

State of Minnesota
Minnesota State Board of Investment



REQUEST FOR PROPOSAL
Master Custodian Services

Date Posted: April 18, 2022

- Responses must be received not later than 3:00 p.m., Central Time, May 31, 2022
- Late responses will not be considered

Minnesota's Commitment to Diversity and Inclusion

The State of Minnesota is committed to diversity and inclusion in its public procurement process. The goal is to ensure that those providing goods and services to the State are representative of our Minnesota communities and include businesses owned by minorities, women, veterans, and those with substantial physical disabilities. Creating broader opportunities for historically under-represented groups provides for additional options and greater competition in the marketplace, creates stronger relationships and engagement within our communities, and fosters economic development and equality.

To further this commitment, the Department of Administration operates a program for Minnesota-based small businesses owned by minorities, women, veterans, and those with substantial physical disabilities. For additional information on this program, or to determine eligibility, please call 651-296-2600 or go to [the Office of Equity in Procurement home page, at www.mn.gov/admin/oep](https://www.mn.gov/admin/oep).

SPECIAL NOTICE: This is a request for proposal. It does not obligate the State of Minnesota to award a contract or complete the proposed program, and the State reserves the right to cancel this solicitation if it is considered in its best interest.

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SECTION 1 – INSTRUCTIONS TO RESPONDERS

Steps for Completing Your Response

Follow the steps below to complete your response to this Solicitation:

Step 1: Read the solicitation documents and ask questions, if any

Step 2: Write your response

Step 3: Submit your response

Incomplete Submittals

A response must be submitted along with any required additional documents. Incomplete responses that materially deviate from the required format and content may be rejected.

STEP 1 – READ THE SOLICITATION DOCUMENT & ASK QUESTIONS, IF ANY

How to Ask Questions

The contact person for questions is:

Paul Anderson

Director, Financial Services and Operations

Minnesota State Board of Investment

acctg.sbi@state.mn.us

Questions should be emailed to the contact by May 2, 2022.

Other personnel are not authorized to answer questions regarding this Solicitation.

STEP 2 – WRITE YOUR RESPONSE

The Proposal Content section is in Section 4. Prepare a written response and supply all requested content. Responses should address the requested information and documents detailed in Section 4. DO NOT INCLUDE Non-Public/Trade Secret data (as defined by Minn. Stat. § 13.37).

Review, sign, and include the Responder Declarations with your response.

STEP 3 –SUBMIT YOUR RESPONSE

Where to Send Your Response

Please submit your response via PDF attached to an email to acctg.sbi@state.mn.us. Proposal submissions are due electronically (emailed) and must be received no later than 3:00 P.M. Central Time, May 31, 2022. **Late responses will not be considered.**

All submitters who meet the May 31, 2022 deadline are also required to provide two bound hard copies and two electronic copies on a flash/thumb drive (one formatted in Microsoft Word and one PDF) of the proposal within five business days of the May 31, 2022 deadline at the following address:

Minnesota State Board of Investment
60 Empire Drive, Suite 355
Saint Paul, MN 55103-3555

Hard copies of the proposals are to be sealed in mailing envelopes or packages with the responder's name and address written on the outside. Provide one copy of the cost detail in a separately sealed envelope clearly marked on the outside "Fee Proposal" along with the responder's name.

All costs associated with producing and submitting a response to this RFP will be borne by the responder. By submitting a response, responder is making a binding legal offer for the period of time set forth below in Section 4, Proposal Content on page 27.

Late responses will not be considered. Emailed responses received after 3:00 P.M. Central Time, May 31, 2022 will not be considered, even if errors or delays were caused by issues outside of responders' control.

SECTION 2 – SUMMARY OF SCOPE

I. PURPOSE

The purpose of this RFP is to obtain a Master Custodian capable of providing the SBI with all the banking needs necessary in fulfilling its fiduciary responsibility. The Master Custodian employed by the SBI through this RFP will be expected to offer the following services:

- Domestic Custody
- International Custody
- Accounting (Including Book of Record for all SBI assets.)
- Reporting
- Cash Management
- Securities Lending (Possibly)
- Performance Measurement and Reporting
- Compliance

Detailed requirements are set forth in Section 2, IV of this RFP.

II. INTRODUCTION

The Minnesota State Board of Investment (SBI) is charged with the investment of approximately \$135.7 billion for the State of Minnesota and related constituents as of December 31, 2021. Of this amount, \$94.1 billion represents retirement funds, which the SBI invests on behalf of various state and local governmental employees. The remainder of the assets are made up of defined contribution assets, tax advantaged savings plans, trust funds and State Cash Accounts.

The selected Master Custodian will report to the Board. In carrying out its responsibilities, the Master Custodian will work closely with individual Board members and their staffs, the SBI's Executive Director and other SBI staff and members of the SBI's Investment Advisory Council.

The primary responsibilities of the Master Custodian shall be to provide settlement and custody services, income collection, reporting, and performance measurement and reporting for all assets owned by the Funds. The Master Custodian will be the book of record for all assets under SBI management. In addition, non-basic services such as analytics and securities lending may be required.

Currently, the SBI retains State Street Bank and Trust, Boston, MA as the Master Custodian for the Funds. The current five-year contract will expire on April 30, 2023 and state law requires the SBI to complete an RFP process before executing a new contract.

The Master Custodian Review Committee will review the responses received from the RFP. Recommendations of the Master Custodian Review Committee will be presented to the SBI for approval.

The SBI assumes that the process for selecting a Master Custodian will proceed expeditiously and will be completed in March 2023. The effective start of the new contract is expected to be May 1, 2023. The term of the new contract is expected to be five (5) years.

III. BACKGROUND REGARDING THE SBI

A. Legal Authorization

The SBI was created pursuant to Article XI, Section 8, of the Minnesota Constitution for the purpose of "administering and directing the investment of all state funds." Statutory provisions relating to fiduciary responsibility, portfolio composition, and the types of securities in which the SBI may legally invest are set forth in Minnesota Statutes Chapter 11A and 356A (incorporated by reference, a true and correct copy of which can be found at <https://www.revisor.mn.gov/pubs/>).

B. Composition

The Minnesota Constitution specifies the membership of the State Board of Investment to be composed of four elected officials: Governor, State Auditor, Secretary of State, and State Attorney General.

C. Funds Invested by the SBI

The funds invested by the SBI, as of December 31, 2021, are listed below:

<u>Funds</u>	<u>External or Internal</u>	<u>Market Value (Billions)</u>
Combined Retirement Funds	External	\$94.1
Fire Plans & Other Public Ret.	External	1.1
Participant Directed Investments	External	14.5
Non Retirement Program	External/Internal	5.5
State Cash Accounts	Internal	<u>20.5</u>
Total		\$135.7

A brief description of each fund is included as **Exhibit A** on **page 38**.

D. External and Internal Asset Management

1. Externally Managed Assets

The SBI invests the Combined Retirement Funds in asset class pools of domestic and international equities, fixed income, private market funds that make an equity or debt investment with a private business. These pools are:

- Active Domestic Equity Pool
- Passive Domestic Equity Pools
- International Equity Pool
- Global Equity Pool
- Core/Core Plus Bond Pool
- Return Seeking Fixed Income Pool
- Treasury Protection Pool
- Ladder Bond Pool
- Cash Pool
- Alternative Investment Pools

The number of funds managed by external investment management companies retained by the Board as of December 31, 2021 are listed below:

Numbers of

Accounts

Asset Class

Combined Funds:

18	Domestic Equity (15 active and 3 passive)
18	International Equity (15 active, 7 developed, 6 emerging markets, and 2 opportunistic; 2 passive, and 1 currency overlay)
3	Global Equity
20	Fixed Income (5 core/core plus, 9 return seeking, 3 treasury protection, 2 laddered bond and 1 cash)
286	Private Market Funds (33 Real Estate, 179 Private Equity, 33 Real Assets, and 41 Private Credit)
2	Private Markets Un-invested S&P mandate (1 cash overlay, 1 physical securities)

Non Retirement Funds:

1	Domestic equity
3	Fixed income
1	Cash

Participant Directed Investment Program:

2	Low Risk Options (1 Stable Value Fund, and 1 Money Market)
11	Mutual Fund/CIT Options (record keeper, Empower)
1	Brokerage Window Option (record keeper, Empower)
2	State Sponsored Savings Plans: 529 Plan and 529A Plan (third party program managers)

The SBI uses a master custodian, currently State Street Bank, to provide a variety of administrative and management functions for these assets.

2. Internally Managed Assets

The state's cash account, excess debt reserve accounts and several non-retirement laddered bond accounts are managed internally. The State's cash account, the Invested Treasurer's Cash (ITC) account, is the largest pool of assets (~\$20 billion) and is internally managed as a single pooled portfolio. The assets of the ITC cash account and the excess debt reserve accounts are custodied at Principal Financial Group, Des Moines, IA. The OPEB laddered bond portfolio is custodied at State Street. One additional non-retirement laddered bond portfolio is scheduled to be funded in 2022; those assets will likely be custodied at State Street.

E. Staffing and Support Services

Staff

The SBI has thirty-three (33) staff members supervised by an Executive Director. The staff are responsible for the implementation of Board policies on an on-going basis. The Executive Director reports investment performance and makes policy recommendations to the SBI at quarterly and special meetings. As part of their on-going duties, the SBI staff maintain close contact with the Board members and their staffs, the State Legislature, the statewide and local retirement systems whose assets are managed by the SBI, and other organizations with interest in the operations and results of the SBI.

Investment Advisory Committee (IAC)

The SBI also maintains a 17 member Investment Advisory Council (IAC) whose duties are set forth in Minnesota Statutes 11A.08. The IAC is composed of the Commissioner of Management and Budget, the Executive Directors of the three statewide retirement systems, one governor designated retiree representative, two governor designated active employee representatives, and ten persons knowledgeable in general investment matters appointed by the Board.

The IAC's duties are to advise the Board and staff on general investment policy matters and perform other advisory tasks as the SBI requests. The IAC meets quarterly prior to the SBI's quarterly meeting.

Administrative Committee

The SBI has established an Administrative Committee to oversee the Executive Director's annual work plan and administrative budget. The Committee is comprised of each Board member (or his/her designee) as well as the chair and vice chair of the IAC, and the Executive Directors of the three statewide retirement systems.

Proxy Committee

The Proxy Committee establishes guidelines for voting shares held by the SBI.

Ad Hoc Committee

The RFP Review Committee is composed of Board designees, members of SBI's Investment Advisory Council and SBI staff

A chart illustrating the SBI's functional organizational structure is included in **Exhibit B** on **page 42**.

F. Relationship with Outside Organizations

The SBI retains Principal Financial Group, Des Moines, Iowa to act as a clearing agent and custodian for State cash accounts that are managed internally at the SBI. SBI utilizes Broadridge Financial Solutions, located in Lake Success, NY for their trading/ticketing platform and for internal control verification of assets. Interaction between the vendor and these organizations will be required during normal processing. The contracts are currently being rebid.

IV. Duties and Responsibilities of Master Custodian

The SBI's Master Custodian must have the following qualifications and perform the following tasks, or provide equivalent services.

A. MINIMUM QUALIFICATIONS

Please provide a narrative which confirms Responder meets the following minimum qualifications.

1. The responder must currently be providing custodial services for at least five (5) U. S. based institutional clients with U. S. marketable security trust assets having an aggregate market value in excess of \$25 billion dollars.
2. The responder must currently be providing international custodial services for at least five (5) U. S. based institutional clients with international marketable security trust assets having an aggregate market value in excess of \$5 billion dollars.
3. The Senior Account Manager proposed for this account must have a minimum of seven (7) years' experience administering domestic and international custodial accounts.
4. The responder must be a U.S. domiciled trust company and a member of the Federal Reserve, or a U.S. subsidiary of a foreign bank subject to the jurisdiction of U. S. courts.
5. The responder must have a long term debt rating of A- or higher from at least two nationally recognized rating agencies.

B. CUSTODY

1. Describe your commitment to providing sub-custodian operations in all current and future countries in the Morgan Stanley Capital International All Country World ex United States index (MSCI ACWI index), the JPMorgan EMBI Global Diversified Index (JPM EMBI) and the JPMorgan GBI-EM Global Diversified Index (JPM GBI-EM).
2. Describe how you provide custodian services for Frontier International markets, both debt and equity.
3. Identify and describe your relationships with foreign sub-custodians.
4. Describe your process for foreign settlement and safekeeping.
5. Describe your procedures for foreign currency translation and timelines. As part of your response, please address how you ensure best execution for clients.
6. Describe your ability for controlling tax reclaim collection.
7. Describe your ability to process and monitor corporate actions.
8. Describe your ability to process and monitor class actions.

9. Describe your ability to process accurate and timely multi-currency accounting.
10. Describe your process for managing un-invested cash of international portfolios.
11. Provide a list of tax services provided for domestic and international custody. Also note tax services that you are not able to provide.
12. Describe your procedure for providing contractual settlement date for international investments.
13. Describe your record retention schedule for custodial duties.
14. Describe your process for managing and validating cash movements related to alternative investments (capital calls, distributions, etc).
15. Describe your capabilities with respect to derivatives, including both equity and debt futures, options on futures, FX forwards, and both cleared and uncleared swaps. Describe any processes or services you provide related to margining.

C. ACCOUNTING

The responder must have a single accounting system that provides the SBI access to both U. S. and international securities accounts within a uniform framework of accounting treatment, reporting and performance measurement.

1. The responder must provide proof that it is a member of all major book entry or electronic securities depositories, including the DTC/ID system and the Federal Reserve System, through which the responder has the ability to clear transactions and cash.
2. The responder must describe its access to secure facilities for the safekeeping and physical delivery of all securities not eligible for the above named depositories.
3. All domestic and international cash and securities transactions must be accounted for on a trade date basis.
4. All income must be reported on a full accrual basis.
5. The responder must describe its ability to amortize debt security instruments using the scientific method (Constant Effective Yield) with its most conservative basis.
6. The responder must describe its ability to reconcile monthly with managers accounts, including fund to fund accounts.
7. The responder must be the book of record of all assets and use trade date accounting.
8. The responder must book accounting only (Shadow Accounting) assets not custodied at responder's bank. Responder should describe its ability to receive and replicate information for assets custodied at a different bank.

9. The responder must describe the following: its ability to provide all GASB reports for all assets and its ability to modify reports according to SBI requests on a 6/30 FYE and 12/31 CYE basis.
10. Describe your ability to value on a daily basis all assets under the control of the Master Custodian, whether they are part of the pooled funds or a separate account.
11. Responder must describe its ability to commit to providing on-going education to the SBI staff as it relates to any changes in the bank's systems and reporting procedures, best practices, and to changes in reporting requirements required by organizations such as FASB or GASB. Describe your ability to offer CPE credit opportunities.
12. Responder must provide an annual report on operational controls in place and results from a test of operating effectiveness (SSAE 16 – Statement of Controls or SOC1 report) as performed and prepared by an independent auditor.
13. The responder must describe its ability to comply with the Institutional Limited Partners Association guidelines regarding tracking and accounting for Private Equity fees and expenses. See **Exhibit C (ILPA Template)** on **page 43**.
14. Describe your controls around establishing repetitive wires.
15. Describe your process on notifying the SBI of any accounting/process changes to be implemented.
16. Describe your process and timing of notifying the SBI of any accounting issues, errors or potential problems.
17. Describe your process around routine edits and variance analyses that are performed on accounting records.
18. Describe your process and systems around derivatives accounting, including both equity and debt futures, options on futures, FX forwards, and both cleared and uncleared swaps.

D. PLAN ACCOUNTING

1. In total, the SBI has over 400 plans that invest money with the SBI; our need is for an accounting system that provides participant accounting for each of these plans. Descriptions of the different plans are listed on Exhibit A (Summary of Funds Managed by MN SBI).
2. Describe how your system conforms to the current and future plan accounting requirements.
3. Demonstrate your ability to calculate individual unit prices for each pool on a daily basis and make them available each evening for pricing trades. Describe your controls to ensure accuracy of pricing.

4. The responder must explain its internal controls with regard to cash movement instructions.
5. Describe your ability to allocate pool earnings as required by the plan participants.
6. All contributions and withdrawals must be transacted prior to 2:00 P.M. EST. The SBI requires that it not be penalized due to a late deliveries caused by late wire transfers. The SBI will ensure that the funds will be available to the bank as of the relevant date and time. Please note if this will be an issue.
7. The responder must create custom files and fields and provide reports or files to the responder's internal control provider consultant as well as other third parties as directed by SBI. The responder must also be able to accept custom data downloads and uploads. Please describe your ability to meet this requirement.
8. The responder must be able to support custom processing requirements as directed by the SBI, such as cost adjustments within the plans, and income reinvestment as directed applied to certain plans but not others. Please describe your ability to meet this requirement.
9. The responder must create, maintain and support a custom website with "white label capabilities" such that it performs as an SBI site. The website will be for plan use in directing contributions and withdrawals and for dissemination of plan statements.
10. The responder must maintain secure access and track User ID's, passwords, addresses, emails, and phone numbers associated with the custom website. Please describe your ability to track such items as well as how you will handle custom access levels, including the average turnaround timeframe of user account updates.
11. The responder must process directed unit transactions as instructed either through the custom plan web site, or through fax or other direction as instructed by the SBI. Please describe your ability to meet this requirement.
12. The responder must produce and make available electronically plans' Statements of Accounts, as well as make available in hard copy and/or by mail on an as-needed basis. Please describe your ability to meet this requirement.
13. Describe your ability to create and maintain a chart of accounts (Transaction Definitions) on how and where each transaction is posted to statements.

14. The responder must produce and make available electronically month-end plan account statements to all plans within five (5) business days after the close of the month;

The Statements must include the following information at a minimum:

- a. Name of the account;
 - b. Account number;
 - c. Address;
 - d. Fund number;
 - e. Individual transactions;
 - f. Activity date;
 - g. Transaction identification;
 - h. Type and the associated transaction dollar amount;
 - i. Beginning, Daily, and Ending Balances; and
 - j. Cost
15. Some plans have CY ends and some have FY ends. Please describe your system's ability to account for different year-ends.
 16. Describe your ability to produce a Daily Flat file for treasury cash transactions and a daily email by 5 AM CST for total amount of wire to/from treasury.
 17. Demonstrate your ability to send monthly detail transaction files and monthly balance files for each group to be verified before statements are posted to the website.
 18. Describe your ability to allocate the different GASB schedules from custodian records on a 6/30 FYE and 12/31 CYE as needed. Also describe your ability to run reports, statements, or do allocations at a 6/30 fiscal year end or 12/31 calendar year end basis as needed.
 19. Demonstrate your ability to provide Monthly Supplemental Fund Balances.
 20. Describe your ability to import a trade file for days when there are a large number of trades.
 21. Describe your system's ability to allow SBI staff to enter trades other than contributions, withdrawals, and transfers.
 22. Describe your ability to produce and email a daily file with current market values for each plan by fund and a daily file of that day's accrual and the month-to-date accrual amount.
 23. Describe your ability to generate an end of day trade file to be emailed to SBI and other third parties as needed for specific funds after the trade time cutoff.
 24. Describe your ability to designate trades that involve SBI's state treasury bank vs. plans' individual banks.

25. Describe your ability to process the Distribution of Securities Lending income.
26. Demonstrate the systems capabilities to set trade limits by dollar amount and a percentage of withdrawal limit of a fund (i.e. max contribution or withdrawal set at \$1 million dollars and max contribution or withdrawal percentage set at 85%).
27. Describe controls for preventing plans from entering historical settle dates on system and controls to have the settlement date automatically set to next business day based on time of transaction.
28. Describe your system's ability to allow Future settlement dates.

E. REPORTING

1. Demonstrate your ability to provide all audited month-end reports to the SBI on or before 12:00 Noon Central Time on the 5th business day of the following month. It is highly desirable that any reports which are available earlier be delivered as soon as they are generated.
2. Describe how your system reconciles the market value and number of shares/par value prior to delivery of daily price.
3. Describe your ability to have a daily feed of all transactions, including corrections or modifications, and its ability to transmit to the SBI's Investment Accounting vendor. The SBI, Investment Accounting vendor, and the responder shall mutually agree upon the format.
4. Demonstrate your system's ability to produce at a minimum, the following audited month-end reports in electronic format. All reports must be available by individual manager and composites of managers. All reports must present transactions in both local and base currency.
 - a. **Cash statement:** a cash reconciliation report tracking all transactions affecting cash between the beginning and ending cash balances.
 - b. **Asset listings:** asset listings must be available by asset type sorted in alphabetical order with par, cost, market value, and book value of each security. A second report listing all assets by industry group is also required.
 - c. **Transaction listing:** must be available in chronological order within each transaction type. This report must be produced with all data items applicable to the transaction shown. This includes all transactions (examples would include purchases, sales, adjustments, and pay down/ups).
 - d. **Accrued income:** must include all income earned but not yet paid. This report must delineate those items that have been earned but not yet payable, impact of foreign tax liability, as well as items that should have been paid but have not been received. Dividend income must be accrued on ex-date. Interest accruals must be based on standard industry calculations for each security type.

- e. **Pending trades:** must include all trades initiated by managers but not yet settled as of month-end.
 - f. **Broker business list:** must include total dollars traded, number of shares traded and commissions paid each month broken down by individual broker.
 - g. **Fail report:** a detailed audit trail must be produced tracking all trades that have failed. This report should include sufficient detail to allow a thorough review of the trade.
 - h. **Annual audit report:** provide the SBI with a copy of the management letter submitted by the responder's external auditor attesting to the nature of the responder's internal control procedures.
 - i. **Working Trial Balances**
 - j. **Realized Gain/ Loss Report**
 - k. **Currency Forward Activity Report**
 - l. **Earnings Receivable Report**
 - m. **Tax Reclaim Report**
 - n. **Earned Income Report**
 - o. **Portfolio Net Asset Value Positions Report:** must include a full asset listing with security level detail plus a summary of net payables/receivables such that the report foots to the portfolio's NAV as of the reporting date
5. Describe your system's ability to produce customized reports for the SBI on a regular and adhoc basis. All parties concerned shall mutually agree upon the form, content, timing and delivery method of these reports. Examples of current reports are:
- Weekly Asset Allocation Report.
 - Stable Value Investment Contract Collateral Report.
 - Monthly and On Demand Plan Rebalancing Report.
 - Customized Board Performance Report specified by the SBI.
 - Custom schedule of partnership commitments, internal rates of return by partnership on a monthly basis.
 - Provide private-equity index information.
 - Customized fee reporting at the partnership level noting both expenses in-and out of partnership.

