) who has or has had a high political profile or holds a senior public office position.

Jurisdictions include any of the following countries or regions: the Balkans, Iran, Iraq, Syria, Myanmar, North Korea, Liberia, Libya, Egypt, Tunisia, Sudan, Belarus, Democratic Republic of Congo, Ivory Coast, Lebanon, Eritrea, Republic of Guinea, Rwanda, Somalia, Uzbekistan, Cuba, and Zimbabwe.

25. Compensation of Trustee. The Trustee shall be entitled to reasonable compensation for its services hereunder as agreed between the Trustee and the Grantor from time to time in the Guideline and Fee Agreement.

26. Notices. All notices, instructions and communications with respect to matters contemplated by this Trust shall be in writing and shall be delivered by mail, facsimile, through electronic means or any other mutually agreed telecommunication method.

27. Conflicts of Interest; Transactions with Affiliates and Minority Passive Shareholders.

- a. *Other Interests.* The Grantor agrees that the Trustee may refrain from rendering any advice or services concerning securities of companies of which officers, directors or employees of the Trustee or its affiliates are directors or officers, or companies as to which the Trustee, its affiliates or any of their officers, directors or employees has any substantial economic interest or possesses material non-public information, unless the Trustee either determines in good faith that it may appropriately do so without disclosing such conflict to the Grantor or discloses such conflict to the Grantor prior to rendering such advice or services with respect to the Trust.
- b. *Brokerage and Trading.* To the extent permitted by applicable law, brokers or dealers utilized by the Trustee to execute or effect transactions or transact in a principal capacity may include the Trustee's affiliates and affiliates of shareholders in the Trustee's ultimate parent company including but not limited to PNC Capital Markets, Inc. (a subsidiary of The PNC Financial Services Group, Inc.), Merrill Lynch, Pierce, Fenner & Smith Incorporated (a subsidiary of Bank of America Corporation) and Barclays Capital, Inc. (a subsidiary of Barclays PLC) (such shareholders and their affiliates are hereby referred to as "Minority Passive Shareholders"). The Grantor understands that such brokers and dealers may retain express or imputed commissions in connection with effecting any transactions for the Trust to the extent permitted by applicable law.
- c. *Cross Trades.* From time to time, when determined by the Trustee to be in the best interest of the Trustee, the Trust may purchase securities from or sell securities to another account (including, without limitation, public or private collective investment vehicles) managed, maintained or trusteeed by the Trustee or an affiliate in accordance with applicable law.

- d. *Agency Cross Trades.* To the extent permitted by applicable law, the Trustee, any affiliated broker-dealers, or broker-dealers that are Minority Passive Shareholders are hereby authorized by the Grantor to execute agency cross transactions on behalf of the Trust. Agency cross transactions may facilitate a purchase or sale of a block of securities for the Trust at a predetermined price and may avoid unfavorable price movements which might otherwise be suffered if the purchase or sale order were exposed to the market. However, the Trustee, its affiliated broker-dealers, and the Minority Passive Shareholders may receive commissions from, and therefore may have a potentially conflicting division of loyalties and responsibilities regarding, both parties to an agency cross transaction.
- e. *Investment in Securities of Affiliates or Minority Passive Shareholders.* To the extent permitted by applicable law and if not prohibited by the Guidelines, the Trustee may purchase, hold, exchange or sell securities of BlackRock, Inc., its affiliates and/or Minority Passive Shareholders.
- f. *Underwriting.* The Grantor understands and agrees that, from time to time, the Trustee may make recommendations to purchase or sell securities, and may purchase or sell securities, in which an affiliate of the Trustee or a Minority Passive Shareholder deals and/or makes a market or an affiliate of the Trustee or a Minority Passive Shareholder may perform or seek to perform investment banking services for issuers of such securities. The Grantor also understands and agrees that any such purchases or sales may be made for the Trust if viewed as advisable by the Trustee in light of the Guidelines. The Trustee may not engage in transactions hereunder except to the extent permitted by law.
- g. *Securities Lending.* To the extent permitted by applicable law, the Trustee may lend, including through a Collective Fund, securities (including but not limited to exchange-traded funds managed by an affiliate of the Trustee) to one or more borrowers (each a "Borrower"), and to be compensated therefor; securities through a common electronic platform in which the Trustee or an affiliate (or a Minority Shareholder) has an equity interest; and mortgage backed securities.
28. Transition Services. With respect to any transition services to be performed by the Trustee, the Grantor agrees to be bound by the attached Appendix D.