6. Describe your system's availability to provide on-line access to recent and pending transactions, current asset listings, and cash flow projections. These reports must be available for individual and combined portfolios and must include, at a minimum, the following capability:
 - Ability to access real time portfolio information including market indices.
 - Automated report writer interface with Windows based spreadsheets and databases.
 - Complete selection of month end multi-currency accounting reports.
 - Multi-currency performance and analytic reports including access to TUCS Universe information.
 - Ability to download data elements with user selected formats and sorting.
 - Customization of reports to client specifications at no additional charge.
 - Ability to access real time Alternative Investment information, including, pending fees, distributions, contributions, etc.
7. Describe how you will monitor, and file responses on the SBI's behalf, to class action lawsuits and provide information to investment managers for bankruptcy filings.
8. Describe your ability to provide the SBI all information necessary to vote proxies and to initiate shareholder resolutions.
9. Describe your ability to produce 6/30 FYE and 12/31 CYE GASB schedules. Examples include but are not limited to:
 - GASB 28
 - GASB 31
 - GASB 40
 - GASB 53
 - GASB 62
 - GASB 67
 - GASB 72
10. Describe your approach to implementing new GASB pronouncements.
11. Describe your ability to provide an Asset listing as of 6/30 and 12/31 of each year in a format agreed upon by SBI and the responder.
12. Describe your ability to produce a stale pricing file on a quarterly basis.
13. Describe your ability to provide secure online facility for file sharing.

F. CASH INVESTMENT (Retirement and Non-Retirement Short Term Investment Fund)

1. Describe your ability to provide a daily zero-balance sweep of cash from all domestic and international accounts into one or more separately managed Short Term Investment Funds (STIF). The SBI is currently using two (2) STIF accounts. One for retirement assets and one for non-retirement assets.
2. Describe your ability to calculate daily earnings on STIF and provide a daily accrual.
3. Securities in the STIF utilized by the SBI must meet the restrictions imposed by Minnesota Statutes 11A and be within guidelines mutually agreed upon; note any issues and concerns regarding this request.
4. Describe your ability to provide cash balances to the SBI's investment managers each morning by 10 A.M. Eastern Time.
5. Describe your ability to provide cash balance projections for a minimum of five days forward to the SBI's investment managers daily. These cash projections must reflect the impact of all unsettled trades, expected maturities and income payable.
6. Income earned, redemptions, and maturities must be credited to the proper accounts on payable date in Fed funds. (The only exceptions will be pass-through securities and certain private placements.) The responder must identify any security types not eligible.
7. Cash flow from purchases and sales must be credited on contractual settlement date. Note any exceptions to this requirement.
8. Have any of your Short Term Investment Fund vehicles that would be available to the SBI experienced a loss; has the fund been priced below \$1.00?
9. The SBI requires un-invested manager cash to be swept into a STIF fund each day. Describe your timeline and procedures for reconciling the swept manager cash to the manager's account.

G. CASH INVESTMENT (State Funds)

1. Describe your abilities and experience managing investments for a State's operating cash pool.
2. See attached guidelines in **Exhibit D starting on page 44** and describe your ability to manage a separate account for State Funds to the guidelines.

H. PERSONNEL

The SBI requests that a fully integrated Global and Domestic custody service team be assigned to its account. Preference will be given to service teams that are dedicated fully to the SBI account with no other client responsibilities. The SBI would prefer that the same

team service both domestic and international assets. The SBI's accounting staff needs direct access to the portfolio level accountants as they process information.

1. The responder must provide a list of employees that are to be assigned to the SBI's account. The resumes of each of these employees must be included.
2. The responder must provide a description of the current account load of the administrators to be assigned to the SBI's account. This description shall include a list of the clients the administrators currently handle, the size and the complexity of these accounts.
3. The responder shall describe its procedures for handling turnover of staff assigned to the SBI's account.
4. The responder shall describe its programs for continuing education of its master custodial staff regarding state-of-the-art changes in the master custody business.
5. The responder shall demonstrate to the SBI sufficient personnel capacity to fully service the needs of an account the size and complexity of the SBI.
6. How do you oversee quality control and measure client satisfaction?
7. Describe how your client services team responds to client inquiries, including first point of contact, routing of inquiry, tracking inquiries and resolution measurement.
8. Discuss how the following areas interact with one another in the servicing of clients:
 - Investment Managers
 - Accounting
 - Audit
 - Performance
 - Reporting
 - Compliance
 - Plan Accounting
9. Describe your backup process and procedure for the absence of the main client relationship manager.

I. COMPUTER SYSTEM

The SBI requires a strong commitment to the custody business from the vendor selected for this contract. One measure of this commitment by a bank to custodial services is its use of a dedicated mainframe system to run accounting and custodial processing.

J. SECURITIES LENDING

1. Describe your securities lending program and its active participation in all major domestic and international securities lending markets.

2. How many clients currently participate in the responder's securities lending program? What is the dollar size of your securities lending pool?
3. The responder must provide its proposal for supplying a fully indemnified security-lending program. This includes not only borrower indemnification, but also indemnification on the reinvesting of collateral. At closing, the responder must provide an opinion as to its legal ability to provide indemnification.
4. The lending program must be collateralized at a minimum of 100% of market value plus accrued interest. What forms of collateral do you accept and what is maximum collateral of each type of collateral? The SBI may only use those securities authorized for purchase by the SBI under MN Statutes, Chapter 11A as collateral. Explain how you would manage this.
5. The loan portfolio must be marked to market daily. Describe your procedures for marking to market.
6. What is the maximum loan made to a single borrower and the maximum total exposure to a single borrower for an account?
7. The SBI must be able to place restrictions on the amount of its assets on loan to a particular broker and/or the amount of a particular security on loan to all brokers. Describe how you will manage this.
8. The responder shall supply the SBI with its criteria for determining eligible brokers and its system to determine ongoing eligibility. Provide a current list of the responder's approved lending brokers.
9. The SBI requires that their account be a separate account. Please describe your ability to manage a separate account and provide your five largest separate security lending accounts?
10. The responder shall supply the SBI with detailed information on the proposed income splits on security lending. Do you charge any fees or expenses for collateral reinvestment? If so, specify the fees and if the fees are deducted before or after the revenue split.
11. Describe how the SBI will be allowed to compensate the responder for custodial services by utilizing income from securities lending and how the SBI will direct distribution of the income from securities lending.
12. The responder shall describe in detail its system for allocating loans among the responder's accounts.
13. Describe any compensation arrangements with borrowers beyond the normal form of negotiated fees and rebates.

14. The responder shall provide its guidelines for investing cash collateral. The SBI reserves the right to negotiate changes to guidelines in force for its assets. Identify if this will be an issue.
15. What lending reports are made available to clients? Provide samples of these reports. Are these reports available online?
16. The responder shall describe its ability to work with third party lenders in the event the SBI declines to have a security-lending program managed by the selected custodial bank either in its entirety or just a portion of the SBI assets.
17. Describe your recall procedures and how substitution is utilized. Describe how your organization mitigates trade fails and other issues associated with the recall of less liquid securities like small cap stocks, for example.
18. How does your organization preserve the right of the SBI to recall any security on loan at any time and ensure that the borrower shall have no recourse to the SBI?
19. Describe how you assess the success of your Securities Lending program.
20. What percentage of your custody income is from security lending?

K. PERFORMANCE MEASUREMENT

1. Describe your performance calculation process and methodology. Describe the integration of your performance system and your accounting system.
2. Describe your ability to provide daily time-weighted rates of return for SBI portfolios including various components for a portfolio and aggregates of portfolios. These portfolios and subsets or aggregates will include, but are not limited to the following:
 - Plans (both retirement plans and non-retirement funds and accounts)
 - Asset classes within individual plans
 - Pools (See the discussion in III D.)
 - Individual investment managers and aggregates

Describe your ability to calculate daily performance at the plan, pool, and manager level.

The responder must be able to report returns in formats and frequency prescribed by the SBI. Describe your ability to retain/archive client returns and reports.

Describe your ability to calculate security-level performance and present performance as a roll-up of a performance times security weights at each level of portfolio/plan ownership.

Period rates of return include but are not limited to:

- Daily
- Weekly
- Monthly
- Quarterly
- Annually
- 2, 3, 4, 5, 10, 20, 25, and 30 years annualized
- Since Inception (will differ for each plan)

The responder must be able to provide the SBI the above-mentioned rates of return on total invested, gross, net of manager fees and a net of all fees basis.

Describe your capabilities to provide the SBI with the calculation and the underlying data that went into the calculations for monthly returns.

3. The responder must participate in the Trust Universe Comparison Service (TUCS). Describe your ability to provide the SBI with comparisons to TUCS within twenty business days of the end of the third, sixth, ninth and twelfth months of the year. If the responder participates in or maintains a universe of comparable plans and investment managers against which the SBI's performance results can be evaluated, please identify and describe. TUCS must be available for Pool and Plan level reporting.

Provide detail on any additional universes that you may have available for clients and describe the indexes that are available for those universes.

4. Describe in detail your ability to provide a broad array of domestic and international market indices, and inflation index data, and performance frequency against which the SBI performance results can be evaluated. At a minimum, the responder must be able to provide the following indices for comparisons:

- Russell 3000
- Russell 200
- Russell 800
- Russell 1000
- Russell 1000 Growth
- Russell 1000 Value
- Russell 2000
- Russell 2000 Growth
- Russell 2000 Value
- Russell 2500
- MSCI ACWI Gross and Net
- MSCI ACWI IMI Gross and Net
- MSCI Emerging Markets Net

- MSCI World ex-USA Net
- MSCI World ex-USA IMI Net
- MSCI ACWI ex-USA Net
- MSCI ACWI IMI ex-US Net
- MSCI China A
- Bloomberg U.S. Aggregate Bond Index
- Bloomberg Intermediate Government
- Bloomberg Treasury 5+ Year
- Bloomberg Treasury 5-10 Year
- Bloomberg Treasury 10+ Year
- Bloomberg U.S. Corporate Bond
- Bloomberg Mortgage Backed Index
- ICE BofA Cash Pay HY Constrained
- ICE BofA US 3-Month Treasury
- ICE BofA BB-B US Cash Pay High Yield Constrained
- JPM EMBI Global Diversified
- JPM GBI-EM Index
- Credit Suisse Leveraged Loan Index
- Consumer Price Index (CPI-U)
- S & P 500 Index
- S&P U.S. Dividend Growth
- iMoneyNet Money Fund Averages
- Nasdaq Dividend Achievers Select
- CRSP US Mid Cap
- CRSP US Total Market Index
- FTSE Global All Cap ex US Index

Describe your ability to manipulate various indices to develop customized weighted indices for comparisons to designated SBI plans.

Describe and list what benchmarks you are licensed to provide to clients for client distribution.

5. Describe your ability to accept, store and utilize historical performance return data to provide the SBI with its historical performance returns on an on-going basis. The SBI will provide historical returns to the responder for time periods preceding the commencement of a contract with the responder. **In the separate fee proposal,** identify any additional costs of loading the SBI's historical performance data. Clearly label the fee as ***Performance Measurement K5***.
6. Describe your capability of delivering data to calculate performance to at least five decimal places, in hard copy, and by electronic means, to any outside firm specified by the SBI. This data must be available for individual and composite portfolios on a monthly basis. Identify the time frame required to deliver data to an outside firm upon request from the SBI.
7. Describe your ability to provide holdings data to third party vendor by electronic means. Describe the frequencies supported (e.g. daily, weekly, monthly) and ability to

support same day correction and/or typical transmission timeframes for corrected data files upon discovery of errors/omissions.

8. Describe any analytical tools or services your firm offers, to help a client measure, monitor and manage risk. Do you offer a holdings based risk product? If so, describe the product and explain how it could be useful to the SBI in understanding and measuring total fund risk. **In the separate fee proposal**, identify the pricing of the risk product. Clearly label the fee as *Performance Measurement K8*.
9. Describe your performance system's ability for client facing ad-hoc report generation, data access, and capabilities to schedule custom data queries.
10. Describe your capability to create and maintain automated performance reports in the format specified by the SBI. The responder must have the ability to have these reports in production mode, including historical data, for reporting purposes for performance data reflecting the first quarter of performance after the start date of the contract between the responder and the SBI.
11. Describe your ability to provide the SBI with the following special information for manager accounts and plan accounts:
 - Internal rates of return for alternative assets (real estate, real assets, private credit, private equity, etc.)
 - International/Global attribution
 - Domestic attribution
 - Fixed Income Attribution
 - Plan level attribution vs. Policy
 - Fund level attribution
 - Asset allocation reports
 - Rebalancing reports and realignment of units
12. Is your performance system integrated with your accounting system? Describe how your performance system coordinates and reconciles with your accounting system. Describe reconciliation timeframes after month-ends and quarter-ends.
13. How do you ensure performance data is accurate? How do you communicate with client if performance data is inaccurate? Describe the steps and amount of time taken between the discovery of a performance data issue and communication with client.
14. Provide samples of performance reports that are from your performance system.
15. Describe your client servicing model, including any client and resource coverage teams, help desk lines, and dedicated staff assigned to the SBI account. Would the SBI have a dedicated performance team member assigned to the account? If so, provide name and years of experience working with clients in performance measurement and analytics.

16. Describe your ability to produce performance at the pool and plan level and provide custom performance reports both in hard copy and electronically to plan owners.
17. Describe your ability to establish customized account tree structures to facilitate performance aggregation and custom composites.
18. Describe your ability to support unitization for multi-level fund-of-fund account structures.
19. Describe your ability to receive, store and generate reports on performance data for assets not held by the custodian as directed by the SBI.

L. COMPLIANCE MONITORING AND REPORTING

1. Describe your ability to take individual SBI investment guidelines and directions and establish testing parameters to provide investment compliance reporting for each account. Attached are sample SBI guidelines to use in your analysis:
 - i. Domestic Equity Active Guidelines (Exhibit D-1)
 - ii. Domestic Equity Passive Guidelines (Exhibit D-2)
 - iii. International Equity Developed Passive Guidelines (Exhibit D-3)
 - iv. International Equity Developed Active Guidelines (Exhibit D-4)
 - v. International Equity Emerging Markets Active Guidelines (Exhibit D-5)
 - vi. Fixed Income Core Plus Guidelines (Exhibit D-6)
 - vii. Fixed Income Multi-Asset Credit Guidelines (Exhibit D-7)
 - viii. Fixed Income High Yield Bond Guidelines (Exhibit D-8)
 - ix. Fixed Income Emerging Markets Debt Guidelines (Exhibit D-9)
 - x. Fixed Income Opportunistic Guidelines (Exhibit D-10)
 - xi. Fixed Income Short Duration Ladder Guidelines (Exhibit D-11)
 - xii. Fixed Income STIF Guidelines (Exhibit D-12)
 - xiii. Uninvested Private Markets S&P 500 Cash Overlay Guidelines (Exhibit D-13)
 - xiv. Internally Managed ITC Cash Guidelines (Exhibit D-14)
 - xv. Internally Managed Excess Debt Reserve Guidelines (Exhibit D-15)
 - xvi. 1Q2022 MSBI Unauthorized Holdings List (Exhibit D-16)
 - xvii. 1Q2022 ITC Fossil Fuel Restricted List (Exhibit D-17)
2. Highlight any limitations or gaps in your current compliance environment that would limit your ability to fully cover the SBI's compliance testing needs as outlined in the investment guidelines provided. Provide your plan to address any gaps.
3. Describe how your investment compliance reporting service detects breaches outside established policies, tolerances, and parameters.
4. Describe your ability to provide compliance on shadow accounts.
5. Describe your ability to provide compliance on a look-through basis for fund-of-funds structures and separate accounts which own a combination of individual securities as well as units of a fund or fund-of-one for which portfolio/ underlying holdings are not

custodied at State Street. Describe any data services or data feeds required for such processes.

6. Describe your ability and resources to provide the following:
 - a. Ongoing assistance in creating new tests or modifying existing tests.
 - b. Track changes/updates to rules and record in the rule matrix, notation of the date of the change/update identifying user implementing the change/update.
 - c. Online user access to the current SBI compliance rule matrices, compliance reports, historical compliance results, and historical breach reports to Adobe PDF or Excel formats;
 - d. Tracking of restricted securities such as Iran, Sudan, Tobacco, etc.
7. What compliance software/system do you use? What is the reporting cadence? Is there a pricing difference between daily and monthly monitoring?
8. Describe your data environment and access to security-level indicative data and analytics needed to support compliance testing. Highlight any gaps and provide your plan to address.
9. Describe your ability to identify and correct inaccurate tests. Is the client solely responsible for monitoring all breaches and communicating to custodian all issues? If not, what process is in place to monitor and update tests? How proactive are you resolving breaches with the client?
10. How will the SBI's account be serviced? How would the composition of the team be structured for SBI's account?

M. COMMINGLED LOOK THROUGH

Describe your ability to incorporate commingled look-through reporting for any commingled assets for compliance testing.

N. RESEARCH

Describe your research capabilities that could assist the SBI with a range of projects including asset allocation, liquidity management and optimal re-balancing.

O. TRANSITION TO NEW CUSTODIAN

1. If applicable, the responder shall present a detailed plan for the transition from the SBI's current custodian to the responder's organization. The detailed plan must include the timing of each phase of the transition; the employees involved, and required actions of the SBI and its current custodian. The current contract expires on April 30, 2023.

2. Any costs to the SBI associated with a transition to a new custodian must be presented in detail in the **separate fee proposal**. In the Fee Proposal document, clearly identify costs as ***Transition to New Custodian***. These cost estimates must include, but are not limited to such items as programming costs related to customized reporting, expenses related to re-registration costs, stamp duties, taxes and transfer of physical securities. Responders are required to give a firm, guaranteed cost of transition including all expenses for items listed above and any additional items.
3. Describe the type and level of resources that would be required from the SBI during the transition.
4. Identify the resources provided during the transition, identify the transition team and detail how the interactions with the SBI would be conducted.
5. Identify the impact to investment managers during a custodian transition and document how you could minimize the impact to managers.
6. Document the process and timing of opening markets; identify course of action if a market is unable to be opened in time for asset transfer.
7. Document the process and timing of unwinding security lending from the former custodian and document the plan to begin security lending. Provide an estimate of the lost revenues for unwinding and starting a new security lending program.

SECTION 3 – PROPOSAL INSTRUCTIONS AND ADDITIONAL INFORMATION

1. Anticipated Contract Term.

The term of this contract is anticipated to be from May 1, 2023 to April 30, 2028.

2. Question and Answer Instructions.

Questions regarding information to be presented in response to the RFP or requests for clarification about this RFP may only be submitted via e-mail to Paul Anderson at: acctg.sbi@state.mn.us no later than May 2, 2022. For the subject line in the e-mail please use: "Master Custodial RFP 2022". SBI will consolidate all questions and its answers into a single Q&A document without divulging the source of the query. The Q&A document will be distributed via e-mail to all firms who requested the RFP.

The SBI's exclusive agents for purposes of responding to vendor inquiries on RFP requirements are:

Paul Anderson

Director, Financial Services and Operations
Minnesota State Board of Investment
60 Empire Drive, Suite 355
St. Paul, MN 55103
acctg.sbi@state.mn.us

Other persons are not authorized to discuss RFP requirements with vendors before the proposal submission deadline.

The SBI shall not be bound by and vendors may not rely on information regarding RFP requirements obtained from non-authorized persons.

Only personnel listed above are authorized to discuss this solicitation with responders. Contact regarding this solicitation with any personnel not listed above could result in disqualification. This provision is not intended to prevent responders from seeking guidance from state procurement assistance programs regarding general procurement questions.

If a responder discovers any significant ambiguity, error, conflict, discrepancy, omission, or other deficiency in the solicitation, please immediately notify the contact person detailed above in writing of such error and request modification or clarification of the document.

SECTION 4 – PROPOSAL CONTENT

PREPARATION OF PROPOSAL

The Master Custodian's response to this RFP shall be organized in the following manner. **Please observe the page limits shown for each section. For purposes of this RFP a “page” is one side of a single piece of 8.5” by 11” paper.** Please note that Master Custodians will be evaluated, in part, on their ability to communicate clearly and succinctly. **Brevity will be appreciated and considered in the evaluation of the RFP responses.**

Executive Summary

Page Limit: None

Part 1: Custody Services Provided

- A statement of the services the Master Custodian is prepared to provide the SBI in order to respond to the duties delineated in Section 2 of this RFP. Address each item in Section 2 in a chronological order. If necessary, provide a statement of any other tasks the Master Custodian believes must be performed to completely meet the SBI's needs.

- A statement of any expected tasks or contributions by the State of Minnesota (including the members of the Board, the Master Custodian Review Committee, the SBI staff, any other State agencies or the IAC) necessary to provide documents or other data needed by the Master Custodian to accomplish the work plan.
- Designation of a project manager and project team for the custodian relationship.
- A statement describing the Master Custodian's plan for performing and managing the contract with particular focus on the delivery of services.

Part 2: Organization and Personnel

Page Limit: No more than 10

- A description of the organization which includes the following information:
 - Date business commenced.
 - Ownership structure.
 - Affiliation with other firms (i.e. parent companies, brokerage firms, investment banking firms or other entities).
 - Description of the firm's financial position and sources of revenue. Include a copy of the firm's most recent audited financial statements.
 - Has your organization received notice of examination, a notice of investigation, a request for information, or a subpoena from the SEC, FINRA, CFTC, NFA, a United States Attorney or other regulatory, self-regulatory, governmental or regulatory or quasi-regulatory entity or organization? Please provide details.
 - Was the organization or any employee the focus of, or engaged in, any litigation or arbitration, enforcement action, examination, investigation or administrative proceeding, including settlement, in connection with its investment management activities? Describe any pending litigation.
 - Complete the following forms in **Attachment A – Account Charts starting on page 200** for the Fiscal Years Ending June 30.
 - Number of accounts by type – Chart A
 - Market value of accounts for domestic and international custody by type – Chart B
 - Size and number of accounts by type – Chart C
 - Total clients gained and lost by fiscal year for the past six years – Chart D
 - Number and title of professional personnel gained and lost in the same periods – Chart E
- Brief description of the firm's growth plan and capacity to undertake this custody relationship.

- A resume or biography of each professional staff person to be assigned to this relationship, outlining their qualifications, previous experience in similar tasks or engagements and the relative contribution (in person-hours) of each.
- Brief description of the firm's growth plan and capacity to undertake this custody relationship.
- A resume or biography of each professional staff person to be assigned to this relationship, outlining their qualifications, previous experience in similar tasks or engagements and the relative contribution (in person-hours) of each.