29. Severability. If any provision of this Trust Agreement is held to be invalid or unenforceable, such invalidity or unenforceability shall not affect any other provision, and the Trust Agreement shall be construed and enforced as if such provision had not been included.

30. Multiple Counterparts. This Trust Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

31. Governing Law; Jurisdiction and Venue. All questions as to the execution, validity, interpretation, construction and performance of this Trust Agreement that relate to the laws of the Commonwealth of Kentucky or the regulatory policies of the Grantor shall be construed in accordance with the laws of the Commonwealth of Kentucky, without regard to conflicts of laws principles thereof, and all questions as to the execution, validity, interpretation, construction and performance of this Trust Agreement that relate to matters of corporate or trust law shall be governed by the laws of the United States (as they relate to trust activities of national banks) and, to the extent not preempted, by the laws of the State of California. The Trustee hereby consents to the jurisdiction in the courts of the Commonwealth of Kentucky and further consents that venue shall lie in Franklin Circuit Court located in Franklin County, Kentucky. Notwithstanding the foregoing, to the extent that the assets of the Trust are invested in a Collective Fund, the construction of the terms of such Collective Fund shall be governed by the laws of the United States, and to the extent not preempted, by the laws of the State of California.

32. Sovereign Immunity. The Trustee acknowledges that the Grantor reserves all immunities, defenses, rights, or actions arising out of its sovereign status or under the Eleventh Amendment to the United States Constitution, except to the extent waived by statute. No waiver of any such immunities, defenses, rights, or actions shall be implied or otherwise considered to exist by reason of its entry into this Trust Agreement, or any agreement related thereto, by any express or implied provision thereof, or by any act or omission to act by the Grantor or any representative or agent of the Grantor, whether taken pursuant to any agreement with the Trustee or prior to the Grantor's execution thereof. The foregoing shall not be interpreted to relieve the Grantor of any of its obligations under this Trust Agreement or any agreement related thereto, nor shall it reduce or modify the rights of Trustee to enforce such obligations at law or in equity.

33. Manager Disclosures. The Grantor hereby acknowledges that it has received from the Trustee a copy of [REDACTED] and "Managing ERISA Assets: A Comprehensive Guide to ERISA Exemptions Used by BlackRock Institutional Trust Company, N.A." The Trustee shall provide the Grantor with updated copies of the above mentioned documents on an annual basis.

34. Electronic Delivery. The Grantor hereby consents to receive disclosures through electronic means including a link or other access to a website maintained by or on behalf of the Trustee or an affiliate, provided that the Trustee is not obligated to provide such electronic delivery, and provided further that the Trustee will furnish a paper copy of any disclosure routinely provided to clients upon prior request.

35. Entire Agreement. This Trust Agreement and the Guidelines and Fee Agreement and any applicable schedules or appendices represent the entire understanding of the parties hereto and supersede all prior written or oral agreements with respect to the subject matter hereof.

IN WITNESS WHEREOF, the parties hereto have caused this Trust Agreement to be executed by their respective officers thereto duly authorized as of the day and year first above written.

Kentucky Retirement System Insurance Trust Fund as Grantor

By

Name

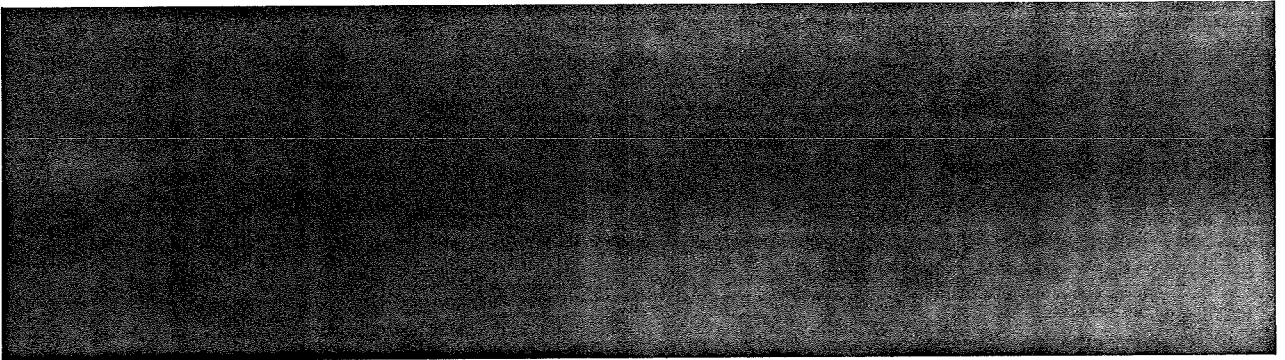
J. Carlson

Title

Chief Investment Officer

The undersigned, BlackRock Institutional Trust Company, N.A., hereby accepts the foregoing appointment as Trustee and acknowledges it is a fiduciary with respect to the Trust insofar as the assets subject to its management are concerned.