Part 3: Computer Capability

Page Limit: No more than 6

- A description of the databases, software and hardware that will be used to support the delivery of investment custody services.
- A description regarding how the databases and software will be accessed by SBI staff. Specify the hardware necessary to accomplish such access.
- A description of the Master Custodian's plan to keep its data processing systems, databases, software and hardware current. Please reference how your organization determines the need to upgrade existing systems and when to introduce new applications.
- A description of the Master Custodian's plan to provide online access via the internet for plan participants. Describe the process that a plan participant would use to access the internet to process transactions and run reports.
- The responder should complete, in an accessible format, the Section 508 and Web Content Accessibility Guidelines (WCAG) sections in a Voluntary Product Accessibility Template (VPAT®) for all software, hardware, and websites (as applicable) as proposed in response to the solicitation. Vendors can use the VPAT form from the [ITIC VPAT site](https://mn.gov/mnit/about-mnit/accessibility/it-procurement.jsp). (Under "Resources," select the "508" option, as it contains both 508 and WCAG forms.) For systems with multiple interfaces (such as an admin and user interface), complete a VPAT for each interface. These documents will be scored according to the solicitation evaluation.
- Responders are encouraged to reference the "[Vendor VPAT Guidance](#)" in the "Products" tab on the [Accessible IT Procurement page](https://mn.gov/mnit/about-mnit/accessibility/it-procurement.jsp) (<https://mn.gov/mnit/about-mnit/accessibility/it-procurement.jsp>) for information and instructions on completing the VPATs. Respondents should also review the related guidance documents on the same site for solicitation reviewers to understand expectations. The responder is strongly encouraged to provide remarks and explanation that both support compliance and detail any deficiencies, as even if you claim "supports" unless there are remarks and explanations, you may score low.

Part 4: Experience and References

Page Limit: No more than 7

- A presentation of the previous experience of the Master Custodian with similar tasks or engagements.
- A list of all pension fund clients under contract as of June 2021.
- A list of at least three references from current clients and three from previous clients. The references must be current public or private pension fund clients and should have accounts of similar size and complexity (including alternative investments) as those described in this RFP. The references shall include the name, title, organization, address and phone number of the responder's primary contact at the client organization.

Part 5: Fee Proposal (must be submitted separately in a sealed envelope)

Page Limit: No more than 8

- Proposed fees shall be stated in the manner outlined as follows:
 - The fee schedule shall be presented based on a five (5) year contract period and presented in the following formats:
- A single fee to be charged for supplying all services and information provided in Section IV for the configuration of funds presented in **Attachment A on page 200.**
- A single fee to be charged for supplying all services and information provided in Section IV **Less Security Lending (IV I)** for the configuration of funds presented in **Attachment A on page 200.**
- An unbundled fee broken down by the specific services and information provided in Section IV and the configuration of funds presented in **Attachment A on page 200.**
 - (1) The fee schedule must include the cost of providing computer equipment and software support for all computer technology used by the SBI at SBI offices to access information covered by this contract.
 - (2) The fee schedule must include the cost of providing the "Proxy Edge" proxy voting system including the interface with the responder's holding database.

NOTE: The Fee Proposal must be submitted separately in a sealed envelope. Part 6: Solicitation Attachments

Part 6: Attachments

Page Limit: None Specified

- Complete the Exceptions to State's Terms and Conditions as **Attachment B** on **page 203**
- Complete and sign the Responder Declarations Form that appears as **Attachment C** on **page 205**.
- Complete the Veteran-Owned Preference form, if applicable, that appears as **Attachment D** on **page 206**
- Complete the Workforce Certification Form that appears as **Attachment E** on **page 207**
- Complete the Equal Pay Certification Form that appears as **Attachment F** on **page 208**

SUBMISSION OF RESPONSE

The vendor shall submit two (2) copies of its RFP response to the SBI at the following address:

Paul Anderson
Director, Financial Services and Operations
Minnesota State Board of Investment
60 Empire Drive, Suite 355
St. Paul, MN 55103-3555

- **All costs incurred in responding to this RFP will be borne by the vendor.**
- **No proposal received after 3:00 P.M. Central Time on May 31, 2022 will be considered.**
- **Two (2) copies of the Fee Proposal must be submitted in a separate, sealed envelope clearly marked "Fee Proposal".**
- **One (1) copy of the response must be unbound and signed in ink by an authorized officer of the responding firm.**
- **Two copies on Flash Drive. One readable by Microsoft Word and one PDF.**
- **Responses must be sealed in mailing envelopes or packages with the vendor's name and address clearly written on the outside. Please identify the unbound copy on the outside of its envelope as well.**

PROJECT TIMETABLE AND RELATED REQUIREMENTS

RFP Issued.

April 18, 2022

Proposals due.

May 31, 2022

**NO PROPOSALS RECEIVED AFTER 3:00 P.M. CENTRAL TIME
ON May 31, 2022 WILL BE CONSIDERED.**

Proposals evaluated by the Review Committee and Interview with Servicing Team (if needed).

June - July 2022

The Review Committee may require that a vendor submitting a proposal make an oral presentation to the Committee during the evaluation process. In such event, the Committee shall notify the vendor of the time and location.

Vendor selected by the SBI.

August 2022

Contract completed and executed.

August 2022 – March 2023

DO NOT INCLUDE Non-Public/Trade Secret data (as defined by Minn. Stat. § 13.37).

SECTION 5 EVALUATION PROCEDURE AND CRITERIA

PROPOSAL SELECTION

A. Nature of Procurement.

This procurement is undertaken by the SBI pursuant to the provisions of Minnesota Statutes, section 16C.08. As such, it is not governed by strict competitive bidding requirements frequently associated with the purchase of supplies and materials by the State and selection will not be based exclusively on the concept of lowest responsible bidder. The SBI reserves the right to waive minor informalities.

Accordingly, the SBI shall select the Vendor(s) whose proposal and oral presentation, if requested, demonstrate, in SBI's sole opinion, clear capability to best fulfill the purposes of the RFP in a cost effective manner. The SBI reserves the right to accept or reject proposals, in whole or in part, and to negotiate separately as necessary to serve the best interest of the State of Minnesota.

B. Selection Criteria.

Proposal Evaluation

All responses received by the deadline will be evaluated by representatives of the SBI Review Committee. Proposals will first be reviewed for responsiveness to determine if the minimum requirements have been met. Proposals that fail to meet minimum requirements will not advance to the next phase of the evaluation. The State reserves the right, based on the scores of the proposals, to create a short-listing of vendors who have received the highest scores to interview or conduct demonstrations/presentations. The state reserves the right to seek best and final offers from one or more responders. A 100-point scale will be used to create the final evaluation recommendation.

Mandatory Requirements (Scored as Pass/Fail)

The following will be considered on a pass/fail basis:

1. Proposals must be received on or before the due date and time specified in **Section 1 - Instruction to Responders**.

Evaluation Factors (Scored based on percentage or points as indicated)

1. **The quality and completeness of the Master Custodian's answer to Section IV of the RFP as it relates to the prescribed duties. (20%)**

The approach, methodology and techniques should be appropriately specific, logical and organized. The Master Custodian must demonstrate the capability to gather the necessary information, develop fully supportable reports, and communicate performance results clearly and succinctly.

2. **The Master Custodian's demonstrated knowledge and experience in investment custody. (15%)**

It is imperative that the Master Custodian has been engaged in the field of investment custody for large pension plan sponsors. In addition, knowledge and experience with respect to endowments, cash accounts, and insurance portfolios is desirable.

3. **The quality of staff to be assigned to fulfill this contract and available support. (20%)**

The Master Custodian must assign to this contract, in terms of numbers and quality, sufficient staff with experience in the fields of financial and investment analysis, data processing and systems support, and general pension fund management. The Master Custodian should explain to the best of its ability to what extent back-up professional personnel are available to substitute for loss of professional personnel identified as necessary in the proposal.

4. **The quality of the data processing and analytical systems necessary to support the custody services. (15%)**

The Master Custodian should demonstrate its ability to manage and maintain the computer software, hardware and databases referenced in its proposal. The Master Custodian's commitment to upgrade existing systems and to introduce new applications that will enhance its ability to perform its duties also will be assessed. Included in this will be the adherence to accessibility standards referenced in Section 4 – Proposal Content, Computer Capability.

5. **The Master Custodian's demonstrated ability to manage the assignment effectively, communicate effectively and assure the successful delivery of the services provided. (15%)**

The plan for performing and managing the contract, including the framework within which the project team will function relative to the SBI, will be evaluated. The Master Custodian should demonstrate its ability to manage and control its duties, including specification of the reporting mechanisms and inter-relationships between the Master Custodian, the SBI and its staff, and outside vendors of the SBI.

6. **Fees (15%)**

All costs relating to the proposal shall be explained in detail.

Payment shall be made on a pro rata quarterly basis billed in arrears.

The evaluation team reserves the right to reject unreasonable costs proposed by vendors. Specifically, the evaluation team will not consider any proposed costs that are, at the sole discretion of the state, not rational or are not competitively priced. Such proposals will be regarded as non-responsive and receive no further consideration.

PERIOD OF CONTRACT & METHOD OF PAYMENT

The contract shall be for five (5) years commencing on or about May 1, 2023.

By Minnesota law, the contract may be canceled by the State Board of Investment, the Commissioner of Administration of the State of Minnesota with or without cause, upon sixty (60) day written notice to the other party.

Payment shall be made on a pro rata quarterly basis billed in arrears.

PUBLIC STATUS OF PROPOSALS SUBMITTED

Pursuant to Minnesota law, all proposals submitted in response to this RFP shall become the property of the State of Minnesota. Such proposals shall also constitute public records in accordance with Minn. Stat. section 13.591 and shall be available for viewing and reproduction by any person except for portions of the response that meet the definition of Trade Secret as defined by Minnesota Statute Section 13.37 subd. 1(b).

SECTION 6 – SOLICITATION TERMS

1. Competition in Responding

The State desires open and fair competition. Questions from responders regarding any of the requirements of the Solicitation must be submitted in writing to the Solicitation Administrator listed in the Solicitation before the due date and time. If changes are made the State will issue an addendum.

Any evidence of collusion among responders in any form designed to defeat competitive responses will be reported to the Minnesota Attorney General for investigation and appropriate action.

2. Addenda to the Solicitation

Changes to the Solicitation will be made by addendum with notification and posted in the same manner as the original Solicitation. Any addenda issued will become part of the Solicitation.

3. Data Security - Foreign Outsourcing of Work is Prohibited

All storage and processing of information shall be performed within the borders of the United States. This provision also applies to work performed by subcontractors at all levels.

4. Joint Ventures

The State allows joint ventures among groups of responders when responding to the solicitation. However, one responder must submit a response on behalf of all the others in the group. The responder that submits the response will be considered legally responsible for the response (and the contract, if awarded).

5. Withdrawing Response

A responder may withdraw its response prior to the due date and time of the Solicitation. For solicitations in the SWIFT Supplier Portal, a responder may withdraw its response from the SWIFT Supplier Portal. For solicitations done any other way, a responder may withdraw its response by notifying the Solicitation Administrator in writing of the desire to withdraw.

After the due date and time of this Solicitation, a responder may withdraw a response only upon showing that an obvious error exists in the response. The showing and request for withdrawal must be made in writing to Solicitation Administrator within a reasonable time and prior to the State's detrimental reliance on the response.

6. Rights Reserved

The State reserves the right to:

- Reject any and all responses received;
- Waive or modify any informalities, irregularities, or inconsistencies in the responses received;
- Negotiate with the highest scoring Responder[s];
- Terminate negotiations and select the next response providing the best value for the State;
- Consider documented past performance resulting from a State contract may be considered in the evaluation process;
- Short list the highest scoring Responders;
- Require Responders to conduct presentations, demonstrations, or submit samples;
- Interview key personnel or references;

- Request a best and final offer from one or more Responders;
- The State reserves the right to request additional information ; and
- The State reserves the right to use estimated usage or scenarios for the purpose of conducting pricing evaluations. The State reserves the right to modify scenarios, and to request or add additional scenarios for the evaluation.

7. Samples and Demonstrations

Upon request, Responders are to provide samples to the State at no charge. Except for those destroyed or mutilated in testing, the State will return samples if requested and at the Responder's expense. All costs to conduct and associated with a demonstration will be the sole responsibility of the Responder.

8. Responses are Nonpublic during Evaluation Process

All materials submitted in response to this Solicitation will become property of the State. During the evaluation process, all information concerning the responses submitted will remain private or nonpublic and will not be disclosed to anyone whose official duties do not require such knowledge. Responses are private or nonpublic data until the completion of the evaluation process as defined by Minn. Stat. § 13.591. The completion of the evaluation process is defined as the State having completed negotiating a contract with the selected responder. The State will notify all responders in writing of the evaluation results.

9. Trade Secret Information

- 9.1 Responders must not submit as part of their response trade secret material, as defined by Minn. Stat. § 13.37.
- 9.2 In the event trade secret data are submitted, Responder must defend any action seeking release of data it believes to be trade secret, and indemnify and hold harmless the State, its agents and employees, from any judgments awarded against the State in favor of the party requesting the data, and any and all costs connected with that defense.
- 9.3 The State does not consider cost or prices to be trade secret material, as defined by Minn. Stat. § 13.37.
- 9.4 A responder may present and discuss trade secret information during an interview or demonstration with the State, if applicable.

10. Conditions of Offer

Unless otherwise approved in writing by the State, Responder's cost proposal and all terms offered in its response that pertain to the completion of professional and technical services and general services will remain firm for 180 days, until they are accepted or rejected by the State, or they are changed by further negotiations with the State prior to contract execution.

11. Award

Any award that may result from this solicitation will be based upon the total accumulated points as established in the solicitation. The State reserves the right to award this solicitation to a single Responder, or to multiple Responders, whichever is in the best interest of the State, providing each Responder is in compliance with all terms and conditions of the solicitation. The State

reserves the right to accept all or part of an offer, to reject all offers, to cancel the solicitation, or to re-issue the solicitation, whichever is in the best interest of the State.

12. Requirements Prior to Contract Execution

Prior to contract execution, a responder receiving a contract award must comply with any submittal requests. A submittal request may include, but is not limited to, a Certificate of Insurance.

13. Targeted Group, Economically Disadvantaged Business, Veteran-Owned and Individual Preference

Unless a greater preference is applicable and allowed by law, in accordance with Minn. Stat. § 16C.16, businesses that are eligible and certified by the State as targeted group (TG) businesses, economically disadvantaged (ED) businesses, and veteran-owned businesses will receive points equal to 6% percent of the total points available as preference.

For TG/ED/VO certification and eligibility information visit [the Office of Equity in Procurement website at https://mn.gov/admin/business/vendor-info/oep/](https://mn.gov/admin/business/vendor-info/oep/) or call the Division's Helpline at 651.296.2600.

14. Reciprocity

State shall comply with Minn. Stat. § 16C.06, subd. 7, as that applies to a non-resident vendor. This paragraph does not apply for any project in which federal funds are expended.

EXHIBIT A

SUMMARY OF FUNDS MANAGED BY THE SBI

Please also see the SBI Annual Report for Fiscal Year 2021. The report is located at <https://msbi.us/annual-reports>.

COMBINED FUNDS

The Combined Funds represent the assets of both active and retired public employees who participate in the defined benefit plans of the three statewide retirement plans. All assets of the Combined Funds are managed externally using multiple investment managers.

Performance Objectives

The Board has established several long-term investment objectives for the Combined Funds. Monitoring actual performance against these return objectives helps the Board to ensure that the Combined Funds meet their respective long-term funding objectives:

1. Provide Real Returns. Over a twenty-year period, the Combined Funds are expected to exceed inflation by 3-5 percentage points on an annualized basis.
2. Exceed Market Returns. Over a ten-year period, the Combined Funds are expected to match or exceed a composite of market indices weighted in a manner that reflects the asset mix of the Combined Funds.

COMBINED RETIREMENT FUNDS (\$94.1 billion)

The Combined Funds contain the pension assets of the currently working and retired participants in the major statewide public employee retirement plans:

Retirement System	Plans
Teachers Retirement Association	Teachers Retirement Plan
Public Employees Retirement Association Police and Fire Fund Public Employees Correctional Fund	General Plan
Minnesota State Retirement System Highway Patrol Retirement Fund Judges Retirement Fund Correctional Employees Fund	General Plan

Asset Allocation

The Combined Funds have a policy asset allocation that is based on the investment objectives of the participating plans and the expected long-term performance of the capital markets.

Asset Class	Allocation	Asset Class Target
Public Equities	50%	Composite Benchmark
Domestic Equities	33%	Russell 3000
International Equities	17%	MSCI ACWI ex-U.S. (net)
Global Equities	na	MSCI ACWI (net)
Total Fixed Income	25%	Bloomberg U.S. Aggregate
Core/Core Plus Bonds*	10%*	Bloomberg U.S. Aggregate
Return Seeking Fixed Income*	na	Bloomberg U.S. Aggregate
Treasury Protection	10%	Bloomberg 5+Year Treasury
Laddered Bond & Cash	5%	ICE BofA 3 Month T-Bill
Private Markets	25%	Composite Benchmark
Invested Allocation	25%	Private Markets Return
Uninvested Allocation	na	S&P 500
Total	100%	Composite Benchmark

**Combined, Core/Core Plus and Return Seeking has a target weight of 10%*

All assets in the Combined Funds are managed externally by investment managers retained by contract.

FIRE PLANS AND OTHER PUBLIC RETIREMENT (\$1.1 BILLION)

The Supplemental Investment Fund (SIF) platform was established to provide broad asset class investment options to eligible plans that invest with the SBI. The Combined Funds and the SIF asset class pools share many of the same equity and fixed income managers. This sharing is accomplished by grouping managers by asset class into several different investment pools much like a family of mutual funds. The list of SIF asset class pools mapped to the respective Combined Funds pools is provided below.

SIF Asset Class Pools Option	Combined Funds Pools
U.S. Equity Index Fund	Russell 3000 Passive Manager
U.S. Equity Actively Managed Fund	Active and Semi-Passive Managers
Broad International Equity Fund	International Active and Passive Managers and Currency Overlay Manager
Bond Fund	Core/Core Plus Bond Managers
Money Market Fund	Short Term Investment Fund (STIF)
Balanced Fund	60% U.S. Equity Index Fund, 35% Bond Fund, 5% Money Market Fund
Volunteer Firefighter Account	35% U.S. Equity Index Fund, 15% Broad International Equity Fund, 45% Bond Fund, and 5% Money Market Fund

PARTICIPANT DIRECTED INVESTMENT PROGRAM (\$14.5 BILLION)

The Participant Directed Investment Program (PDIP) provides a variety of investment vehicles to state and local public employees for their retirement or other tax-advantaged saving plans and to individuals and families in the State Sponsored Savings Plans. The list of investment vehicles and administration of the platform is provided below.

Investment Vehicle	Administered
SIF Asset Class Pools	Plan Accounting / Custodian
SIF Stable Value Fund Minnesota State Retirement System (MSRS)	Custodian (fixed income collateral portfolio), with Empower as record keeper.
Mutual funds, CIT options, and Brokerage Window	Minnesota State Retirement System (MSRS) with Empower as record keeper.
Two State Sponsored Savings Plans: 529 College Saving Plan 529A ABLE Plan	Third Party Program Managers: TIAA-CREF Ascensus

NON-RETIREMENT PROGRAM (\$5.5 BILLION)

The Non-Retirement Program is managed by the SBI for designated trust funds, Other Postemployment Benefit (OPEB) trusts, and programs created by the Minnesota Constitution and Legislature. The Non-Retirement Accounts listed below offer broad asset class exposure to certain Minnesota public sector entities with authority to invest with the SBI.

Asset Class	Investment Approach/Strategy
Non-Retirement Equity Fund	Externally managed separate account passively invested to the S&P 500 Index.
Non-Retirement Bond Fund	Externally managed separate account actively invested to the Bloomberg U.S. Aggregate Index.
Non-Retirement Cash Fund	Externally managed pooled cash account invested to the iMoney Net Money Fund Average Taxable.
Assigned Risk Plan Fixed Income Portfolio	Externally managed separate account invested to the Bloomberg U.S. Govt. Intermediate Index.
Met Council Laddered Bond Portfolio	Internally managed separate account.

STATE CASH ACCOUNTS (\$20.5 billion)

These accounts represent the cash balances in more than 400 separate accounts that flow through the Minnesota State Treasury. These accounts include the Treasurer's Cash Pool (cash balances of special or dedicated accounts of State agencies and the balance of the Invested Treasurer's Cash), bond proceeds, the debt reserve transfer, and small legally restricted cash accounts. All of these accounts are managed internally.

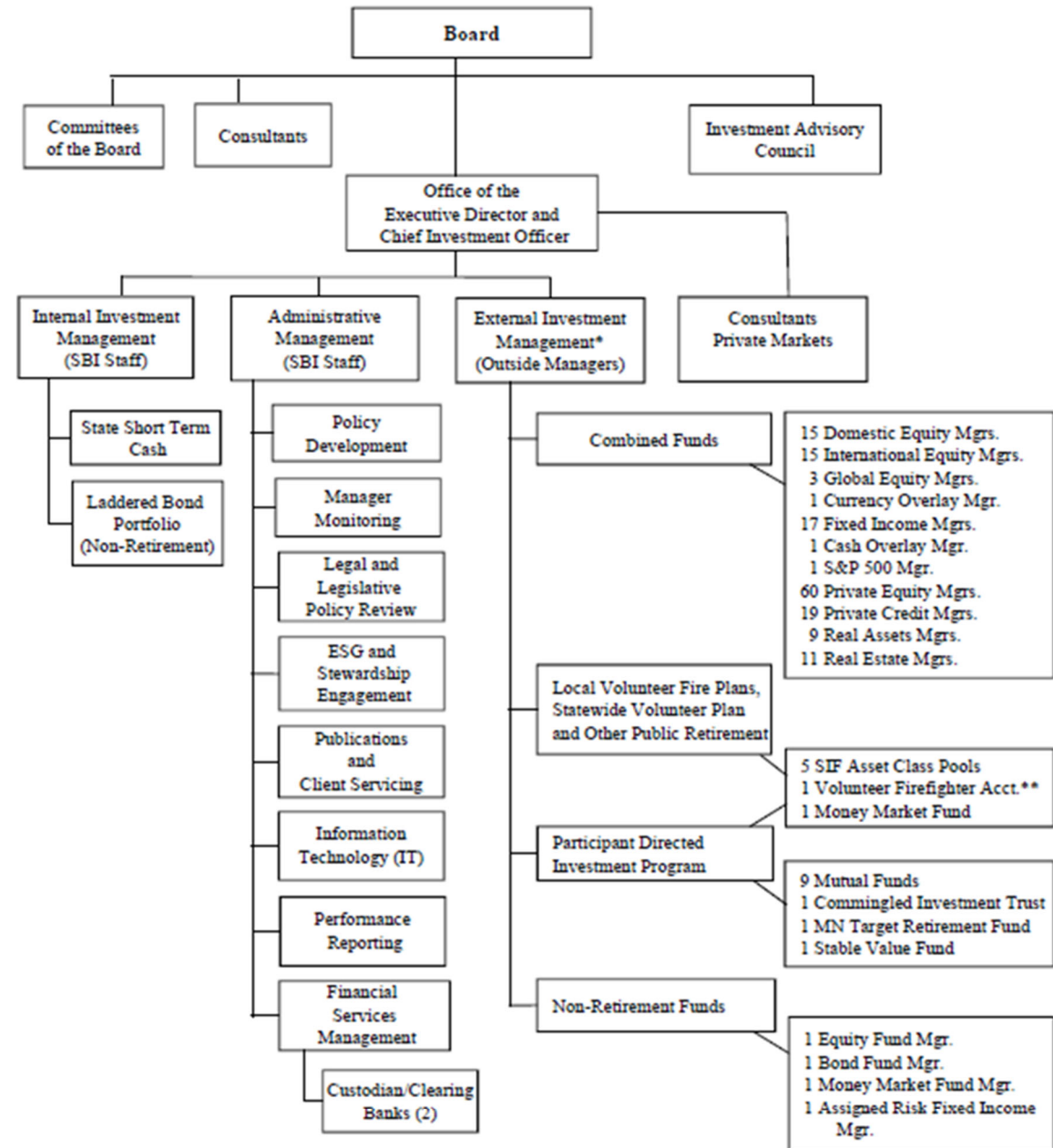
Performance Objectives

The Invested Treasurer's Cash Pool is measured against the iMoneyNet, all Taxable Money Fund Report Average.

EXHIBIT B

STATE BOARD OF INVESTMENT

Functional Organizational Structure



* Includes all managers approved by the Board through 3/31/2021

** Only available to volunteer fire relief plans in the Statewide Volunteer Firefighter Plan

INVESTMENT PROGRAMS MANAGED INTERNALLY	INVESTMENT PROGRAMS FUNDS MANAGED EXTERNALLY
State Cash Accounts	Combined Funds
	Local Volunteer Fire Plans
	Participant Directed Investment Program
	Non-Retirement Funds

EXHIBIT C – ILPA



	Current Period	TTM	Since Inception	Current Period	TTM	Since Inception	Current Period	TTM	Since Inception
	(Oct-21 - Dec-21)	(Jan-21 - Dec-21)	(Feb-13 - Dec-21)	(Oct-21 - Dec-21)	(Jan-21 - Dec-21)	(Feb-13 - Dec-21)	(Oct-21 - Dec-21)	(Jan-21 - Dec-21)	(Feb-13 - Dec-21)
Best Practices Fund II, L.P.									
A. Capital Account Statement for LP #5									
A1. NAV Reconciliation and Summary of Fees, Expenses & Incentive Allocation	LP #5's Allocation of Total Fund			Total Fund (incl. GP Allocation)			GP's Allocation of Total Fund		
Beginning NAV after Potential Incentive Allocation	\$45,067,000	\$38,196,000	\$0	\$2,495,281,787	\$2,163,081,300	\$0	\$339,194,377	\$276,104,050	\$0
Contributions - Cash & Non-Cash	0	5,000,000	35,000,000	0	250,375,000	1,752,625,000	0	375,000	2,625,000
Distributions - Cash & Non-Cash - Gross of Paid Incentive Allocation	1,300,000	5,250,000	20,250,000	62,593,750	250,375,000	1,452,175,000	93,750	375,000	2,175,000
Incentive Allocation - Paid	(50,000)	(250,000)	(1,250,000)	0	0	0	2,500,000	12,500,000	75,000,000
Distributions - Cash & Non-Cash - Net of Paid Incentive Allocation	1,250,000	5,000,000	19,000,000	62,593,750	250,375,000	1,452,175,000	2,593,750	12,875,000	77,175,000
Total Cash / Non-Cash Flows (contributions, less distributions)	(1,250,000)	0	16,000,000	(62,593,750)	0	300,450,000	(2,593,750)	(12,500,000)	(74,550,000)
Net Operating Income (Expense):									
(Management Fees – Gross of Offsets & Rebates):	(187,500)	(750,000)	(6,625,000)	(9,375,000)	(37,500,000)	(331,250,000)	0	0	0
Management Fee Rebate	0	0	0	0	0	0	0	0	0
(Partnership Expenses - Total):	(12,000)	(67,500)	(358,000)	(600,750)	(2,753,000)	(17,622,500)	0	0	0
(Partnership Expenses – Accounting, Administration & IT)									
(Partnership Expenses – Audit)	(2,000)	(5,000)	(58,000)	(100,000)	(250,000)	(2,600,000)	0	0	0
(Partnership Expenses – Bank Fees)	0	0	0	0	0	0	0	0	0
(Partnership Expenses – Custody Fees)									
(Partnership Expenses – Due Diligence)									
(Partnership Expenses – Legal)	0	(37,500)	(250,000)	0	(1,875,000)	(12,500,000)	0	0	0
(Partnership Expenses – Organization Costs)	(10,000)	(25,000)	(50,000)	(500,750)	(628,000)	(2,522,500)	0	0	0
(Partnership Expenses – Other Travel)									
(Partnership Expenses – Other)									
Total Offsets to Fees & Expenses (applied during period):	50,000	245,000	1,245,000	2,500,000	12,250,000	62,250,000	0	0	0
Offset Categories	% Offset to LP #5*								
Advisory Fee Offset	80%	0	0	0	0	0	0	0	0
Broken Deal Fee Offset	80%	0	30,000	100,000	0	1,500,000	5,000,000	0	0
Transaction & Deal Fee Offset	80%	20,000	80,000	150,000	1,000,000	4,000,000	7,500,000	0	0
Directors Fee Offset	100%	25,000	100,000	600,000	1,250,000	5,000,000	30,000,000	0	0
Monitoring Fee Offset	100%	10,000	40,000	300,000	500,000	2,000,000	15,000,000	0	0
Capital Markets Fee Offset	100%	0	0	0	0	0	0	0	0
Organization Cost Offset	80%	0	0	0	0	0	0	0	0
Placement Fee Offset	100%	0	0	100,000	0	0	5,000,000	0	0
Other Offset	80%	0	0	0	0	0	0	0	0
(Unapplied Offset Amount)		(5,000)	(5,000)	(5,000)	(250,000)	(250,000)	(250,000)	0	0
Total Management Fees & Partnership Expenses, Net of Offsets & Rebates	(149,500)	(572,500)	(5,738,000)	(7,475,750)	(28,003,000)	(286,622,500)	0	0	0
Fee Waiver	0	7,500	25,000	0	375,000	1,250,000	0	0	0
Interest Income	500	1,000	10,000	25,038	50,075	500,750	38	75	750
Dividend Income	10,000	50,000	340,000	500,750	2,503,750	17,030,000	750	3,750	30,000
(Interest Expense)	(2,000)	(8,000)	(40,000)	(100,150)	(400,600)	(2,003,000)	(150)	(600)	(3,000)
Other	1,000	3,000	20,000	50,075	150,225	1,001,500	75	225	1,500
Total Net Operating Income / (Expense)	(140,000)	(519,000)	(5,383,000)	(7,000,038)	(25,324,550)	(268,843,250)	713	3,450	29,250
Placement Fees	0	0	(40,000)	0	0	(2,000,000)	0	0	0
Change in Realized Gain / (Loss)	1,000,000	3,000,000	15,100,000	50,075,000	150,225,000	500,750,000	2,575,000	12,725,000	75,728,250
Change in Unrealized Gain / (Loss)	1,000,000	5,000,000	20,000,000	62,593,750	250,375,000	2,008,000,000	12,531,160	75,375,000	350,500,000
Ending NAV Before Potential Incentive Allocation	50,677,000	50,677,000	50,677,000	2,538,356,750	2,538,356,750	2,538,356,750	1,707,500	1,707,500	1,707,500
Incentive Allocation - Starting Period Balance (accrued)	(4,750,000)	(3,750,000)	0	0	0	0	337,500,000	275,000,000	0
Incentive Allocation - Periodic Change (accrued)	(250,000)	(1,250,000)	(5,000,000)	0	0	0	12,500,000	75,000,000	350,000,000
Ending NAV After Potential Incentive Allocation	\$45,677,000	\$45,677,000	\$45,677,000	\$2,538,356,750	\$2,538,356,750	\$2,538,356,750	\$351,707,500	\$351,707,500	\$351,707,500

EXHIBIT D-1. DOMESTIC EQUITY ACTIVE GUIDELINES

The investment actions of the Minnesota State Board of Investment (SBI) external active domestic common stock managers will be governed and evaluated by the following guidelines, which are comprised of Parts A and B:

Part A:

A1. RISK/RETURN OBJECTIVES

The Manager will be evaluated, in part, based on performance in delivering cumulative returns, net of fees and expenses, in excess of a predetermined benchmark assigned to the Manager. The Manager is responsible for actively managing the absolute level and composition of the active risk of the Manager's portfolio relative to the benchmark. The Manager's objectives are:

A portfolio excess return above the benchmark, net of fees and expenses, of 50 basis points (0.50%) or greater over the most recent five-year period.

A portfolio information ratio of 0.20 or greater over the most recent five-year period, where the information ratio is the annualized excess return over the benchmark, net of fees and expenses, divided by the annualized standard deviation of excess return over the benchmark.

All risk/return objectives will be monitored over three-year longer time periods, on a rolling basis, to ascertain the consistency of the Manager's performance relative to expectations for the mandate.

The Manager must notify and explain to SBI staff in the Quarterly Manager Commentary (see investment guideline B5(b)) any deviation from these objectives.

A2. BENCHMARK

The benchmark is the Russell 3000 Growth. This benchmark will also be used to calculate the Manager's performance based fee, if applicable. SBI reserves the right to change the benchmark upon prior written notification to the Manager.

A3. ELIGIBLE INVESTMENTS

The Manager is restricted to trading common stocks, stock index futures, exchange traded funds, cash equivalents identified under A3(h), and the SBI STIF fund. The Manager may hold any security received as a distribution from an existing holding. The Manager must have the SBI's written approval to purchase equity options, preferred stocks, warrants and convertible issues and any security that is not specifically outlined in this guideline. The investments of the Manager must satisfy

the following criteria and constraints:

- (a) All securities held must be covered by the authorization in *Minnesota Statutes* Chapter 11A.24.
- (b) The stocks held must be issued by corporations organized under the laws of the U.S. or its states, the Dominion of Canada or its provinces, and/or be listed on an exchange regulated by an agency of the United States (including NASDAQ) or Canadian national government at time of purchase. These include REITs, Business Development Companies (BDCs), and American Depositary Receipts (ADRs) traded on such an exchange. Securities issued pursuant to Rule 144A may be purchased for the Account if, upon issuance, they will be publicly traded securities and can be priced on a daily basis.
- (c) The Manager may not purchase restricted stock or letter stock.
- (d) Private placements, defined as those securities for which a public market does not exist or which will be subject to any known trading restrictions at any time during which the security is held in the SBI's portfolio, may not be purchased in the Account. The Manager may purchase IPOs, provided any allocation received as part of a particular IPO is not restricted from being traded and must be traded on a public market and can be priced daily.
- (e) Debt securities cannot be purchased in the Account.
- (f) The Manager may purchase open or closed-end funds or pooled investment vehicles to the extent they trade on an exchange regulated by an agency of the United States or Canadian national government and is limited to no more than 10% of the portfolio.
- (g) The Manager shall not hold at any time more than three (3) percent of the total outstanding shares of any corporation in the SBI's portfolio. If a holding should breach this level or the Manager desires to hold a larger position, the Manager must notify the SBI in writing for approval.
- (h) Cash equivalents shall be invested in the SBI's STIF fund, managed by its custodian bank, with the exception of cash equivalents used as collateral to maintain futures exposure.
- (i) Stock options purchased through a governmentally regulated exchange and CFTC approved stock index futures may be used in the portfolio. Over-the-counter instruments are not permitted. All future transactions must be entered into and maintained with a fully offsetting amount of cash or cash equivalents. The cash or cash equivalent position used to offset the futures position at the time of purchase, plus any mark to market adjustments, must be maintained over the life of the futures position to ensure that a leveraged position, as defined in Part B4, does not occur.

- (j) The Manager is expected to incorporate environmental, social and governance (ESG) broadly into its portfolio or process.
- (k) The Manager may not purchase stocks from the SBI's List of Unauthorized Investments. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided.

A4. PROXY VOTING

The Manager may not vote proxies on behalf of the SBI's account unless by the SBI has given prior written authorization to do so.

Investment Guidelines Effective Date: January 1, 2021

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: PUBLIC EQUITY, FIXED INCOME AND ASSIGNED RISK PLAN

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All securities held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles may not be held in the Account without the prior written approval of the SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement entered into by the Manager on behalf of the Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolio at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the Account.

The Manager may not short individual securities, except that short positions in allowable derivatives are permitted as long as such positions meet all derivatives exposure and collateral requirements outlined in Part A of the guidelines.

B5. COMMUNICATION

The SBI requires its investment managers to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI Staff and shall complete and return the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI Staff, whichever is later.
- (c) The Manager is expected to provide SBI staff with a "Manager Commentary" as described in the SBI's Manager Continuation Policy, within ten (10) business days after quarter-end. The Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving any issuer of securities held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (1) **Share and Pricing Reconciliation**—the Manager must reconcile with the custodial bank share and price values using mystatestreet.com data and utilize the template provided by State Street. The reconciliations must be completed at least on a monthly basis. The Manager must email their completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the first business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the number of shares for each security between the Managers' records and State Street's, and any differences must be

reconciled. If a discrepancy exists you must contact your daily State Street representative to resolve the issue. The reconciliation should also include the identification of security price differences of 3% or greater at the security level. The Manager should reconcile cash as an individual holding.

- (2) **Performance & Net Asset Value Comparison**—the Manager must provide preliminary net asset values and month-to-date performance along with your share and price reconciliation. This report must be completed using data for the previous month. The Manager will include this information on the share and pricing reconciliation and will email the completed reconciliation to your daily State Street representative no later than the first business day of the following month by 5:00 PM EST. Net asset values are comprised of the total market value of the entire fund, plus all open trades and pending income.
- (b) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (c) **Daily Pricing Requests**—The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual security pricing requests, the Manager may send a comprehensive holdings report—with shares and prices—to the custodian bank on a daily basis as long as it is submitted before the 5:00 PM EST deadline.
- (d) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the custodian bank. The Manager may appeal to the SBI if the Manager and custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to the SBI in the quarterly Manager Commentary whether or not the Manager agrees with the Custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must immediately inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these guidelines and has been in compliance over the last three months. If the Manager has violated the guidelines in the past three months and cannot certify compliance over this period, the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time. Managers will be notified in advance of changes to the investment guidelines.

Investment Guidelines Effective Date: January 1, 2021

EXHIBIT D-2. DOMESTIC EQUITY PASSIVE GUIDELINES

The investment actions of the Minnesota State Board of Investment (SBI) external passive domestic common stock manager will be governed and evaluated by the following guidelines, which are comprised of Parts A and B:

Part A:

A1. RISK/RETURN OBJECTIVES

The Manager will be evaluated, in part, based on performance in delivering cumulative returns, net of fees and expenses, in line with a predetermined benchmark assigned to the Manager. The Manager is responsible for managing the absolute level and composition of the active risk of the Manager's portfolio relative to the benchmark. The active risk and annual shortfall may exceed the guideline limits due to the implementation of the SBI's List of Restricted Sudan Stocks or the List of Restricted Iran Companies. The Manager will report the attribution, by category, of the shortfall/excess return for both the quarter and the year in the Quarterly Manager Commentary. The Manager's objectives are:

- (a) An actual portfolio that has a realized active risk level relative to the benchmark of 12 bps or less, where active risk is the annualized standard deviation of the Manager's excess returns relative to the benchmark. And,
- (b) A portfolio that tracks the return of the benchmark closely. Over time, the annual return shortfall relative to the benchmark, due to fees and trading expenses, should be no more than 0.12%.
- (c) The Manager must notify and explain to SBI staff in the Quarterly Manager Commentary (see investment guideline B5(b)) any deviation from these objectives.

A2. BENCHMARK INDEX

The benchmark is the Russell 1000. SBI reserves the right to change the benchmark upon prior written notification to Manager.

A3. ELIGIBLE INVESTMENTS

The Manager is restricted to trading common stocks that are in the benchmark index, stock index futures, exchange traded funds, cash equivalents identified under A3(b), and the SBI STIF fund. The Manager may hold any security received as a distribution from an existing holding. The Manager may sell any securities removed from the target index over a reasonable period of time. The investments of the Manager must satisfy the following criteria and constraints:

- (a) All securities held must be covered by the authorization in *Minnesota Statutes* Chapter 11A.24.
- (b) Debt securities cannot be purchased in the Account.
- (c) Cash equivalents shall be invested in the SBI's STIF fund, managed by its custodian bank, with the exception of cash equivalents used as collateral to maintain futures exposure.
- (d) Stock options purchased through a governmentally regulated exchange and CFTC approved stock index futures may be used in the portfolio. Over-the-counter instruments are not permitted. All future transactions must be entered into and maintained with a fully offsetting amount of cash or cash equivalents. The cash or cash equivalent position used to offset the futures position at the time of purchase, plus any mark to market adjustments, must be maintained over the life of the futures position to ensure that a leveraged position, as defined in Part B4, does not occur. Securities issued pursuant to Rule 144A may be purchased for the Account if, upon issuance, they will be publicly traded securities and can be priced on a daily basis.
- (e) The Manager may not purchase stocks from the SBI's List of Unauthorized Investments. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided, including divestment, when applicable.

A4. PROXY VOTING

The Manager may not vote proxies on behalf of the SBI's account unless specifically requested by the SBI to do so.

Investment Guidelines Effective Date: January 1, 2022

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: PUBLIC EQUITY, FIXED INCOME AND ASSIGNED RISK PLAN

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All securities held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles may not be held in the Account without the prior written approval of the SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement entered into by the Manager on behalf of the Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolio at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the Account.

The Manager may not short individual securities, except that short positions in allowable derivatives are permitted as long as such positions meet all derivatives exposure and collateral requirements outlined in Part A of the guidelines.

B5. COMMUNICATION

The SBI requires its investment managers to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI Staff and shall complete and return the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI Staff, whichever is later.
- (c) The Manager is expected to provide SBI staff with a "Manager Commentary" as described in the SBI's Manager Continuation Policy, within ten (10) business days after quarter-end. The Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving any issuer of securities held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (1) **Share and Pricing Reconciliation**—the Manager must reconcile with the custodial bank share and price values using mystatestreet.com data and utilize the template provided by State Street. The reconciliations must be completed at least on a monthly basis. The Manager must email their completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the first business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the number of shares for each security between the Managers' records and State Street's, and any differences

must be reconciled. If a discrepancy exists you must contact your daily State Street representative to resolve the issue. The reconciliation should also include the identification of security price differences of 3% or greater at the security level. The Manager should reconcile cash as an individual holding.

- (2) **Performance & Net Asset Value Comparison**—the Manager must provide preliminary net asset values and month-to-date performance along with your share and price reconciliation. This report must be completed using data for the previous month. The Manager will include this information on the share and pricing reconciliation and will email the completed reconciliation to your daily State Street representative no later than the first business day of the following month by 5:00 PM EST. Net asset values are comprised of the total market value of the entire fund, plus all open trades and pending income.
- (b) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (c) **Daily Pricing Requests**—The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual security pricing requests, the Manager may send a comprehensive holdings report—with shares and prices—to the custodian bank on a daily basis as long as it is submitted before the 5:00 PM EST deadline.
- (d) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the custodian bank. The Manager may appeal to the SBI if the Manager and custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to the SBI in the quarterly Manager Commentary whether or not the Manager agrees with the Custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must immediately inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these guidelines and has been in compliance over the last three months. If the Manager has violated the guidelines in the past three months and cannot certify compliance over this period, the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time. Managers will be notified in advance of changes to the investment guidelines.

Investment Guidelines Effective Date: January 1, 2021

EXHIBIT D-3. INTERNATIONAL EQUITY DEVELOPED PASSIVE GUIDELINES

The investment actions of the Minnesota State Board of Investment (SBI) Passive Fund Manager will be governed and evaluated by the following guidelines which are comprised of Parts A and B:

Part A:

A1. RETURN/TRACKING ERROR OBJECTIVE

The Manager will be evaluated, in part, based on performance in delivering cumulative returns, net of fees and expenses, in line with a predetermined benchmark provided to the Manager. The Manager is responsible for managing the absolute level and composition of the active risk of the Manager's portfolio relative to the benchmark. The active risk and annual shortfall may exceed the guideline limits due to the implementation of the SBI's Unauthorized Holdings List. The Manager will report the attribution, by category, of the shortfall/ excess return for both the quarter and the year in the Quarterly Manager Commentary. The Manager's objectives are:

- (a) An actual portfolio that has a realized active risk level relative to the benchmark of 0.60 or less, where active risk is the annualized standard deviation of the Manager's excess returns relative to the benchmark. And,
- (b) A portfolio that tracks the return of the benchmark closely. Over time, the annual excess return relative to the benchmark, should exceed 0.10%.

A2. BENCHMARK INDEX

The benchmark is the Morgan Stanley Capital International (MSCI) World ex. U.S. Index, unhedged, with dividends net of tax withholdings. SBI reserves the right to change the benchmark upon notification to the Manager.

3. ELIGIBLE INVESTMENTS

The Manager is restricted to trading companies in the benchmark index but is able to trade pre-announced index changes in advance of the effective date of their inclusion in the benchmark index; Commodity Futures Trading Commission (CFTC) approved stock index futures; exchange traded funds; currency forwards and spot; cash in USD and countries in the Benchmark Index, and cash received as a distribution from an Eligible Investment; cash equivalents identified in A3(b) and the SBI's STIF fund. The Manager may hold any security received as a voluntary or involuntary distribution from an existing holding or which was acquired when it was part of the benchmark index. The Manager must have the SBI's written approval to purchase any security that is not

specifically outlined in this guideline. The investments of the Manager must satisfy the following criteria and constraints:

- (a) All securities held must be covered by the authorization in *Minnesota Statutes* Chapter 11A.24.
- (b) U.S. cash equivalents shall be invested in the SBI's STIF fund, managed by its custodian bank, with the exception of cash equivalents used as collateral to maintain futures and currency forwards exposure.
- (c) Stock options purchased through a governmentally regulated exchange and CFTC approved stock index futures may be used in the portfolio. Over-the-counter instruments are not permitted, with the exception of currency forwards which are Eligible Investments. All future transactions must be entered into and maintained with a fully offsetting amount of cash or cash equivalents. The cash or cash equivalent position used to offset the futures position at the time of purchase, plus any mark to market adjustments, must be maintained over the life of the futures position to ensure that a leveraged position, as defined in Part B4, does not occur.
- (d) The Manager may not purchase stocks from the SBI's Unauthorized Holdings List. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided.
- (e) Omitted.
- (f) Currency forwards may be used to adjust the effective non-U.S. currency exposure of the portfolio. Manager is permitted to hedge all or any portion of the non-U.S. currency exposure back to the U.S. dollar. The Manager is not permitted to increase the exposure to any non-U.S. currency of an eligible market beyond that established by the holdings of the portfolio or that of the country allocation within the benchmark. The total net non-U.S. currency exposure of all securities and currency forwards may not exceed the total market value of the portfolio. The Manager has no obligation to hedge currency risk and will not be required to do so.