BlackRock Institutional Trust Company, N.A. as Trustee



Appendix A

Insurance

| | |
|---|------------|
| ■ | [REDACTED] |
| | [REDACTED] |
| ■ | |
| ■ | [REDACTED] |
| | [REDACTED] |
| | [REDACTED] |

Appendix C

Reporting

-
- a) Monthly (either hard copy or by electronic access) within ten (10) business days of month-end:
-
- i) Reports describing in detail the previous month's portfolio activities, including GIPS compliant performance tabulations gross and net of fees for the 1-month, 3-month, calendar YTD, fiscal YTD, 1-year, 3-year, 5-year, 10-year, and since inception as appropriate. A summary of purchases & sales (Account activity), sector weights and other appropriate Account characteristics (e.g. convexity and effective duration, P/E, etc.) for both the benchmark and the Account;
 - ii) Reports tracking units, original cost, amortized cost, market value, and gain/loss of each holding; and
 - iii) A summary of proxy votes for the Collective Funds in which the Account is invested.
- b) Quarterly within thirty (30) calendar days of calendar quarter-end:
- i) Reports reviewing portfolio performance (as above) and the Trustee's current investment strategy and outlook.
- c) Annually, after the close of the calendar year:
- i) A Compliance Certificate provided in Appendix E;
 - ii) If Trustee accepts soft dollars, a report on the Trustee's use of soft dollars earned and expended resulting from its duties under this Agreement. The report shall include the products and services obtained through soft dollar arrangements and their approximate value. It is understood that until notice to the contrary is provided to Grantor, neither the Trustee nor the Collective Funds shall accept soft dollars in connection with the services provided pursuant to this Agreement.
- d) Periodically as requested:
- i) Information relating to industries, businesses, corporations or securities as requested by Grantor;
 - ii) Reports containing the Trustee's and affiliates' conflict of interest policies; and
 - iii) Any other such reports regarding the Account as Grantor may reasonably request.

Appendix D

Transition Management Assignments

From time to time, the Grantor may authorize the Trustee to provide transition management ("Transition Assignment(s)") for a portfolio of assets of the Plan (the "Portfolio") when the Grantor is modifying or changing the Plan's existing investment strategy, adding or removing investment managers, or is otherwise liquidating or restructuring the Portfolio. The Grantor will commence a Transition Assignment with the Trustee by executing a Letter of Authorization ("Letter"), which describes the terms of a specific Transition Assignment, identifies the current manager of the Portfolio ("Legacy Manager"), and identifies the intended future manager ("Target Manager") of the Portfolio that will be restructured during the Transition Assignment ("Target Strategy"). This Appendix A, the underlying Agreement, and Letter will govern Transition Assignments performed by the Trustee.

Delegation to Affiliates

Grantor acknowledges that Trustee may utilize certain of its affiliates, including but not limited to BlackRock Investment Management, LLC, to perform certain of the transition services with respect to the Transition Assignment(s). In the event of any such delegation, Trustee's affiliates shall be bound to the terms of this Appendix A and Letter to the same extent as Trustee.

Domicile and Delivery

Portfolio assets may be held in restructuring accounts ("Restructuring Accounts") domiciled either at an external custodian (the "Custodian" identified in the Letter) or at the Trustee. The Grantor authorizes the Trustee to open and close Restructuring Accounts domiciled at the Trustee and the Grantor will direct the Custodian to open and close Restructuring Accounts domiciled at the Custodian in connection with a Transition Assignment.