A4. PROXY VOTING

The SBI retains the right to vote its proxies directly. Unless the SBI notifies the Manager that it is exercising this right, the Manager shall vote all proxies on behalf of the SBI. On a best efforts basis, the Manager shall vote all proxies according to guidelines provided to the Manager by the SBI. The Manager shall report annually on its voting practices with respect to the SBI portfolio. This report shall be received by the SBI within sixty (60) days following the fiscal year ending June 30. The SBI represents that such delegation of voting rights is consistent with applicable *Minnesota Statutes*. The SBI agrees to instruct the Custodian to forward all proxy materials to the Manager upon receipt. The Manager shall not be liable with regard to voting of proxies in the event proxy materials are not received by the Manager in a timely manner.

A5. U.S. TREASURY REPORTING

In order to meet the requirements of the Treasury International Capital (TIC) Form SLT, and for as long as that remains a reporting requirement, the Manager must report quarterly to the SBI that all assets in the SBI's portfolio are held in custody at the SBI's custodian bank or its sub-custodian network. If any assets in the SBI's portfolio, such as holdings in a comingled fund, are held in custody outside of the SBI's custodian bank or its sub-custodian network, the Manager must report quarterly to the SBI that these assets are being properly reported by the respective custodian.

A6. COUNTERPARTY BANKS

Each counterparty bank used by the Manager to execute currency transactions, except for currency transactions settled via Continuous Linked Settlement (CLS), must have a long-term credit rating of A3/A-/A- or better from at least two of the following rating organizations: S&P, Moody's, or Fitch/IBCA. Prior written authorization is required to execute currency transactions with counterparty banks rated A3/A-/A- or better by only one of the aforementioned rating agencies.

Any agreement entered into by the Manager on behalf of the SBI's account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that the SBI's liability for settlement, commissions and fees is limited solely to funds of the SBI under the Manager's control and does not constitute a general obligation of the State of Minnesota.

The Manager is responsible for monitoring the counterparty credit ratings of each counterparty bank and/or counterparty group, and the Manager will promptly notify the SBI of any counterparty rating downgrade below the A3/A-/A- level.

Investment Guidelines Effective Date: January 1, 2021

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: PUBLIC EQUITY, FIXED INCOME AND ASSIGNED RISK PLAN

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All securities held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles may not be held in the Account without the prior written approval of the SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement entered into by the Manager on behalf of the Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolio at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the Account.

The Manager may not short individual securities, except that short positions in allowable derivatives are permitted as long as such positions meet all derivatives exposure and collateral requirements outlined in Part A of the guidelines.

B5. COMMUNICATION

The SBI requires its investment managers to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI Staff and shall complete and return the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI Staff, whichever is later.
- (c) The Manager is expected to provide SBI staff with a "Manager Commentary" as described in the SBI's Manager Continuation Policy, within ten (10) business days after quarter-end. The Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving any issuer of securities held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (1) **Share and Pricing Reconciliation**—the Manager must reconcile with the custodial bank share and price values using mystatestreet.com data and utilize the template provided by State Street. The reconciliations must be completed at least on a monthly basis. The Manager must email their completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the first business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the number of shares for each security between the Managers' records and State Street's, and any differences must be reconciled. If a discrepancy exists you must contact your daily State Street representative to resolve the issue. The reconciliation should also include the identification of security price differences of 3% or greater at the security level. The Managers should reconcile cash as an individual holding.

- (2) **Performance & Net Asset Value Comparison**—the Manager must provide preliminary net asset values and month-to-date performance along with your share and price reconciliation. This report must be completed using data for the previous month. The Manager will include this information on the share and pricing reconciliation and will email the completed reconciliation to your daily State Street representative no later than the first business day of the following month by 5:00 PM EST. Net asset values are comprised of the total market value of the entire fund, plus all open trades and pending income.
- (b) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (c) **Daily Pricing Requests**—The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual security pricing requests, the Manager may send a comprehensive holdings report—with shares and prices—to the custodian bank on a daily basis as long as it is submitted before the 5:00 PM EST deadline.
- (d) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the custodian bank. The Manager may appeal to the SBI if the Manager and custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to the SBI in the quarterly Manager Commentary whether or not the Manager agrees with the Custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must immediately inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these guidelines and has been in compliance over the last three months. If the Manager has violated the guidelines in the past three months and cannot certify compliance over this period, the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time. Managers will be notified in advance of changes to the investment guidelines.

Investment Guidelines Effective Date: January 1, 2021

EXHIBIT D-4. INTERNATIONAL EQUITY DEVELOPED ACTIVE GUIDELINES

The investment actions of the Minnesota State Board of Investment (SBI) active international developed markets equity managers will be governed and evaluated by the following guidelines which are comprised of Parts A and B:

Part A:

A1. RISK/RETURN OBJECTIVE

The Manager will be evaluated, in part, based on performance in delivering cumulative returns, net of fees and expenses, in excess of a predetermined benchmark assigned to the Manager. The Manager is responsible for actively managing the absolute level and composition of the active risk of the Manager's portfolio relative to the benchmark. The Manager's objectives are:

A portfolio excess return above the benchmark, net of fees and expenses, of 50 basis points (0.50%) or greater over the most recent five-year period.

A portfolio information ratio of 0.20 or greater over the most recent five-year period, where the information ratio is the annualized excess return over the benchmark, net of fees and expenses, divided by the annualized standard deviation of excess return over the benchmark.

All risk/return objectives will be monitored over three-year and longer time periods, on a rolling basis, to ascertain the consistency of the Manager's performance relative to expectations for the mandate.

The Manager must notify and explain to SBI staff in the Quarterly Manager Commentary (see investment guideline B5(b)) any deviation from these objectives.

A2. BENCHMARK

The benchmark is the Morgan Stanley Capital International (MSCI) World ex. U.S. Index, unhedged, with dividends net of tax withholdings. SBI reserves the right to change the benchmark upon notification to the Manager.

A3. ELIGIBLE MARKETS

The Manager may invest in eligible securities in countries in the MSCI World exUS Index. The Manager may not invest in countries in the MSCI Emerging Markets Index or the MSCI Frontier Markets Index. The Manager must request authorization to invest in any countries that are not represented in either index. The country classification of a security shall be its country of listing. The Manager is permitted to invest no more than 10% of the Account's market value in aggregate in countries outside the MSCI World ex US Index.

A4. ELIGIBLE INVESTMENTS

Subject to the constraints in A3 above, the Manager is restricted to trading common stocks; preferred stocks; exchange traded funds; currency forwards and spot; REITs; stapled units; cash in USD and Eligible Markets, and cash received as a distribution from an Eligible Investment; cash equivalents identified in A4(b) and the SBI's STIF fund. The Manager may hold any security received as a voluntary or involuntary distribution from an existing holding or which was acquired when it was part of the benchmark index. The Manager must have the SBI's one-time written approval to purchase warrants, rights, open-end country funds, stock index futures and options, and currency futures and options. Manager must have SBI's prior written approval to purchase closed-end country or regional funds, convertible preferred stock, trusts (other than REITs), collective investment schemes, and any security that is not specifically outlined in this guideline. The investments of the Manager must satisfy the following criteria and constraints:

- (a) All securities held must be covered by the authorization in *Minnesota Statutes* Chapter 11A.24.
- (b) U.S. cash equivalents shall be invested in the SBI's STIF fund, managed by its custodian bank with the exception of cash equivalents used as collateral to maintain futures and currency forwards exposure.
- (c) Private placements, defined as those securities for which a public market does not exist or which will be subject to any known trading restrictions at any time during which the security is held in the SBI's portfolio, may not be purchased in the Account. The Manager may purchase IPOs, provided any allocation received as part of a particular IPO is not restricted from being traded and must be traded on a public market and can be priced daily.
- (d) Debt securities, including convertible bonds, with the exception of cash equivalents may not be purchased in the Account.
- (e) In the SBI's portfolio, the Manager shall not at any time hold more than three (3) percent of the total outstanding shares of any corporation. If a holding should breach this level or the Manager desires to hold a larger position, the Manager must notify the SBI in writing for approval.
- (f) The stock of companies domiciled in the U.S. shall not be held in the Account, unless included in the benchmark index or received as a distribution from an existing holding which is otherwise an eligible security. However, with the SBI's prior written authorization, the Manager may hold open-end and closed-end funds, which invest primarily in international securities. The Manager may purchase dually listed MSCI World ex US Index securities that are listed on a U.S. exchange. The Manager may purchase Canadian Investment Trusts, provided they have no trading restrictions, trade on a public market and can be priced daily.

- (g) American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), Crest Depositary Interests (CDIs), European Depositary Receipts (EDRs), and Swedish Depositary Receipts (SDRs) may be held in the Account provided they are issued by a company which is traded or listed on an eligible market and can be priced on a daily basis. Non-U.S. securities issued pursuant to Rule 144A may be purchased for the Account if, upon issuance, they will be publicly-traded securities in their local market(s) and can be priced on a daily basis.
- (h) Stock options purchased through a governmentally regulated exchange and CFTC approved stock index futures may be used in the portfolio. Over-the-counter instruments are not permitted, with the exception of currency forwards which are Eligible Investments. All future transactions must be entered into and maintained with a fully offsetting amount of cash or cash equivalents. The cash or cash equivalent position used to offset the futures position at the time of purchase, plus any mark to market adjustments, must be maintained over the life of the futures position to ensure that a leveraged position, as defined in Part B4, does not occur.
- (i) Currency forwards may be used to adjust the effective non-U.S. currency exposure of the portfolio. Manager is permitted to hedge all or any portion of the non-U.S. currency exposure back to the U.S. dollar and may also attempt to add value from anticipated declines in the value of any non-U.S. currency, through hedging out of one non-U.S. currency into another non-U.S. currency. The Manager is permitted to increase the exposure to any non-U.S. currency of an eligible market beyond that established by the equity security holdings of the portfolio or that of the country allocation within the benchmark; provided, however, that the total net non-U.S. currency exposure of all securities and currency forwards may not exceed the total market value of the portfolio. The Manager has no obligation to hedge currency risk and will not be required to do so.
- (j) The Manager is expected to incorporate environmental, social and governance (ESG) considerations broadly into their portfolios or process.
- (k) The Manager may not purchase stocks from the SBI's Unauthorized Holdings List. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided.

A5. COUNTERPARTY BANKS

Each counterparty bank used by the Manager to execute currency transactions, except for currency transactions settled via Continuous Linked Settlement (CLS), must have a long-term credit rating of A3/A-/A- or better from at least two of the following rating organizations: S&P, Moody's, or Fitch/IBCA. Prior written authorization is required to execute currency transactions with counterparty banks rated A3/A-/A- or better by only one of the aforementioned rating agencies.

Any agreement entered into by the Manager on behalf of the SBI's account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that the SBI's liability for settlement,

commissions and fees is limited solely to funds of the SBI under the Manager's control and does not constitute a general obligation of the State of Minnesota.

The Manager is responsible for monitoring the counterparty credit ratings of each counterparty bank and/or counterparty group, and the Manager will promptly notify the SBI of any counterparty rating downgrade below the A3/A-/A- level.

A6. PROXY VOTING

The SBI retains the right to vote its proxies directly. Unless the SBI notifies the Manager that it is exercising this right, the Manager shall vote all proxies on behalf of the SBI. On a best efforts basis, the Manager shall vote all proxies according to guidelines provided to the Manager by the SBI. The Manager shall report annually on its voting practices with respect to the SBI portfolio. This report shall be received by the SBI within sixty (60) days following the fiscal year ending June 30. The SBI represents that such delegation of voting rights is consistent with applicable *Minnesota Statutes*. The SBI agrees to instruct the Custodian to forward all proxy materials to the Manager upon receipt. Managers shall not be liable with regard to voting of proxies in the event proxy materials are not received by the Manager in a timely manner.

A7. U.S. TREASURY REPORTING

In order to meet the requirements of the Treasury International Capital (TIC) Form SLT, and for as long as that remains a reporting requirement, the Manager must report quarterly to the SBI that all assets in the SBI's portfolio are held in custody at the SBI's custodian bank or its sub-custodian network. If any assets in the SBI's portfolio, such as holdings in a comingled fund, are held in custody outside of the SBI's custodian bank or its sub-custodian network, the Manager must report quarterly to the SBI that these assets are being properly reported by the respective custodian.

Investment Guidelines Effective Date: January 1, 2021

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: PUBLIC EQUITY, FIXED INCOME AND ASSIGNED RISK PLAN

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All securities held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles may not be held in the Account without the prior written approval of the SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement entered into by the Manager on behalf of the Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolio at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the Account.

The Manager may not short individual securities, except that short positions in allowable derivatives are permitted as long as such positions meet all derivatives exposure and collateral requirements outlined in Part A of the guidelines.

B5. COMMUNICATION

The SBI requires its investment managers to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI Staff and shall complete and return the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI Staff, whichever is later.
- (c) The Manager is expected to provide SBI staff with a "Manager Commentary" as described in the SBI's Manager Continuation Policy, within ten (10) business days after quarter-end. The Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving any issuer of securities held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (1) **Share and Pricing Reconciliation**—the Manager must reconcile with the custodial bank share and price values using mystatestreet.com data and utilize the template provided by State Street. The reconciliations must be completed at least on a monthly basis. The Manager must email their completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the first business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the number of shares for each security between the Managers' records and State Street's, and any differences must be reconciled. If a discrepancy exists you must contact your daily State

Street representative to resolve the issue. The reconciliation should also include the identification of security price differences of 3% or greater at the security level. The Manager should reconcile cash as an individual holding.

- (2) **Performance & Net Asset Value Comparison**—the Manager must provide preliminary net asset values and month-to-date performance along with your share and price reconciliation. This report must be completed using data for the previous month. The Manager will include this information on the share and pricing reconciliation and will email the completed reconciliation to your daily State Street representative no later than the first business day of the following month by 5:00 PM EST. Net asset values are comprised of the total market value of the entire fund, plus all open trades and pending income.
- (b) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (c) **Daily Pricing Requests**—The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual security pricing requests, the Manager may send a comprehensive holdings report—with shares and prices—to the custodian bank on a daily basis as long as it is submitted before the 5:00 PM EST deadline.
- (d) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the custodian bank. The Manager may appeal to the SBI if the Manager and custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to the SBI in the quarterly Manager Commentary whether or not the Manager agrees with the Custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must immediately inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these guidelines and has been in compliance over the last three months. If the Manager has violated the guidelines in the past three months and cannot certify compliance over this period, the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time. Managers will be notified in advance of changes to the investment guidelines.

Investment Guidelines Effective Date: January 1, 2021

EXHIBIT D-5. INTERNATIONAL EQUITY EMERGING MARKETS ACTIVE GUIDELINES

The investment actions of the Minnesota State Board of Investment (SBI) international emerging markets equity managers will be governed and evaluated by the following guidelines which are comprised of Parts A and B:

Part A:

A1. RISK/RETURN OBJECTIVE

The Manager will be evaluated, in part, based on performance in delivering cumulative returns, net of fees and expenses, in excess of a predetermined benchmark provided to the Manager. The Manager is responsible for actively managing the absolute level and composition of the active risk of the Manager's portfolio relative to the benchmark. The Manager's objectives are:

A portfolio excess return above the benchmark, net of fees and expenses, of 50 basis points (0.50%) or greater over the most recent five-year period.

A portfolio information ratio of 0.20 or greater over the most recent five-year period, where the information ratio is the annualized excess return over the benchmark, net of fees and expenses, divided by the annualized standard deviation of excess return over the benchmark.

All risk/return objectives will be monitored over three-year and longer time periods, on a rolling basis, to ascertain the consistency of the Manager's performance relative to expectations for the mandate.

The Manager must notify and explain to SBI staff in the Quarterly Manager Commentary (see investment guideline B5(b)) any deviation from these objectives.

A2. BENCHMARK

The benchmark is the Morgan Stanley Capital International Emerging Markets (MSCI EM) Index unhedged, with dividends net of tax withholdings. SBI reserves the right to change the benchmark upon notification to the Manager.

A3. ELIGIBLE MARKETS

The Manager may invest in eligible securities in countries in the MSCI Emerging Markets Index. The country classification of a security shall be its MSCI Country Classification, and/or the Bloomberg Country of Risk Classification (as appropriate), except as indicated in A4(e). The Manager is permitted to invest no greater than 20% of the Account's market value in aggregate in countries outside the benchmark index.

A4. ELIGIBLE INVESTMENTS

Subject to the constraints in A3 above, the Manager is restricted to trading common stocks; preferred stocks; exchange traded funds; currency forwards and spot; REITs; stapled units; cash in USD and Eligible Markets, and cash received as a distribution from an Eligible Investment; cash equivalents identified in A4(b) and the SBI's STIF fund. The Manager may hold any security received as a voluntary or involuntary distribution from an existing holding or which was acquired when it was part of the benchmark index. The Manager must have the SBI's one-time written approval to purchase warrants, rights, open-end country funds, stock index futures and options, and currency futures and options. Manager must have SBI's prior written approval to purchase closed-end country and regional funds, convertible preferred stock, trusts (other than REITs), collective investment schemes, and any security that is not specifically outlined in this guideline. The investments of the Manager must satisfy the following criteria and constraints:

- (a) All securities held must be covered by the authorization in *Minnesota Statutes* Chapter 11A.24.
- (b) U.S. cash equivalents shall be invested in the SBI's STIF fund, managed by its custodian bank, with the exception of cash equivalents used as collateral to maintain futures and currency forwards exposure.
- (c) Private placements, defined as those securities for which a public market does not exist or which will be subject to any known trading restrictions at any time during which the security is held in the SBI's portfolio, may not be purchased in the Account. The Manager may purchase IPOs, provided any allocation received as part of a particular IPO is not restricted from being traded and must be traded on a public market and can be priced daily.
- (d) Debt securities, including convertible bonds, with the exception of cash equivalents may not be purchased in the Account.
- (e) American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs) and Crest Depositary Interests (CDIs) may be held in the Account provided they are issued by a company which is traded or listed on an eligible market, including as allowed in Guideline A3, and can be priced on a daily basis. Non-U.S. securities and Depositary Receipts issued pursuant to Rule 144A may be purchased for the Account if, upon issuance, these securities (or their underlying shares in the case of Depositary Receipts) will be publicly-traded securities in their local market(s) or another regulated market and can be priced on a daily basis.
- (f) In the SBI's portfolio, the Manager shall not at any time hold more than three (3) percent of the total outstanding shares of any corporation. If a holding should breach this level or the Manager desires to hold a larger position, the Manager must notify the SBI in writing for approval.
- (g) Currency forwards may be used to adjust the effective non-U.S. country exposure of the Account from 0 to 100%. Hedging back to USD or to the Euro is permitted.

Cross hedging from one eligible market currency into another eligible market currency is permitted with prior written notification to SBI staff. The total net non-U.S. currency exposure of all securities and currency forwards may not exceed the total market value of the portfolio. The Manager has no obligation to hedge currency risk and will not be required to do so.

- (h) Stock options purchased through a governmentally regulated exchange and CFTC approved stock index futures may be used in the portfolio. Over-the-counter instruments are not permitted, with the exception of currency forwards which are Eligible Investments. All future transactions must be entered into and maintained with a fully offsetting amount of cash or cash equivalents. The cash or cash equivalent position used to offset the futures position at the time of purchase, plus any mark to market adjustments, must be maintained over the life of the futures position to ensure that a leveraged position, as defined in Part B4, does not occur.
- (i) If investing locally in India under the SBI's Foreign Institutional Investor (FII) registration, the Manager may not convert depository receipts of Indian companies into local shares to be held or traded in India.
- (j) Except as otherwise specifically provided in this section A4, over-the-counter derivative instruments are not permitted.
- (k) Manager is authorized to invest in participation notes and Low Exercise Price Warrants provided the issuer is a non-United States entity. To the extent Manager is required to agree to any trading agreement or representation letter on the SBI's behalf related to such investments, such agreements or representations must be reviewed and approved by legal representatives of the SBI.
- (l) The Manager is expected to incorporate environmental, social, and governance (ESG) considerations broadly into their portfolios or process.
- (m) The Manager may not purchase stocks from the SBI's Unauthorized Holdings List. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided.

A5. COUNTERPARTY BANKS

Each counterparty bank used by the Manager to execute currency transactions, except for currency transactions settled via Continuous Linked Settlement (CLS), must have a long-term credit rating of A3/A-/A- or better from at least two of the following rating organizations: S&P, Moody's, or Fitch/IBCA. Prior written authorization is required to execute currency transactions with counterparty banks rated A3/A-/A- or better by only one of the aforementioned rating agencies.

Any agreement entered into by the Manager on behalf of the SBI's account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that the SBI's liability for settlement,

commissions and fees is limited solely to funds of the SBI under the Manager's control and does not constitute a general obligation of the State of Minnesota.

The Manager is responsible for monitoring the counterparty credit ratings of each counterparty bank and/or counterparty group, and the Manager will promptly notify the SBI of any counterparty rating downgrade below the A3/A-/A- level.

A6. PROXY VOTING

The SBI retains the right to vote its proxies directly. Unless the SBI notifies the Manager that it is exercising this right, the Manager shall vote all proxies on behalf of the SBI. On a best efforts basis, the Manager shall vote all proxies according to guidelines provided to the Manager by the SBI. The Manager shall report annually on its voting practices with respect to the SBI portfolio. This report shall be received by the SBI within sixty (60) days following the fiscal year ending June 30. The SBI represents that such delegation of voting rights is consistent with applicable *Minnesota Statutes*. The SBI agrees to instruct the Custodian to forward all proxy materials to the Manager upon receipt. Managers shall not be liable with regard to voting of proxies in the event proxy materials are not received by the Manager in a timely manner.

A7. U.S. TREASURY REPORTING

In order to meet the requirements of the Treasury International Capital (TIC) Form SLT, and for as long as that remains a reporting requirement, the Manager must report quarterly to the SBI that all assets in the SBI's portfolio are held in custody at the SBI's custodian bank or its sub-custodian network. If any assets in the SBI's portfolio, such as holdings in a comingled fund, are held in custody outside of the SBI's custodian bank or its sub-custodian network, the Manager must report quarterly to the SBI that these assets are being properly reported by the respective custodian.

Investment Guidelines Effective Date: January 1, 2021

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: PUBLIC EQUITY, FIXED INCOME AND ASSIGNED RISK PLAN

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All securities held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles may not be held in the Account without the prior written approval of the SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement entered into by the Manager on behalf of the Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolio at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the Account.

The Manager may not short individual securities, except that short positions in allowable derivatives are permitted as long as such positions meet all derivatives exposure and collateral requirements outlined in Part A of the guidelines.

B5. COMMUNICATION

The SBI requires its investment managers to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI Staff and shall complete and return the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI Staff, whichever is later.
- (c) The Manager is expected to provide SBI staff with a "Manager Commentary" as described in the SBI's Manager Continuation Policy, within ten (10) business days after quarter-end. The Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving any issuer of securities held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (1) **Share and Pricing Reconciliation**—the Manager must reconcile with the custodial bank share and price values using mystatestreet.com data and utilize the template provided by State Street. The reconciliations must be completed at least on a monthly basis. The Manager must email their completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the first business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the number of shares for each security between the Managers' records and State Street's, and any differences must be reconciled. If a discrepancy exists you must contact your daily State

Street representative to resolve the issue. The reconciliation should also include the identification of security price differences of 3% or greater at the security level. The Manager should reconcile cash as an individual holding.

- (2) **Performance & Net Asset Value Comparison**—the Manager must provide preliminary net asset values and month-to-date performance along with your share and price reconciliation. This report must be completed using data for the previous month. The Manager will include this information on the share and pricing reconciliation and will email the completed reconciliation to your daily State Street representative no later than the first business day of the following month by 5:00 PM EST. Net asset values are comprised of the total market value of the entire fund, plus all open trades and pending income.
- (b) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (c) **Daily Pricing Requests**—The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual security pricing requests, the Manager may send a comprehensive holdings report—with shares and prices—to the custodian bank on a daily basis as long as it is submitted before the 5:00 PM EST deadline.
- (d) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the custodian bank. The Manager may appeal to the SBI if the Manager and custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to the SBI in the quarterly Manager Commentary whether or not the Manager agrees with the Custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must immediately inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these guidelines and has been in compliance over the last three months. If the Manager has violated the guidelines in the past three months and cannot certify compliance over this period, the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time. Managers will be notified in advance of changes to the investment guidelines.

Investment Guidelines Effective Date: January 1, 2021

EXHIBIT D-6. FIXED INCOME CORE PLUS GUIDELINES

The investment actions of the Minnesota State Board of Investment (SBI) external core plus fixed income portfolio managers will be governed and evaluated by the following investment guidelines which are comprised of Parts A and B:

Part A:

A1. RISK/RETURN OBJECTIVES

The Manager will be evaluated, in part, based on performance in delivering cumulative returns, net of fees and expenses, in excess of a predetermined benchmark assigned to the Manager. The Manager is responsible for actively managing the absolute level and composition of the active risk of the Manager's portfolio relative to the benchmark. The Manager's objectives are:

A portfolio excess return above benchmark, net of fees and expenses, of at least 75 basis points (0.75%) over the most recent five-year period.

A portfolio information ratio of 0.50 or greater over the most recent five-year period, where the information ratio is the annualized excess return over the benchmark, net of fees and expenses, divided by the annualized standard deviation of excess returns over the benchmark.

Portfolio excess return and information ratio will also be monitored over rolling three-year, five-year and longer time periods to judge the consistency of the Manager's performance relative to expectations for the Manager's style. The Manager must notify and explain to SBI staff in the Quarterly Manager Commentary (see Investment Guidelines Part B, section B5(c)) any deviation from these objectives.

A2. BENCHMARK

The benchmark is the Bloomberg Barclays U.S. Aggregate Bond Index (Barclays Aggregate). The SBI reserves the right to change the benchmark upon notification to the Manager.

A3. LEVERAGE

The Manager may not leverage the portfolio at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the portfolio.

A4. ELIGIBLE INVESTMENTS

The Manager may purchase or sell fixed income instruments, foreign exchange (FX), and interest rate derivatives, credit derivatives and FX-related derivatives. All securities held must be covered by the authorization in *Minnesota Statutes Chapter 11A.24*. The investments must satisfy the following criteria:

- (a) Governmental bonds, notes, bills, mortgages, and other evidences of indebtedness, including guaranteed or insured issues of:
 - (1) the United States, its agencies, its instrumentalities, or organizations created and regulated by an act of Congress;
 - (2) Canada and its provinces, provided the principal and interest is payable in United States dollars; and
 - (3) the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, or any other United States Government sponsored organization of which the United States is a member.
- (b) Fixed income securities issued by any U.S. state, U.S. territory, or any municipality, political subdivision, agency or instrumentality thereof, provided that:
 - (1) such securities may not be purchased by the Manager directly from the issuer or the issuer's agent, such as an underwriter or underwriting syndicate; and
 - (2) all purchases of securities under this subdivision must be transacted in the secondary market.
- (c) Securities issued or guaranteed by a corporation or Real Estate Investment Trust (REIT) organized under the laws of the United States or any state thereof, or the Dominion of Canada or any province thereof.
- (d) Yankee bonds, Eurodollar bonds and other U.S. dollar-denominated obligations issued or guaranteed by companies domiciled in a developed market country other than the U.S. or Canada.
- (e) Supranational, or sovereign debt obligations of governments other than the U.S. or Canada and denominated in U.S. dollars, including debt of subdivisions, government agencies, and government-owned or government-sponsored enterprises.
- (f) Non-U.S. dollar denominated sovereign, corporate or supranational bonds from developed markets as determined by MSCI's Market Classification and included

in the MSCI World Index, including debt of subdivisions, government agencies, and government-owned or government-sponsored enterprises.

- (g) Emerging market debt securities in the form of hard currency (U.S. dollar or Euro denominated) sovereign, or corporate debt, or local currency sovereign debt. The security's country of issuance must be included as a member country in the JPM EMBI Global, JPM GBI-EM Global or JPM CEMBI index. For the avoidance of doubt, local currency corporate debt is prohibited.
- (h) Foreign currency spot and forward transactions in eligible markets as outlined under section A4(f) and section A4(g) above
- (i) Bank Loans
- (j) Collateralized Loan Obligations (CLO's)
- (k) Asset-backed securities
- (l) Agency mortgage and commercial mortgage backed securities, including TBA mortgages, and REMIC/CMO trusts
- (m) Non-Agency mortgage-backed securities, including residential and commercial mortgage securitizations
- (n) Securities issued under Rule 144A
- (o) Fixed income related ETFs, excluding leveraged and inverse ETFs
- (p) Preferred securities and contingent convertible bonds (co-cos) of eligible companies are permitted with the following constraints:
 - (1) The issue may not be convertible into common stock; and
 - (2) The total exposure to such securities may not exceed 5% of the value of the portfolio on a market value basis.
- (q) Derivatives, including U.S. Treasury futures, Eurodollar futures, Fed Funds futures, SOFR futures, interest rate swaps, options on futures, options on interest rate swaps, credit default swap indices and currency forward contracts, currency futures and options on eligible currencies as outlined under section A4(f) and section A4(g) above, provided that:
 - (1) all derivatives must be traded on a contract market regulated by a governmental agency, or by a financial institution regulated by a governmental agency;

- (2) all derivatives listed in this section must be entered into and maintained with a fully offsetting amount of collateral as defined in section A5(f)(2) below; and
 - (3) the portfolio may not be leveraged in any way. Net long derivative contracts shall not constitute leverage providing the portfolio is managed within relevant portfolio limits contained within these guidelines.
- (r) Uninvested U.S. dollar cash reserves shall be invested in the SBI's STIF fund, managed by its custodian bank.

A5. INVESTMENT CONSTRAINTS AND LIMITATIONS

(a) Duration

The option-adjusted duration of the portfolio must be maintained within +/- 20% of the option-adjusted duration of the Barclays Aggregate Index.

(b) Credit Quality

- (1) All eligible investments must be rated at or above the minimum rating criteria outlined in the below table by at least one Nationally Recognized Statistical Ratings Organization (NRSRO) at time of purchase, Notwithstanding the foregoing, the Manager may invest up to 5% of the market value of the portfolio in non-rated corporate securities.

Sector	Minimum Rating
Government and municipal securities permitted under sections A4(a) and A4(b)	BBB-
Emerging Market corporate debt	BBB-
Non-agency MBS, CMBS, ABS (including CLOs)	BBB-
All other Securities	B-

- (2) Any security purchased in accordance with these investment guidelines that is subsequently downgraded below the required minimum rating for purchase may continue to be held, unless otherwise directed by the SBI.
- (3) The overall weighted portfolio credit quality must be a minimum of A-.

(c) Sector Concentration

The following sector concentration limits shall apply on an ongoing basis. Sectors not listed have no concentration limit unless otherwise noted within these investment guidelines.

Extended Sector	Maximum Market Value Percentage
Total Emerging Markets Debt (EMD) ¹	15%
Local Currency EM Debt Sublimit ¹	10%
Below Investment Grade Debt (Corporate Bonds, Preferred Securities, Bank Loans)	20%
Non-U.S. dollar denominated Developed Markets debt ¹	20%
Limit on total non-U.S. dollar exposure (Dev+EM local)¹	20%
Limit on all above Extended Sectors Combined¹	30%

¹ Includes underlying bond exposure and notional currency exposure from currency positions including currency forwards, futures and options. Long and short exposures in the same currency may be netted for the purposes of calculating these limits, but cross hedges or proxy hedges may not be netted against other exposures and shall be included using gross notional value.

(d) Issue and Issuer Concentration

- (1) Securities of a single issuer shall be limited to no more than 5% of the total market value of the portfolio measured at the time of purchase, excluding U.S. government securities allowed under section A4(a)(1), agency mortgage-backed and commercial mortgage-backed securities allowed under section A4(l) and cash reserves held in the SBI's STIF fund, managed by its custodian bank. In the case of securitized assets, the issuer shall be the specific issuing trust.
- (2) Securities issued or guaranteed by a corporation or REIT which are either rated below BBB- or not rated by at least one Nationally Recognized Statistical Ratings Organization (NRSRO) at time of purchase are subject to the following limitations:
 - (i) participation shall be limited to 20% of a single offering; and
 - (ii) securities of a single issuer shall be limited to 10% of the issuer's total outstanding obligations, measured at the time of purchase.

(e) Currency

- (1) Currency exposure may be obtained through underlying physical securities, long outright currency positions or long or short positions in currency derivatives including currency forwards, futures and options.
- (2) Currency derivatives, including currency forwards may be used to adjust the effective non-U.S. currency exposure of the portfolio. The Manager is permitted to hedge all or any portion of the non-U.S. currency exposure back to the U.S. dollar, and may also employ net short currency positions as part of a bona fide cross-hedging or proxy-hedging strategy.

Additionally, the manager may increase the exposure to any non-U.S. currency of an eligible market beyond that established by the security holdings of the portfolio.

- (3) The total net non-U.S. currency exposure of all securities and currency derivatives may not exceed the non-U.S. dollar exposure limits set forth in section A5(c) in these investment guidelines.

(f) Derivative Guidelines

(1) Maximum Exposure

Total net notional exposure from all derivative contracts must be less than 50% of the Manager's portfolio net asset value and the total net contribution to duration exposure from all derivative positions must be less than 50% of the Portfolio's duration.

Total exposure due to derivative contracts will be calculated on a net notional value basis. All futures contracts will use their current price to calculate the net notional value.

For the purposes of calculating notional exposure for Eurodollar futures, Fed Funds futures and SOFR futures, the notional exposure shall be equal to the net notional value of the contract multiplied by the standard contract term length expressed in fractional years.

For the purposes of calculating total net notional exposure for options, all puts and calls sold by the Manager will have a notional value equal to the current notional value of the underlying contract, and all puts and calls purchased by the Manager will have a notional value of zero.

(2) Collateral Guidelines

All derivatives positions must be fully collateralized by cash, cash equivalents and highly liquid, short term securities, defined as:

- (i) Net cash, including payables and receivables and uninvested cash reserves held in the SBI's STIF fund, managed by its custodian bank;
- (ii) All U.S. Treasury securities (including US. Treasury Inflation Indexed Securities) with an effective duration of five years or less;
- (iii) All investment grade securities with an effective duration and spread duration of one year or less; and

- (iv) Any security or currency position that will satisfy the good delivery requirement for a derivative contract or forward contract currently being held in the Manager's portfolio.
- (3) Derivative Contracts Subject to the Above Constraints

The following derivative contracts are subject to the above constraints:

- (i) Interest rate futures, including U.S. Treasury futures, Eurodollar futures, Fed Funds futures, and SOFR futures;
- (ii) Interest rate options on U.S. Treasury futures, Eurodollar futures, Fed Funds futures and SOFR futures;
- (iii) Interest rate swaps and credit default swap indices;
- (iv) Currency futures and currency options;
- (v) Currency forward contracts are exempt from the overall concentration restrictions in section A5(f)(1), but are subject to the Collateral Guidelines in section A5(f)(2); and
- (vi) TBA mortgages are exempt from the overall concentration restrictions in section A5(f)(1), but are subject to the Collateral Guidelines in section A5(f)(2).

A6. PROHIBITED INVESTMENTS

The Manager is prohibited from investing in the following:

- (a) Any security issued by the State of Minnesota, its agencies, authorities, instrumentalities and other related entities including, but not limited to, the following:
 - Minnesota Management and Budget
 - Minnesota Housing Finance Agency
 - Minnesota Office of Higher Education
 - Minnesota State Colleges and Universities
 - Minnesota Higher Education Facilities Authority
 - Minnesota State Armory Building Commission
 - Minnesota Rural Finance Authority
 - Minnesota Public Facilities Authority
 - Minnesota Agricultural and Economic Development Authority – conduit borrower
 - Iron Range Resources and Rehabilitation
 - Metropolitan Airports Commission
 - Metropolitan Council
 - University of Minnesota

This prohibition also extends to debt obligations for which the State of Minnesota, its agencies, authorities, instrumentalities and other related entities is a conduit borrower or lessee in a lease-purchase transaction including, but not limited to, the following:*

- Port Authority of the City of St. Paul - \$52,900,000 Lease Revenue Refunding Bonds, Series 2013-2
- Port Authority of the City of St. Paul - \$62,860,000 Lease Revenue Refunding Bonds, Series 2013-3
- City of Bemidji, Minnesota - \$6,395,000 Lease Revenue Refunding Bonds, Series 2016

Additionally, prohibited is the purchase of any security issued by any city, county or school district within the State of Minnesota.*

*** If there is any uncertainty related to this prohibition and its application to a particular security under consideration, the manager shall not purchase the security in question.**

- (b) Any security types not specifically authorized in section A4 are prohibited from purchase without the SBI's prior written authorization.
- (c) The Manager may not purchase securities from the SBI's List of Unauthorized Investments. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided.
- (d) The Manager may not short individual securities, except that short positions in derivatives are permitted as long as the position meets the derivatives exposure and collateral requirements in section A5(f) above, and, in the case of currency forwards, futures and options, also meets the requirements in section A5(e) above.

A7. COUNTERPARTY BANKS

Each counterparty bank used by the Manager to execute currency spot and forward transactions, except for currency transactions settled via Continuous Linked Settlement (CLS), must have a long-term credit rating of A- or its equivalent or better from at least two of the following rating organizations: S&P, Moody's, or Fitch. Prior written authorization is required to execute currency transactions with counterparty banks whose long term credit ratings do not meet this requirement.

Any agreement entered into by the Manager on behalf of the SBI's account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that the SBI's liability for settlement, commissions and fees is limited solely to funds of the SBI under the Manager's control and does not constitute a general obligation of the State of Minnesota.

The Manager is responsible for monitoring the counterparty credit ratings of each counterparty bank and/or counterparty group, and the Manager will promptly notify the SBI of any ratings downgrade of an active or approved counterparty below the minimum required level.

A8. QUALIFIED INSTITUTIONAL BUYER

SBI is a Qualified Institutional Buyer ("QIB") as such term is defined in Rule 144A(a)(1)(i) of the General Rules and Regulations under the Securities Act of 1933 (17 CFR Part 230.144A). SBI agrees to promptly notify the Manager in writing, if SBI ceases to be a QIB and further agrees to provide such evidence of its status as a QIB as the Manager may reasonably request from time to time.

A9. ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) CONSIDERATIONS

The manager is expected to incorporate environmental, social and governance (ESG) considerations broadly into their investment portfolio or process.

A10. REPORTING

- (a) The Manager shall provide the SBI staff with a "Derivative Report" within ten (10) business days after month end. The report should show each derivative contract, the number of contracts, the total notional value for each contract, and the total contribution to duration for each contract. The report should also show which contracts offset each other to calculate the total net notional value of the portfolio. The SBI reserves the right to ask for a "Derivative Report" at any time during the month. The report should also show the portfolio assets that qualify as collateral, as defined in section A5(f)(2), including the duration and market value of each security counted as collateral.
- (b) The Manager shall provide the SBI staff with a "Downgrade Report" within ten (10) business days after month end. The report should list all securities held within the portfolio which have been downgraded subsequent to purchase and which carry a prevailing rating below the required minimum rating for purchase. The report should provide security identifier, security description, coupon, maturity date, market price, par amount and market value held in the portfolio, both in dollars and expressed as a percentage of the total portfolio. The report should provide the current rating, as well as the previous rating, and the effective date of the change.
- (c) The Manager shall provide the SBI staff with a report within ten (10) business days after month end showing the following information:
 - (1) a sector, quality and maturity breakdown on both a percent of market value basis and on a contribution to duration basis for the SBI portfolio, the benchmark and the difference between the two. In the sector breakdown, sub-total categories showing the total allocation to each of the extended sectors (e.g. non-dollar developed market bonds, emerging

markets debt and below investment grade debt) must be included. All figures should be reported to two decimal places.

- (2) a portfolio characteristics summary showing the option-adjusted duration, convexity, spread duration, term to maturity, average quality, yield to maturity, option-adjusted spread and average coupon for the SBI portfolio and the benchmark.
- (3) a comparison of the SBI's portfolio to the benchmark by sector, maturity, country and currency, the percentage difference between the portfolio and benchmark, and a column showing the guideline constraints.
- (4) the 1-month, 3-month, YTD, 1-year, 3-year, 5-year, 10-year and since inception performance of the portfolio on a net of fees basis, the benchmark return for each period and a line showing value added. For periods one year and longer, the report should include the portfolio's realized tracking error and information ratio relative to the benchmark and the portfolio's Sharpe ratio.
- (5) a breakdown of risk budget, and the proportion of budget attributable to top-down factors (duration, curve) and bottom-up factors (security selection, sector rotation) or equivalent categorizations.

Investment Guidelines Effective Date: October 1, 2020

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: PUBLIC EQUITY, FIXED INCOME AND ASSIGNED RISK PLAN

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All securities held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles may not be held in the Account without the prior written approval of the SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement entered into by the Manager on behalf of the Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolio at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the Account.

The Manager may not short individual securities, except that short positions in allowable derivatives are permitted as long as such positions meet all derivatives exposure and collateral requirements outlined in Part A of the guidelines.

B5. COMMUNICATION

The SBI requires its investment managers to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI Staff and shall complete and return the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI Staff, whichever is later.
- (c) The Manager is expected to provide SBI staff with a "Manager Commentary" as described in the SBI's Manager Continuation Policy, within ten (10) business days after quarter-end. The Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving any issuer of securities held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (1) **Share and Pricing Reconciliation**—the Manager must reconcile with the custodial bank share and price values using mystatestreet.com data and utilize the template provided by State Street. The reconciliations must be completed at least on a monthly basis. The Manager must email their completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the first business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the number of shares for each security between the Managers' records and State Street's, and any differences must be reconciled. If a discrepancy exists you must contact your daily State Street representative to resolve the issue. The reconciliation should also

include the identification of security price differences of 3% or greater at the security level. The Manager should reconcile cash as an individual holding.

- (2) **Performance & Net Asset Value Comparison**—the Manager must provide preliminary net asset values and month-to-date performance along with your share and price reconciliation. This report must be completed using data for the previous month. The Manager will include this information on the share and pricing reconciliation and will email the completed reconciliation to your daily State Street representative no later than the first business day of the following month by 5:00 PM EST. Net asset values are comprised of the total market value of the entire fund, plus all open trades and pending income.
- (b) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (c) **Daily Pricing Requests**—The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual security pricing requests, the Manager may send a comprehensive holdings report—with shares and prices—to the custodian bank on a daily basis as long as it is submitted before the 5:00 PM EST deadline.
- (d) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the custodian bank. The Manager may appeal to the SBI if the Manager and custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to the SBI in the quarterly Manager Commentary whether or not the Manager agrees with the Custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must immediately inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these guidelines and has been in compliance over the last three months. If the Manager has violated the guidelines in the past three months and cannot certify compliance over this period, the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time. Managers will be notified in advance of changes to the investment guidelines.

Investment Guidelines Effective Date: October 1, 2020

EXHIBIT D-7. EXTERNAL MULTI-ASSET CREDIT PORTFOLIO MANAGERS

The investment actions of the Minnesota State Board of Investment (SBI) external multi asset credit fixed income portfolio managers will be governed and evaluated by the following investment guidelines which are comprised of Parts A and B:

Part A:

A1. RISK/RETURN OBJECTIVES

The Manager will be evaluated, in part, based on performance in delivering cumulative returns, net of fees and expenses, in excess of a predetermined benchmark assigned to the Manager. The Manager is responsible for actively managing the absolute level and composition of the active risk of the Manager's portfolio relative to the benchmark. The Manager's objectives are:

A portfolio excess return above benchmark, net of fees and expenses, of at least 125 basis points (1.25%) over the most recent five-year period.

A portfolio information ratio of 0.50 or greater over the most recent five-year period, where the information ratio is the annualized excess return over the benchmark, net of fees and expenses, divided by the annualized standard deviation of excess returns over the benchmark.

Portfolio excess return and information ratio will also be monitored over rolling three-year, five-year and longer time periods to judge the consistency of the Manager's performance relative to expectations for the Manager's style. The Manager must notify and explain to SBI staff in the Quarterly Manager Commentary (see Investment Guidelines Part B, section B5(c)) any deviation from these objectives.

A2. BENCHMARK

The benchmark will be blended as follows: (hereafter referred to as the Blended Benchmark)

- 33.4% BofA ML US High Yield BB-B Cash Pay Constrained Index (JUC4)
- 33.3% JPM EMBI Global Diversified Index (JPEIDIVR)
- 33.3% Credit Suisse Leverage Loan Index (CSLLLTOT)

The SBI reserves the right to change the benchmark upon notification to the Manager. Responsibility for calculation of the Blended Benchmark will lie with the SBI as a custodial performance function.

A3. LEVERAGE

The Manager may not leverage the portfolio at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the portfolio.