For a Restructuring Account domiciled either at the Trustee or at the Custodian, the Grantor agrees that: (1) Any external Legacy Manager currently managing the Portfolio will not have access to the Portfolio after the Custodian has delivered a Certified Asset List (as defined below) to the Trustee; (2) The Trustee will take responsibility of the Portfolio on the close of business on the date the Trustee has received a signed copy of the Letter from the Grantor and, if an external manager is the Legacy Manager, the Certified Asset List from the Custodian; (3) The Trustee shall have no obligations or liability with respect to any account that the Trustee is

unable to close after the Restructuring is completed; and (4) Any cash balances and securities due to the Restructuring Account as the result of corporate actions, interest, or other similar occurrences will be invested as soon as practicable.

The Grantor directs any Custodian or any external manager of Portfolio assets (a "Legacy Manager" or "Target Manager" (Identified in the Letter)), to: (1) provide the Trustee with any information the Trustee may reasonably request in order to provide services during the Transition Assignment including, without limitation, a Certified Asset List (as defined below) from the Custodian, and Verified Buy List (as defined below) from the Target Manager, that in each case are verified respectively by the Custodian or the Target Manager as complete and accurate; and (2) follow instructions of the Trustee, including, without limitation, instructions to deliver (or assist in the delivery of) or make available, as the case may be, the Portfolio's assets to the Trustee for restructuring or liquidation, and to settle securities trades.

For Restructuring Accounts domiciled with the Trustee, the Grantor acknowledges and agrees that: (1) Third-party expenses (including, but not limited to, custodial, safekeeping and fund accounting fees) and any transition fees that the Grantor has agreed to pay the Trustee with respect to the Transition Assignment will accrue in the Restructuring Accounts and may reduce the amount of assets in the Portfolio under transition; (2) After the Transition Assignment is complete and all related balances are zero, the Trustee is authorized to close the Restructuring Account and any associated client account, as necessary; and (3) If amounts owed to the Restructuring Account are less than fees accruing in the Restructuring Account, the Trustee may determine to close the Restructuring Account before such amounts are collected.

Portfolio Verification

For Transition Assignments for which the Trustee is not the Legacy Manager of the Portfolio, the Trustee will rely solely upon the Custodian's electronic certification of the assets in the Portfolio (the "Certified Asset List") in a form acceptable to the Trustee without independent verification. Likewise, for Transition Assignments for which the Trustee is not the Target Manager, the Trustee will rely solely upon electronic verification by the Target Manager of a verified buy list ("Verified Buy List") for such manager's Target Strategy in a form acceptable to the Trustee without independent verification. The Certified Asset List and Verified Buy List (collectively "Verified Lists") are required to ensure that assets in the Portfolio and the Target Strategy to be constructed are accurate and complete. The Grantor acknowledges and agrees that: (1) The Trustee is not responsible for any errors or omissions that arise from inaccuracies in the Verified

Lists and/or any Custodian's or Target Manager's failure to certify/verify, or erroneous verification of, any asset list, buy list or partial list provided; (2) The Trustee will not be liable for any losses directly or indirectly resulting from any Custodian's or the Target Manager's acts or omissions; and (3) All securities certified and/or delivered or otherwise made available to the Trustee in Transition Assignments must be in marketable form, free of liens, loans, encumbrances or other restrictions on sale.

Any additional securities or cash that are posted to the Portfolio at the Custodian or any security that becomes available in marketable form, free of liens, loans, encumbrances or has other restrictions on sale removed after Trustee receives the certified Asset List must be communicated to Trustee in an addition to the Certified Asset List (a "Certified List Addition") in a form acceptable to Trustee. Trustee will subsequently take investment management authority of the additional assets after this Certified List Addition has been received.

The Trustee may determine from time to time in connection with Transition Assignments that one or more securities on a Verified List is subject to a regulatory or other purchase restriction (each, an "Identified Security"). If the Trustee notifies the Grantor of an Identified Security in a Certified Asset List, then the Grantor will remove such Identified Security from the Portfolio or arrange for cash to be delivered in lieu of any such Identified Security. If the Trustee notifies the Grantor or Target Manager of an Identified Security on a Verified Buy List, the Trustee reserves the right to deliver cash in lieu of any such Identified Security.

Restructuring Process

Once the Portfolio's securities are contributed to the Restructuring Account, the Trustee will first identify and retain any Portfolio securities that are acceptable in-kind candidates for the Target Strategy. Next, the remaining securities will be crossed, if applicable, and/or sold and the proceeds will be used to purchase additional securities for the Target Strategy.