A4. ELIGIBLE INVESTMENTS

The Manager may purchase or sell fixed income or equity instruments, foreign exchange (FX), and interest rate derivatives, credit derivatives and FX-related derivatives. All securities held must be covered by the authorization in *Minnesota Statutes* Chapter 11A.24. The investments must satisfy the following criteria at time of acquisition:

- (a) Governmental bonds, notes, bills, mortgages, and other evidences of indebtedness, including guaranteed or insured issues of:
 - (1) the United States, its agencies, its instrumentalities, or organizations created and regulated by an act of Congress;
 - (2) Canada and its provinces, provided the principal and interest is payable in United States dollars; and
 - (3) the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, or any other United States Government sponsored organization of which the United States is a member.
- (b) Fixed income securities issued by any U.S. state, U.S. territory, or any municipality, political subdivision, agency or instrumentality thereof, provided that:
 - (1) such securities may not be purchased by the Manager directly from the issuer or the issuer's agent, such as an underwriter or underwriting syndicate; and
 - (2) all purchases of securities under this subdivision must be transacted in the secondary market.
- (c) Securities issued or guaranteed by a corporation or Real Estate Investment Trust (REIT) organized under the laws of the United States or any state thereof, or the Dominion of Canada or any province thereof.
- (d) Yankee bonds, Eurodollar bonds and other U.S. dollar-denominated obligations issued or guaranteed by companies domiciled in a developed market country other than the U.S. or Canada.

- (e) Supranational, or sovereign debt obligations of governments other than the U.S. or Canada and denominated in U.S. dollars, including debt of subdivisions, government agencies, and government-owned or government-sponsored enterprises.
- (f) Non-U.S. dollar denominated sovereign, corporate or supranational bonds from developed markets as determined by MSCI's Market Classification and included in the MSCI World Index, including debt of subdivisions, government agencies, and government-owned or government-sponsored enterprises.
- (g) Emerging market debt securities in the form of hard currency (U.S. dollar or Euro denominated) sovereign or quasi-sovereign debt, corporate debt or local currency sovereign debt. Either the security's country of issuance, country of domicile or country of risk must be included as a member country in the JPM EMBI Global Diversified Index, the JPM GBI-EM Global Index or JPM CEMBI Index. For the avoidance of doubt, local currency corporate debt is prohibited.
- (h) Foreign currency spot and forward transactions in eligible markets as outlined under section A4(f) and section A4(g) above
- (i) Bank Loans
- (j) Collateralized Loan Obligations (CLO's)
- (k) Asset-backed securities
- (l) Agency mortgage and commercial mortgage backed securities, including TBA mortgages and dollar rolls, and REMIC/CMO trusts
- (m) Non-Agency mortgage-backed securities, including residential and commercial mortgage securitizations
- (n) Securities issued under Rule 144A
- (o) Fixed income related ETFs, excluding leveraged and inverse ETFs
- (p) Preferred securities and contingent convertible bonds (co-cos) of eligible companies are permitted with the following constraints:
 - (1) The issue may not be convertible into common stock; and
 - (2) The total exposure to such securities may not exceed 5% of the value of the portfolio on a market value basis.
- (q) Restructuring securities, defined as:
 - (1) Any debt or equity instrument not otherwise eligible in guidelines where received in connection with a reorganization, restructuring or other

exchange transaction involving a pre-existing eligible investment under these Investment Guidelines; or

- (2) Any eligible investment where purchased or obtained in connection with or in anticipation of a recapitalization or other financial restructuring transaction involving a pre-existing investment.

With respect to equity restructuring securities, the Manager shall not at any time hold in the SBI's portfolio more than three (3) percent of the total outstanding shares of any corporation.

- (r) Derivatives, including U.S. Treasury futures, Eurodollar futures, Fed Funds futures, SOFR futures, interest rate swaps, options on futures, options on interest rate swaps, credit default swap indices and currency forward contracts, currency futures and options on eligible currencies as outlined under section A4(f) and section A4(g) above, provided that:
 - (1) all derivatives must be traded on a contract market regulated by a governmental agency, or by a financial institution regulated by a governmental agency;
 - (2) all derivatives listed in this section must be entered into and maintained with a fully offsetting amount of collateral as defined in section A5(f)(2) below; and
 - (3) the portfolio may not be leveraged in any way. Net long derivative contracts shall not constitute leverage providing the portfolio is managed within relevant portfolio limits contained within these guidelines.
- (s) Uninvested U.S. dollar cash reserves shall be invested in the SBI's STIF fund, managed by its custodian bank.

A5. INVESTMENT CONSTRAINTS AND LIMITATIONS

- (a) Duration

The option-adjusted duration of the portfolio must be maintained within +/-20% of the option-adjusted duration of the Blended Benchmark.

(b) Credit Quality

- (1) All eligible investments must be rated at or above the minimum rating criteria outlined in the below table by at least one Nationally Recognized Statistical Ratings Organization (NRSRO) at time of purchase, excluding non-rated corporate and restructuring securities.

Sector	Minimum Rating
Government and municipal securities permitted under sections A4(a) and A4(b)	BBB-
Emerging Market corporate debt	BBB-
Non-agency MBS, CMBS, ABS (including CLOs)	BBB-
All other Securities	CCC

- (2) Any security purchased in accordance with these investment guidelines that is subsequently downgraded below the required minimum rating for purchase or ratings withdrawn may continue to be held, unless otherwise directed by the SBI.
- (3) The overall weighted portfolio credit quality must be a minimum of B.

(c) Concentration Limits

The following concentration limits shall apply on an ongoing basis. Sectors not listed have no concentration limit unless otherwise noted within these investment guidelines.

Sector Limits	Max Market Value % (Band if range)
High Yield Corporate Debt	20% - 60%
Bank Loans	10% - 60%
Emerging Market Debt	10% - 60%
Emerging Market Corporate Debt Sub-limit	10%
Local Currency EM Debt Sub-limit	10%
Restructuring Securities A4(q)	3%
Non-U.S. dollar denominated Developed Markets debt ¹	20%
Limit on total non-U.S. dollar exposure (Dev+EM local)¹	20%

¹ Includes underlying bond exposure and notional currency exposure from currency positions including currency forwards, futures and options. Long and short exposures in the same currency may be netted for the purposes of calculating these limits, but cross hedges or proxy hedges may not be netted against other exposures and shall be included using gross notional value.

(d) Issue and Issuer Concentration

- (1) Securities of a single issuer shall be limited to no more than 5% of the total market value of the portfolio measured at the time of purchase, excluding U.S. government securities allowed under section A4(a)(1), agency mortgage-backed and commercial mortgage-backed securities allowed under section A4(l) and cash reserves held in the SBI's STIF fund, managed by its custodian bank. In the case of securitized assets, the issuer shall be the specific issuing trust.
- (2) Securities issued or guaranteed by a corporation or REIT which are either rated below BBB- or not rated by at least one Nationally Recognized Statistical Ratings Organization (NRSRO) at time of purchase are subject to the following limitations:
 - (iii) participation shall be limited to 20% of a single offering; and
 - (iv) securities of a single issuer shall be limited to 10% of the issuer's total outstanding obligations, measured at the time of purchase.

(e) Currency

- (1) Currency exposure may be obtained through underlying physical securities, long outright currency positions or long or short positions in currency derivatives including currency forwards, futures and options.
- (2) Currency derivatives, including currency forwards may be used to adjust the effective non-U.S. currency exposure of the portfolio. The Manager is permitted to hedge all or any portion of the non-U.S. currency exposure back to the U.S. dollar, and may also employ net short currency positions as part of a bona fide cross-hedging or proxy-hedging strategy. Additionally, the manager may increase the exposure to any non-U.S. currency of an eligible market beyond that established by the security holdings of the portfolio.
- (3) The total net non-U.S. currency exposure of all securities and currency derivatives may not exceed the non-U.S. dollar exposure limits set forth in section A5(c) in these investment guidelines.

(f) Derivative Guidelines

(1) Maximum Exposure

Total net notional exposure from all derivative contracts must be less than 50% of the Manager's portfolio net asset value and the total net contribution to duration exposure from all derivative positions must be less than 50% of the Portfolio's duration.

Total exposure due to derivative contracts will be calculated on a net notional value basis. All futures contracts will use their current price to calculate the net notional value.

For the purposes of calculating notional exposure for Eurodollar futures, Fed Funds futures and SOFR futures, the notional exposure shall be equal to the net notional value of the contract multiplied by the standard contract term length expressed in fractional years.

For the purposes of calculating total net notional exposure for options, all puts and calls sold by the Manager will have a notional value equal to the current notional value of the underlying contract, and all puts and calls purchased by the Manager will have a notional value of zero.

(2) Collateral Guidelines

All derivatives positions must be fully collateralized by cash, cash equivalents and highly liquid, short term securities, defined as:

- (iii) Net cash, including payables and receivables and uninvested cash reserves held in the SBI's STIF fund, managed by its custodian bank;
- (iv) All U.S. Treasury securities (including US. Treasury Inflation Indexed Securities) with an effective duration of five years or less;
- (iii) All investment grade securities with an effective duration and spread duration of one year or less; and
- (iv) Any security or currency position that will satisfy the good delivery requirement for a derivative contract or forward contract currently being held in the Manager's portfolio.

(3) Derivative Contracts Subject to the Above Constraints

The following derivative contracts are subject to the above constraints:

- (i) Interest rate futures, including U.S. Treasury futures, Eurodollar futures, Fed Funds futures, and SOFR futures;
- (ii) Interest rate options on U.S. Treasury futures, Eurodollar futures, Fed Funds futures and SOFR futures;
- (iv) Interest rate swaps and credit default swap indices;
- (iv) Currency futures and currency options;

- (v) Currency forward contracts and TBA mortgages are exempt from the overall concentration restrictions in section A5(f)(1), but are subject to the Collateral Guidelines in section A5(f)(2);

A6. PROHIBITED INVESTMENTS

The Manager is prohibited from investing in the following:

- (a) Any security issued by the State of Minnesota, its agencies, authorities, instrumentalities and other related entities including, but not limited to, the following:*

- Minnesota Management and Budget
- Minnesota Housing Finance Agency
- Minnesota Office of Higher Education
- Minnesota State Colleges and Universities
- Minnesota Higher Education Facilities Authority
- Minnesota State Armory Building Commission
- Minnesota Rural Finance Authority
- Minnesota Public Facilities Authority
- Minnesota Agricultural and Economic Development Authority – conduit borrower
- Iron Range Resources and Rehabilitation
- Metropolitan Airports Commission
- Metropolitan Council
- University of Minnesota

This prohibition also extends to debt obligations for which the State of Minnesota, its agencies, authorities, instrumentalities and other related entities is a conduit borrower or lessee in a lease-purchase transaction including, but not limited to, the following:*

- Port Authority of the City of St. Paul - \$52,900,000 Lease Revenue Refunding Bonds, Series 2013-2
- Port Authority of the City of St. Paul - \$62,860,000 Lease Revenue Refunding Bonds, Series 2013-3
- City of Bemidji, Minnesota - \$6,395,000 Lease Revenue Refunding Bonds, Series 2016

Additionally, prohibited is the purchase of any security issued by any city, county or school district within the State of Minnesota.*

*** If there is any uncertainty related to this prohibition and its application to a particular security under consideration, the manager shall not purchase the security in question.**

- (b) Any security types not specifically authorized in section A4 are prohibited from purchase without the SBI's prior written authorization.
- (c) The Manager may not purchase securities from the SBI's List of Unauthorized Investments. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided.
- (d) The Manager may not short individual securities, except that short positions in derivatives are permitted as long as the position meets the derivatives exposure and collateral requirements in section A5(f) above, and, in the case of currency forwards, futures and options, also meets the requirements in section A5(e) above.

A7. COUNTERPARTY BANKS

Each counterparty bank used by the Manager to execute currency spot and forward transactions, except for currency transactions settled via Continuous Linked Settlement (CLS), must have a long-term credit rating of A- or its equivalent or better from at least two of the following rating organizations: S&P, Moody's, or Fitch. Prior written authorization is required to execute currency transactions with counterparty banks whose long term credit ratings do not meet this requirement.

Any agreement entered into by the Manager on behalf of the SBI's account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that the SBI's liability for settlement, commissions and fees is limited solely to funds of the SBI under the Manager's control and does not constitute a general obligation of the State of Minnesota.

The Manager is responsible for monitoring the counterparty credit ratings of each counterparty bank and/or counterparty group, and the Manager will promptly notify the SBI of any ratings downgrade of an active or approved counterparty below the minimum required level.

A8. QUALIFIED INSTITUTIONAL BUYER

SBI is a Qualified Institutional Buyer ("QIB") as such term is defined in Rule 144A(a)(1)(i) of the General Rules and Regulations under the Securities Act of 1933 (17 CFR Part 230.144A). SBI agrees to promptly notify the Manager in writing, if SBI ceases to be a QIB and further agrees to provide such evidence of its status as a QIB as the Manager may reasonably request from time to time.

A9. ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) CONSIDERATIONS

The manager is expected to incorporate environmental, social and governance (ESG) considerations broadly into their investment portfolio or process.

A10. REPORTING

- (a) The Manager shall provide the SBI staff with a “Derivative Report” within ten (10) business days after month end. The report should show each derivative contract, the number of contracts, the total notional value for each contract, and the total contribution to duration for each contract. The report should also show which contracts offset each other to calculate the total net notional value of the portfolio. The SBI reserves the right to ask for a “Derivative Report” at any time during the month. The report should also show the portfolio assets that qualify as collateral, as defined in section A5(f)(2), including the duration and market value of each security counted as collateral.
- (b) The Manager shall provide the SBI staff with a “Downgraded and Restructured Securities Report” within ten (10) business days after month end. The report should list all securities held within the portfolio which have been downgraded, or are Restructuring Securities as defined in A4(q). The report should provide security identifier, security description, coupon, maturity date, market price, par amount and market value held in the portfolio, both in dollars and expressed as a percentage of the total portfolio. For downgraded securities, the report should provide the current rating, as well as the previous rating, and the effective date of the change. For restructurings, the report should list the par amount of the original performing security, final form and shares of investment (equity, warrants, etc.) and anticipated holding period.
- (c) The Manager shall provide the SBI staff with a report within ten (10) business days after month end showing the following information:
 - (1) a sector, quality and maturity breakdown on both a percent of market value basis and on a contribution to duration basis for the SBI portfolio, the benchmark and the difference between the two. In the sector breakdown, sub-total categories showing the total allocation to each of the extended sectors (e.g. corporate and local currency EMD, restructuring securities) must be included. All figures should be reported to two decimal places.
 - (2) a portfolio characteristics summary showing the option-adjusted duration, convexity, spread duration, term to maturity, average quality, yield to maturity, option-adjusted spread and average coupon for the SBI portfolio and the benchmark.
 - (3) a comparison of the SBI’s portfolio to the benchmark by sector, maturity, country and currency, the percentage difference between the

portfolio and benchmark, and a column showing the guideline constraints.

- (4) the 1-month, 3-month, YTD, 1-year, 3-year, 5-year, 10-year and since inception performance of the portfolio on a net of fees basis, the benchmark return for each period and a line showing value added. For periods one year and longer, the report should include the portfolio's realized tracking error and information ratio relative to the benchmark and the portfolio's Sharpe ratio.
- (5) a breakdown of risk budget, and the proportion of budget attributable to top-down factors (duration, curve) and bottom-up factors (security and issuer selection, sector and industry rotation) or equivalent categorizations.

Investment Guidelines Effective Date: December 1, 2020

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: PUBLIC EQUITY, FIXED INCOME AND ASSIGNED RISK PLAN

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All securities held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles may not be held in the Account without the prior written approval of the SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement entered into by the Manager on behalf of the Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolio at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the Account.

The Manager may not short individual securities, except that short positions in allowable derivatives are permitted as long as such positions meet all derivatives exposure and collateral requirements outlined in Part A of the guidelines.

B5. COMMUNICATION

The SBI requires its investment managers to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI Staff and shall complete and return the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI Staff, whichever is later.
- (c) The Manager is expected to provide SBI staff with a "Manager Commentary" as described in the SBI's Manager Continuation Policy, within ten (10) business days after quarter-end. The Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving any issuer of securities held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (1) **Share and Pricing Reconciliation**—the Manager must reconcile with the custodial bank share and price values using mystatestreet.com data and utilize the template provided by State Street. The reconciliations must be completed at least on a monthly basis. The Manager must email their completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the first business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the number of shares for each security between the Managers' records and State Street's, and any differences must be reconciled. If a discrepancy exists you must contact your daily State Street representative to resolve the issue. The reconciliation should also

include the identification of security price differences of 3% or greater at the security level. The Manager should reconcile cash as an individual holding.

- (2) **Performance & Net Asset Value Comparison**—the Manager must provide preliminary net asset values and month-to-date performance along with your share and price reconciliation. This report must be completed using data for the previous month. The Manager will include this information on the share and pricing reconciliation and will email the completed reconciliation to your daily State Street representative no later than the first business day of the following month by 5:00 PM EST. Net asset values are comprised of the total market value of the entire fund, plus all open trades and pending income.
- (e) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (f) **Daily Pricing Requests**—The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual security pricing requests, the Manager may send a comprehensive holdings report—with shares and prices—to the custodian bank on a daily basis as long as it is submitted before the 5:00 PM EST deadline.
- (g) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the custodian bank. The Manager may appeal to the SBI if the Manager and custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to the SBI in the quarterly Manager Commentary whether or not the Manager agrees with the Custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must immediately inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these guidelines and has been in compliance over the last three months. If the Manager has violated the guidelines in the past three months and cannot certify compliance over this period, the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time. Managers will be notified in advance of changes to the investment guidelines.

Investment Guidelines Effective Date: October 1, 2020

EXHIBIT D-8. EXTERNAL HIGH YIELD FIXED INCOME PORTFOLIO MANAGERS

The investment actions of the Minnesota State Board of Investment (SBI) external high yield fixed income portfolio managers will be governed and evaluated by the following investment guidelines which are comprised of Parts A and B:

Part A:

A1. RISK/RETURN OBJECTIVES

The Manager will be evaluated, in part, based on performance in delivering cumulative returns, net of fees and expenses, in excess of a predetermined benchmark assigned to the Manager. The Manager is responsible for actively managing the absolute level and composition of the active risk of the Manager's portfolio relative to the benchmark. The Manager's objectives are:

A portfolio excess return above benchmark, net of fees and expenses, of at least 75 basis points (0.75%) over the most recent five-year period.

A portfolio information ratio of 0.50 or greater over the most recent five-year period, where the information ratio is the annualized excess return over the benchmark, net of fees and expenses, divided by the annualized standard deviation of excess returns over the benchmark.

Portfolio excess return and information ratio will also be monitored over rolling three-year, five-year and longer time periods to judge the consistency of the Manager's performance relative to expectations for the Manager's style. The Manager must notify and explain to SBI staff in the Quarterly Manager Commentary (see Investment Guidelines Part B, section B5(c)) any deviation from these objectives.

A2. BENCHMARK

The benchmark is the ICE BofA US Cash Pay High Yield Constrained Index (JUCO Index). The SBI reserves the right to change the benchmark upon notification to the Manager.

A3. LEVERAGE

The Manager may not leverage the portfolio at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the portfolio.

A4. ELIGIBLE INVESTMENTS

The Manager may purchase or sell fixed income or equity instruments, foreign exchange (FX), and interest rate derivatives, credit derivatives and FX-related derivatives. All securities held must be covered by the authorization in *Minnesota Statutes Chapter 11A.24*. The investments must satisfy the following criteria at the time of acquisition:

- (a) Governmental bonds, notes, bills, mortgages, and other evidences of indebtedness, including guaranteed or insured issues of:
 - (1) the United States, its agencies, its instrumentalities, or organizations created and regulated by an act of Congress;
 - (2) Canada and its provinces, provided the principal and interest is payable in United States dollars; and
 - (3) the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, or any other United States Government sponsored organization of which the United States is a member.
- (b) Securities issued or guaranteed by a corporation or REIT organized under the laws of the United States or any state thereof, or the Dominion of Canada or any province thereof.
- (c) Bank Loans from developed markets as determined by MSCI's Market Classification and included in the MSCI World Index.
- (d) Securities issued under Rule 144A
- (e) Fixed income related ETFs, excluding leveraged and inverse ETFs
- (f) Restructuring Securities, as defined as:
 - (1) Any debt or equity instrument not otherwise eligible in guidelines where received in connection with a reorganization, restructuring or other exchange transaction involving a pre-existing eligible investment under these Investment Guidelines; or
 - (2) Any eligible investment where purchased or obtained in connection with or in anticipation of a recapitalization or other financial restructuring transaction involving a pre-existing investment.

- (g) Preferred securities and contingent convertible bonds (co-cos) of eligible companies are permitted but total exposure to such securities may not exceed 5% of the value of the portfolio on a market value basis.
- (h) Yankee bonds, Eurodollar bonds and other U.S. dollar-denominated obligations issued or guaranteed by companies domiciled in a developed market country other than the U.S. or Canada.
- (i) Supranational, or sovereign debt obligations of governments other than the U.S. or Canada and denominated in U.S. dollars, including debt of subdivisions, government agencies, and government-owned or government-sponsored enterprises
- (j) Non-U.S. dollar denominated sovereign, corporate or supranational bonds from developed markets as determined by MSCI's Market Classification and included in the MSCI World Index, including debt of subdivisions, government agencies, and government-owned or government-sponsored enterprises.
- (k) Derivatives, including U.S. Treasury futures, Eurodollar futures, Fed Funds futures, SOFR futures, interest rate swaps, options on futures, options on interest rate swaps, credit default swap indices and currency forward contracts, currency futures and options on eligible currencies as outlined under section A4(j) above, provided that:
 - (1) all derivatives must be traded on a contract market regulated by a governmental agency, or by a financial institution regulated by a governmental agency;
 - (2) all derivatives listed in this section must be entered into and maintained with a fully offsetting amount of collateral as defined in section A5(f)(2) below; and
 - (3) the portfolio may not be leveraged in any way. Net long derivative contracts shall not constitute leverage providing the portfolio is managed within relevant portfolio limits contained within these guidelines.
- (l) Uninvested U.S. dollar cash reserves shall be invested in the SBI's STIF fund, managed by its custodian bank.

A5. INVESTMENT CONSTRAINTS AND LIMITATIONS

(a) Duration

The effective duration of the portfolio must be maintained within +/- 25% of the effective duration of the JUCO Index.

(b) Credit Quality

- (1) All eligible investments must be rated at or above CCC- by at least one Nationally Recognized Statistical Ratings Organization (NRSRO) at time of purchase, excluding non-rated corporate and restructuring securities.
- (2) Securities issued or guaranteed by a corporation or REIT which are either rated below BBB- or not rated by at least one Nationally Recognized Statistical Ratings Organization (NRSRO) at time of purchase are subject to the following limitations:
 - (i) participation shall be limited to 20% of a single offering; and
 - (ii) securities of a single issuer shall be limited to 10% of the issuer's total outstanding obligations, measured at the time of purchase.
- (3) Any security purchased in accordance with these investment guidelines that is subsequently downgraded below the required minimum rating or ratings withdrawn, may continue to be held unless otherwise directed by the SBI.
- (4) The overall weighted portfolio credit quality must be a minimum of B-.
- (5) For the avoidance of doubt, none of the foregoing requirements in clauses (1) through (4) shall apply with respect to equity related Restructuring Securities.