In performing Transition Assignments, the Trustee may purchase or sell assets in the Portfolio through the Trustee's passive cross-trading program (the "Crossing Program") — a cross-trade of securities with index or model-driven funds or (to the extent permissible) other funds or accounts that are undergoing transition assignments. The Grantor acknowledges that it has been informed of the Trustee's internal cross-trading system and techniques.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Non-US Securities Trading

For Transition Assignments that involve the trading of non-US securities, the Trustee, in its discretion, may direct the trades of local currency balances and U.S. dollars in order to facilitate the settlement of trading executed in local currencies.

Acknowledgements

Transition Assignments will be traded on a best efforts basis. Some assets in the Portfolio may be difficult to trade in adverse market conditions, and in the event of such market conditions, securities prices and volume can be expected to be quite volatile. In addition, the Trustee's use of certain strategies may be affected by government restrictions. The Trustee may trade in one day or take a time extensive approach to trading in an attempt to minimize transaction and market impact costs although transaction costs may be higher in certain market conditions. The Grantor acknowledges that during Transition Assignments the Grantor will not receive proper exposure to the Target Strategy.

Appendix E

Compliance Certificate

As a duly authorized officer of BlackRock Institutional Trust Company, N.A. (the "Trustee"), I hereby certify that I am familiar with that certain Grantor Trust Agreement dated _____, 2012 (the "Agreement") between the Kentucky Retirement Systems Insurance Trust Fund (the "Grantor") and the Trustee relating to investment of certain Grantor assets by the Trustee. In addition, to the best of my knowledge after diligent inquiry, I hereby certify to the Grantor that:

- (a) All investments of the Grantor assets made by the Trustee during the fiscal year ending June 30, _____, were made within applicable Guidelines incorporated in the Agreement at the time each investment was made, except as set forth below;
- (b) All current investment holdings in the Trust managed by the Trustee are in compliance with the Guidelines currently applicable under the Agreement, except as set forth below;
- (c) During the fiscal year ending June 30, _____, no member of the Grantor and no person claiming to represent or have influence with the Grantor has contacted the Trustee with respect to a financial transaction or solicitation which is not solely on behalf of the Grantor with the Trustee, except as set forth below; and
- (d) The Trustee is in compliance with all representations, warranties and covenants in the Agreement which apply to the Trustee, including but not limited to any indemnity or insurance coverage requirements, except as set forth below. Current insurance coverage applicable to the Grantor's assets are as follows: (Please attach insurance certificates as applicable.)

Errors and Omissions dedicated to the Agreement: Date of expiration: _____

Per occurrence limit: _____

Annual aggregate: _____

Directors and officers liability: _____

Date of expiration: _____

Brokers blanket bond or similar coverage: _____

Date of expiration: _____

Other: _____

Date of expiration: _____

Exceptions: (Attach a separate sheet if necessary.)

Dated: _____

By: _____

Name: _____

Title: _____

Kentucky Retirement System Insurance Trust Fund Guideline and Fee Agreement

This Guideline and Fee Agreement shall be effective January 1, 2017 and shall replace and supersede all previous guideline and fee related agreements. Reference is made to the Grantor Trust Agreement (the "Agreement") dated March 22, 2012 between Kentucky Retirement System Insurance Trust Fund (the "Grantor") and BlackRock Institutional Trust Company, N.A. (the "Trustee"). Capitalized terms used herein and not defined shall be given their meanings as so defined in the Agreement.

SECTION 1, GUIDELINES

To expand on Section Two of the Agreement, the Grantor has determined that, pursuant to the Trust's investment policies and objectives, the Trust's investment needs can best be met by investing in the following common trust fund(s):

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The above collective funds engage in securities lending and will pay to the Manager a separate securities lending fee as described in Section 2 below.

[REDACTED]

The [REDACTED] does not engage in securities lending.

The investment guidelines for the above referenced collective investment funds can be found in the Plan of BlackRock Institutional Trust Company, N.A. Investment Funds for Employee Benefit Trusts and the Schedule A thereto (collectively the "Plan Document"), a current copy of which may be accessed via the following website link:

www.blackrockdocuments.com

The Manager shall notify the Systems of material changes to the investment guidelines in which the Account is invested.

The above referenced common trust funds may invest through one or more short term investment funds used for a cash "sweep" vehicle to manage uninvested cash or reinvestment and management of cash collateral associated with securities loans (each, a "STIF Fund").

STIF Funds used for a cash "sweep" vehicle are invested primarily in short term debt securities, such as variable amount notes, commercial paper, U.S. government securities, repurchase agreements, certificates of deposit of banks and savings institutions, and other short term obligations.

STIF Funds used to manage cash collateral associated with securities loans ("Cash Equivalent Funds") invest such cash collateral in short term debt instruments. Additional information relating to the investment philosophy, risk management and guidelines criteria for the STIF Funds, as well as specific guidelines for each STIF Fund can be found in "Short-Term Investment Funds Overview and Guidelines", a current copy of which may be accessed via www.blackrock.com/institutional/documents.

The Grantor will notify the Trustee if it is determined for any reason that there is a change in the Trust's investment needs affecting the stated objectives.

SECTION 2, FEES

To expand on Section Twenty-Five of the Agreement, the fees to be applied to the Trust's investment in the above common trust fund(s) are as follows:

A. Investment management fees.

[REDACTED]

[REDACTED] 5.5 bps

[REDACTED]

Annual investment management fee rate

[REDACTED] 12 bps

[REDACTED] 10 bps

[REDACTED]

Annual investment management fee rate

[REDACTED] 12 bps

[REDACTED] 10 bps

[REDACTED]

Annual investment management fee rate

[REDACTED] 12 bps

[REDACTED] 10 bps

[REDACTED]

Annual investment management fee rate:

[REDACTED] 6 bps

[REDACTED] 4.5 bps

[REDACTED] 3 bps

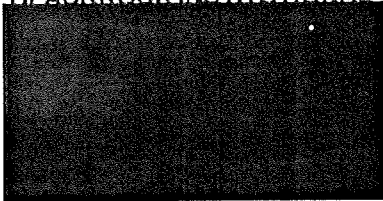
Investment management fees are calculated and billed quarterly in arrears (for quarters ending March 31st, June 30th, September 30th and December 31st) by (i) averaging the Plan's proportionate share of the Collective Fund's net asset value, as determined by the Manager, as of the last day of each month in the applicable quarter and (ii) applying the applicable annual investment management fee rate that shall be based on the actual number of days of such calendar quarter (e.g., 91/365). Where the Plan's assets are held for a partial period as a result of the Plan's initial contribution into or final withdrawal from the Collective Fund, the investment management fees will be prorated for such period, based on the actual number of days in the invoice period divided by the actual number of calendar days (e.g., actual days in invoice period/365). The month end market values will be prorated for any daily subscriptions or redemptions that exceed \$5 million during any billing period and for any quarter in which management commences or terminates on a day other than the beginning or end of the quarter. Payment of investment management fees is due to the Manager within thirty (30) days after the invoice date. Investment management fees will be calculated and billed in U.S. Dollars.

B. Securities lending fees.

- i. The lending Collective Fund and the Manager will each receive [REDACTED] of the net income earned from securities lending transactions. If a loan is collateralized with cash, net income is determined by calculating the return received by a lending Collective Fund's investment of cash collateral posted for securities loans in the applicable STIF Fund used to manage cash collateral, net of borrower rebate fees. If a loan is collateralized with assets other than cash, net income equals the loan fee negotiated with the borrower. The net income from securities lending divided between the lending Collective Fund and the Manager is also net of cash collateral management fees paid to the Manager as described below and the other expenses of the STIF Funds used to manage cash collateral. The Manager bears all operational costs directly related to securities lending transactions from its share of net income. The Trust's portion of lending revenue is retained by the lending Collective Fund and invested in accordance with the relevant Collective Fund Guidelines.
- ii. STIF Funds used to manage cash collateral associated with securities loans are subject to a management fee, payable to the Manager, accrued daily on the net assets of such fund at either (a) an annual rate of [REDACTED], or (b) an annual rate of [REDACTED], if such fund may engage in "synthetic" transactions. "Synthetic" transactions are further described in the STIF Guidelines.

- C. **Administrative expenses.** Each of the Collective Funds is subject to administrative expenses, including, but not limited to accounting, custody and audit fees. The administrative expenses are accrued daily against the Collective Fund, which results in an adjustment in the Collective Fund's unit value to reflect such expenses accrued.

BLACKROCK INSTITUTIONAL TRUST COMPANY, N.A.



AGREED AND ACCEPTED:
KENTUCKY RETIREMENT SYSTEMS

By: _____

Name: *Joe Gilbert*

Title: *Director of Equity*

Date: *3/28/17*