(c) Portfolio Limitations*

	Market Value Limit
CCC+ Rated or below (rated by Moody's or S&P).	30%
Single Industry (GICS 6-Digit Code)	20%
Non-U.S. dollar investments	20%
Bank Loans	15%
Investment Grade Corporate Securities	15%
Single Issuer	5%
Government Securities under paragraph A3(a)	5%
Non-Rated Corporate Securities	5%
Restructuring Securities (Debt or Equity)	3%

*Portfolio limits apply at time of purchase

(d) Currency

- (1) Currency exposure may be obtained through underlying physical securities, long outright currency positions or long or short positions in currency derivatives including currency forwards, futures and options.
- (2) Currency derivatives, including currency forwards may be used to adjust the effective non-U.S. currency exposure of the portfolio. The Manager is permitted to hedge all or any portion of the non-U.S. currency exposure back to the U.S. dollar, and may also employ net short currency positions as part of a bona fide cross-hedging or proxy- hedging strategy.

(e) Derivative Guidelines

(1) Maximum Exposure

Total net notional exposure from all derivative contracts must be less than 50% of the Manager's portfolio net asset value and the total net contribution to duration exposure from all derivative positions must be less than 50% of the Portfolio's duration.

Total exposure due to derivative contracts will be calculated on a net notional value basis. All futures contracts will use their current price to calculate the net notional value.

For the purposes of calculating notional exposure for Eurodollar futures, Fed Funds futures and SOFR futures, the notional exposure shall be equal to the net notional value of the contract multiplied by the standard contract term length expressed in fractional years.

For the purposes of calculating total net notional exposure for options, all puts and calls sold by the Manager will have a notional value equal to the current notional value of the underlying contract, and all puts and calls purchased by the Manager will have a notional value of zero.

(2) Collateral Guidelines

All derivatives positions must be fully collateralized by cash, cash equivalents and highly liquid, short term securities, defined as:

- (i) Net cash, including payables and receivables and uninvested cash reserves held in the SBI's STIF fund, managed by its custodian bank;
- (ii) All U.S. Treasury securities (including US. Treasury Inflation Indexed Securities) with an effective duration of five years or less;
- (iii) All investment grade securities with an effective duration and spread duration of one year or less; and
- (iv) Any security or currency position that will satisfy the good delivery requirement for a derivative contract or forward contract currently being held in the Manager's portfolio.

(3) Derivative Contracts Subject to the Above Constraints

The following derivative contracts are subject to the above constraints:

- (i) Interest rate futures, including U.S. Treasury futures, Eurodollar futures, Fed Funds futures, and SOFR futures;
 - (ii) Interest rate options on U.S. Treasury futures, Eurodollar futures, Fed Funds futures and SOFR futures;
 - (iii) Interest rate swaps and credit default swap indices;
 - (iv) Currency futures and currency options;
- (f) Currency forward contracts are exempt from the overall concentration restrictions in section A5(e)(1), but are subject to the Collateral Guidelines in section A5(e)(2).

A6. PROHIBITED INVESTMENTS

The Manager is prohibited from investing in the following:

- (a) Any security issued by the State of Minnesota, its agencies, authorities, instrumentalities and other related entities including, but not limited to, the following:*
- Minnesota Management and Budget
 - Minnesota Housing Finance Agency
 - Minnesota Office of Higher Education
 - Minnesota State Colleges and Universities
 - Minnesota Higher Education Facilities Authority
 - Minnesota State Armory Building Commission
 - Minnesota Rural Finance Authority
 - Minnesota Public Facilities Authority
 - Minnesota Agricultural and Economic Development Authority – conduit borrower
 - Iron Range Resources and Rehabilitation
 - Metropolitan Airports Commission
 - Metropolitan Council
 - University of Minnesota

This prohibition also extends to debt obligations for which the State of Minnesota, its agencies, authorities, instrumentalities and other related entities is a conduit borrower or lessee in a lease-purchase transaction including, but not limited to, the following:*

- Port Authority of the City of St. Paul - \$52,900,000 Lease Revenue Refunding Bonds, Series 2013-2
- Port Authority of the City of St. Paul - \$62,860,000 Lease Revenue Refunding Bonds, Series 2013-3
- City of Bemidji, Minnesota - \$6,395,000 Lease Revenue Refunding Bonds, Series 2016

Additionally, prohibited is the purchase of any security issued by any city, county or school district within the State of Minnesota.*

*** If there is any uncertainty related to this prohibition and its application to a particular security under consideration, the Manager shall not purchase the security in question.**

- (b) Any security types not specifically authorized in section A4 are prohibited from purchase without the SBI's prior written authorization.

- (c) The Manager may not purchase securities from the SBI's List of Unauthorized Investments. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided.
- (d) The Manager may not short individual securities.
- (e) With respect to equity securities, the Manager shall not at any time hold in the SBI's portfolio more than three (3) percent of the total outstanding shares of any corporation.

A7. COUNTERPARTY BANKS

Each counterparty bank used by the Manager to execute currency spot and forward transactions, except for currency transactions settled via Continuous Linked Settlement (CLS), must have a long-term credit rating of A- or its equivalent or better from at least two of the following rating organizations: S&P, Moody's, or Fitch. Prior written authorization is required to execute currency transactions with counterparty banks whose long term credit ratings do not meet this requirement.

Any agreement entered into by the Manager on behalf of the SBI's Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that the SBI's liability for settlement, commissions and fees is limited solely to funds of the SBI under the Manager's control and does not constitute a general obligation of the State of Minnesota.

The Manager is responsible for monitoring the counterparty credit ratings of each counterparty bank and/or counterparty group, and the Manager will promptly notify the SBI of any ratings downgrade of an active or approved counterparty below the minimum required level.

A8. QUALIFIED INSTITUTIONAL BUYER

SBI is a Qualified Institutional Buyer ("QIB") as such term is defined in Rule 144A(a)(1)(i) of the General Rules and Regulations under the Securities Act of 1933 (17 CFR Part 230.144A). SBI agrees to promptly notify the Manager in writing, if SBI ceases to be a QIB and further agrees to provide such evidence of its status as a QIB as the Manager may reasonably request from time to time.

A9. ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) CONSIDERATIONS

The manager is expected to incorporate environmental, social and governance (ESG) considerations broadly into their investment portfolio or process.

A10. REPORTING

- (a) The Manager shall provide the SBI staff with a "Derivative Report" within ten (10) business days after month end. The report should show each derivative contract, the number of contracts, the total notional value for each contract, and the total

contribution to duration for each contract. The report should also show which contracts offset each other to calculate the total net notional value of the portfolio. The SBI reserves the right to ask for a "Derivative Report" at any time during the month. The report should also show the portfolio assets that qualify as collateral, as defined in section A5(e)(2), including the duration and market value of each security counted as collateral.

- (b) The Manager shall provide the SBI staff with a "Downgraded and Restructured Securities Report" within ten (10) business days after month end. The report should list all securities held within the portfolio which have been downgraded, or are Restructuring Securities as defined in A4(f). The report should provide security identifier, security description, coupon, maturity date, market price, par amount and market value held in the portfolio, both in dollars and expressed as a percentage of the total portfolio. For downgraded securities, the report should provide the current rating, as well as the previous rating, and the effective date of the change. For restructurings, the report should list the par amount of the original performing security, final form and shares of investment (equity, warrants, etc.) and anticipated holding period.
- (c) The Manager shall provide the SBI staff with a report within ten (10) business days after month end showing the following information:
 - (1) a sector, quality and maturity for the SBI portfolio, the benchmark and the difference between the two. In the sector breakdown, sub-total categories showing the total allocation to each of the extended sectors (e.g. Bank Loans, Government Securities) must be included. All figures should be reported to two decimal places.
 - (2) a portfolio characteristics summary showing the option-adjusted duration, convexity, spread duration, term to maturity, average quality, yield to maturity, option-adjusted spread and average coupon for the SBI portfolio and the benchmark.
 - (3) a comparison of the SBI's portfolio to the benchmark by industry, maturity, country and currency, the percentage difference between the portfolio and benchmark, and a column showing the guideline constraints.
 - (4) the 1-month, 3-month, YTD, 1-year, 3-year, 5-year, 10-year and since inception performance of the portfolio on a net of fees basis, the benchmark return for each period and a line showing value added. For periods one year and longer, the report should include the portfolio's realized tracking error and information ratio relative to the benchmark and the portfolio's Sharpe ratio.
 - (5) a breakdown of risk budget, and the proportion of budget attributable to key factors including security selection, industry/sector allocation or top down factors, if applicable.

Investment Guidelines Effective Date: December 1, 2020

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: PUBLIC EQUITY, FIXED INCOME AND ASSIGNED RISK PLAN

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All securities held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles may not be held in the Account without the prior written approval of the SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement entered into by the Manager on behalf of the Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolio at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the Account.

The Manager may not short individual securities, except that short positions in allowable derivatives are permitted as long as such positions meet all derivatives exposure and collateral requirements outlined in Part A of the guidelines.

B5. COMMUNICATION

The SBI requires its investment managers to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI Staff and shall complete and return the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI Staff, whichever is later.
- (c) The Manager is expected to provide SBI staff with a "Manager Commentary" as described in the SBI's Manager Continuation Policy, within ten (10) business days after quarter-end. The Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving any issuer of securities held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (1) **Share and Pricing Reconciliation**—the Manager must reconcile with the custodial bank share and price values using mystatestreet.com data and utilize the template provided by State Street. The reconciliations must be completed at least on a monthly basis. The Manager must email their completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the first business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the number of shares for each security between the Managers' records and State Street's, and any differences

must be reconciled. If a discrepancy exists you must contact your daily State Street representative to resolve the issue. The reconciliation should also include the identification of security price differences of 3% or greater at the security level. The Manager should reconcile cash as an individual holding.

- (2) **Performance & Net Asset Value Comparison**—the Manager must provide preliminary net asset values and month-to-date performance along with your share and price reconciliation. This report must be completed using data for the previous month. The Manager will include this information on the share and pricing reconciliation and will email the completed reconciliation to your daily State Street representative no later than the first business day of the following month by 5:00 PM EST. Net asset values are comprised of the total market value of the entire fund, plus all open trades and pending income.
- (b) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (c) **Daily Pricing Requests**—The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual security pricing requests, the Manager may send a comprehensive holdings report—with shares and prices—to the custodian bank on a daily basis as long as it is submitted before the 5:00 PM EST deadline.
- (d) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the custodian bank. The Manager may appeal to the SBI if the Manager and custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to the SBI in the quarterly Manager Commentary whether or not the Manager agrees with the Custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must promptly, upon becoming aware, inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these guidelines and has been in compliance over the last three months. If the Manager has violated the guidelines in the past three months and cannot certify compliance over this period,

the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time. Managers will be notified in advance of changes to the investment guidelines.

Investment Guidelines Effective Date: December 1, 2020

EXHIBIT D-9. EXTERNAL EMERGING MARKETS FIXED INCOME PORTFOLIO MANAGERS

The investment actions of the Minnesota State Board of Investment (SBI) external emerging markets fixed income portfolio managers will be governed and evaluated by the following investment guidelines which are comprised of Parts A and B:

Part A:

A1. RISK/RETURN OBJECTIVES

The Manager will be evaluated, in part, based on performance in delivering cumulative returns, net of fees and expenses, in excess of a predetermined benchmark assigned to the Manager. The Manager is responsible for actively managing the absolute level and composition of the active risk of the Manager's portfolio relative to the benchmark. The Manager's objectives are:

A portfolio excess return above benchmark, net of fees and expenses, of at least 125 basis points (1.25%) over the most recent five-year period.

A portfolio information ratio of 0.50 or greater over the most recent five-year period, where the information ratio is the annualized excess return over the benchmark, net of fees and expenses, divided by the annualized standard deviation of excess returns over the benchmark.

Portfolio excess return and information ratio will also be monitored over rolling three year, five-year and longer time periods to judge the consistency of the Manager's performance relative to expectations for the Manager's style. The Manager must notify and explain to SBI staff in the Quarterly Manager Commentary (see Investment Guidelines Part B, section B5(c)) any deviation from these objectives.

A2. BENCHMARK

The benchmark will be as follows: (hereafter referred to as the "Blended Benchmark")

- JP Morgan 50% GBI-EM GD + 50% EMBI GD (JEMBAGTU)

The SBI reserves the right to change the benchmark upon notification to the Manager. Responsibility for calculation of the blended benchmark will lie with the SBI as a custodial performance function.

A3. LEVERAGE

The Manager may not leverage the portfolio at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of

the obligations existing in the portfolio. Allowable derivatives positions, provided such positions are covered with a fully offsetting amount of collateral within the portfolio as defined in section A5(f)(2) of the investment guidelines, shall not constitute leverage.

A4. ELIGIBLE INVESTMENTS

The Manager may purchase or sell fixed income instruments, foreign exchange (FX), and interest rate derivatives, credit derivatives and FX-related derivatives. All securities held must be covered by the authorization in Minnesota Statutes Chapter 11A.24. The investments must satisfy the following criteria:

- (a) Emerging Market debt securities in the form of Hard Currency Sovereign or Quasi-Sovereign debt, Corporate debt or Local Currency Sovereign or Quasi-Sovereign debt. For the avoidance of doubt, Local Currency Corporate debt is prohibited.
- (b) Non-U.S. dollar denominated Sovereign, Quasi-Sovereign or Corporate or Supra-National debt securities from developed markets as determined by MSCI's Market Classification and included in the MSCI World Index, including debt of subdivisions, government agencies, and government-owned or government-sponsored enterprises.
- (c) Commercial paper, fixed time deposits, bankers' acceptances and money market instruments denominated in any currency.
- (d) Loans and related assignments and participations
- (e) Equity securities, including warrants, as well as securities of other investment companies that are of the type manager invests in directly.
- (f) Foreign currency spot and forward transactions including non-deliverable forwards in eligible markets as outlined under section A4(a) and section A4(b) above
- (g) Fixed income related ETFs, excluding leveraged and inverse ETFs and other pooled vehicles
- (h) Derivatives limited to the following: U.S. Treasury futures, Eurodollar futures, Fed Funds futures, SOFR futures, interest rate swaps, currency and cross-currency swaps, options on futures, options on interest rate swaps, credit default swap indices and currency forward contracts, currency futures and options on eligible currencies as outlined under section A4(a) and section A4(b) above, provided that:
 - (1) all derivatives must be traded on a contract market regulated by a governmental agency, or by a financial institution regulated by a governmental agency;

- (2) all derivatives listed in this section must be entered into and maintained with a fully offsetting amount of collateral within the portfolio as defined in section A5(f)(2) below; and
 - (3) the portfolio may not be leveraged in any way. Net long derivative contracts and hedges shall not constitute leverage providing the portfolio is managed within relevant portfolio limits contained within these guidelines.
- (i) Uninvested U.S. dollar cash reserves shall be invested in the SBI's STIF fund, managed by its custodian bank.

A5. INVESTMENT CONSTRAINTS AND LIMITATIONS

(a) Duration

The option-adjusted duration of the portfolio must be maintained within +/-20% of the option-adjusted duration of the Blended Benchmark.

(b) Credit Quality

- (1) All eligible securities must be rated at or above the minimum rating criteria of CCC by at least one Nationally Recognized Statistical Ratings Organization (NRSRO) at time of purchase. In the case of an unrated Sovereign security, the issuers rating can apply provided the security is expected take the same or a higher rating as the issuer. Pending a rating, the expected rating can be used. Notwithstanding the foregoing, the Manager may invest up to 5% of the market value of the portfolio in non-rated Corporates.
- (2) Any security purchased in accordance with these investment guidelines that is subsequently downgraded below the required minimum rating for purchase or where the rating is withdrawn may continue to be held, unless otherwise directed by the SBI.
- (3) The overall weighted portfolio credit quality must be a minimum of B-.

(c) Concentration Limits

The following concentration limits shall apply on an ongoing basis. Sectors not listed have no concentration limit unless otherwise noted within these investment guidelines.

Sector/Extended Sector	Maximum Market Value Percentage (or band if range)
Emerging Markets Hard Currency Investments	25% – 75%
Emerging Markets Local Currency Investments	25% - 75%
Hard Currency Corporate Debt Sublimit ¹	35%
Single Emerging Market ¹	25%
Equity Securities and Warrants A4(g)	3%
Single Local Currency ¹ unless over such amount is hedged to USD or Euro	15%

¹ Includes underlying bond exposure and notional currency exposure from currency positions including currency forwards, futures and options. Long and short exposures in the same currency may be netted for the purposes of calculating these limits, but cross hedges or proxy hedges may not be netted against other exposures and shall be included using gross notional value.

(d) Issue and Issuer Concentration

- (1) Securities of a single or Corporate issuer shall be limited to no more than 5% of the total market value of the portfolio measured at the time of purchase.

(e) Currency

- (1) Currency exposure may be obtained through underlying physical securities, long outright currency positions or long or short positions in currency derivatives including currency forwards, futures and options.
- (2) Currency derivatives, including currency forwards may be used to adjust the effective non-U.S. currency exposure of the portfolio. The Manager is permitted to hedge all or any portion of the non-U.S. currency exposure back to the U.S. dollar, and may also employ net short currency positions only as part of a bona fide cross-hedging or proxy-hedging strategy. Additionally, the Manager may increase the exposure to any non-U.S. currency of an eligible market beyond that established by the security holdings of the portfolio.

- (3) The total net non-U.S. currency exposure of all securities and currency derivatives may not exceed the non-U.S. dollar exposure limits set forth in section A5(c) in these investment guidelines.

(f) Derivative Guidelines

(1) Maximum Exposure

Total net notional exposure from all derivative contracts must be less than 50% of the Manager's portfolio net asset value and the total net contribution to duration exposure from all derivative positions must be less than 50% of the Portfolio's duration.

Total exposure due to derivative contracts will be calculated on a net notional value basis. All futures contracts will use their current price to calculate the net notional value.

For the purposes of calculating notional exposure for Eurodollar futures, Fed Funds futures and SOFR futures, the notional exposure shall be equal to the net notional value of the contract multiplied by the standard contract term length expressed in fractional years.

For the purposes of calculating total net notional exposure for options, all puts and calls sold by the Manager will have a notional value equal to the current notional value of the underlying contract, and all puts and calls purchased by the Manager will have a notional value of zero.

For the purposes of calculating net notional exposure for f/x forwards and non-deliverable forwards, offsetting exposures in the same currency may be netted. Net short f/x forwards, including non-deliverable forwards, used to hedge long underlying currency exposures in the portfolio's investments, may be netted against the value of such underlying investments for the calculation of net notional exposure.

(2) Collateral Guidelines

All net notional derivatives positions, netted in accordance with A5(f)(1) must be fully covered within the portfolio against the nominal value by cash, cash equivalents and highly liquid, short term securities, defined as:

- (i) Net cash, including payables and receivables and uninvested cash reserves held in the SBI's STIF fund, managed by its custodian bank;
- (ii) All investment grade securities with a maturity of one year or less;

The Manager will separately post and receive USD with OTC counterparties under the terms of the ISDA Master Agreement.

(3) Derivative Contracts Subject to the Above Constraints

The following derivative contracts are subject to the above constraints:

- (i) Interest rate futures, including U.S. Treasury futures, Eurodollar futures, Fed Funds futures, and SOFR futures;
- (ii) Interest rate options on U.S. Treasury futures, Eurodollar futures, Fed Funds futures and SOFR futures;
- (iii) Interest rate swaps and credit default swap indices;
- (iv) Currency futures and currency options;
- (v) Currency forward contracts are exempt from the overall concentration restrictions in section A5(f)(1), but are subject to the Collateral Guidelines in section A5(f)(2);

A6. PROHIBITED INVESTMENTS

The Manager is prohibited from investing in the following:

- (a) Any security issued by the State of Minnesota, its agencies, authorities, instrumentalities and other related entities including, but not limited to, the following:
 - Minnesota Management and Budget
 - Minnesota Housing Finance Agency
 - Minnesota Office of Higher Education
 - Minnesota State Colleges and Universities
 - Minnesota Higher Education Facilities Authority
 - Minnesota State Armory Building Commission
 - Minnesota Rural Finance Authority
 - Minnesota Public Facilities Authority
 - Minnesota Agricultural and Economic Development Authority – conduit borrower
 - Iron Range Resources and Rehabilitation
 - Metropolitan Airports Commission
 - Metropolitan Council
 - University of Minnesota

This prohibition also extends to debt obligations for which the State of Minnesota, its agencies, authorities, instrumentalities and other related entities is a conduit borrower or lessee in a lease-purchase transaction including, but not limited to, the following:*

- Port Authority of the City of St. Paul - \$52,900,000 Lease Revenue Refunding Bonds, Series 2013-2
- Port Authority of the City of St. Paul - \$62,860,000 Lease Revenue Refunding Bonds, Series 2013-3
- City of Bemidji, Minnesota - \$6,395,000 Lease Revenue Refunding Bonds, Series 2016

Additionally, prohibited is the purchase of any security issued by any city, county or school district within the State of Minnesota.*

• *** If there is any uncertainty related to this prohibition and its application to a particular security under consideration, the manager shall not purchase the security in question.**

- (b) Any security types not specifically authorized in section A4 are prohibited from purchase without the SBI's prior written authorization.
- (c) The Manager may not purchase securities from the SBI's List of Unauthorized Investments. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided.
- (d) The Manager may not short individual securities, except that short positions in derivatives are permitted as long as the position meets the derivatives exposure and collateral requirements in section A5(f) above, and, in the case of currency forwards, futures and options, also meets the requirements in section A5(e) above.

A7. COUNTERPARTY BANKS

Each counterparty bank used by the Manager to execute derivative transactions, currency spot and forward transactions, except for currency transactions settled via Continuous Linked Settlement (CLS), must have a long-term credit rating of A- or its equivalent or better from at least two of the following rating organizations: S&P, Moody's, or Fitch. Prior written authorization is required to execute currency transactions with counterparty banks whose long term credit ratings do not meet this requirement.

Any agreement entered into by the Manager on behalf of the SBI's account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that the SBI's liability for settlement, commissions and fees is limited solely to funds of the SBI under the Manager's control and does not constitute a general obligation of the State of Minnesota.

The Manager is responsible for monitoring the counterparty credit ratings of each counterparty bank and/or counterparty group, and the Manager will promptly notify the

SBI of any ratings downgrade of an active or approved counterparty below the minimum required level.

A8. QUALIFIED INSTITUTIONAL BUYER

SBI is a government instrumentality investing the assets of governmental plans and is a Qualified Institutional Buyer ("QIB") as such term is defined in Rule 144A(a)(1)(i) of the General Rules and Regulations under the Securities Act of 1933 (17 CFR Part 230.144A). SBI agrees to promptly notify the Manager in writing, if SBI ceases to be a QIB and further agrees to provide such evidence of its status as a QIB as the Manager may reasonably request from time to time.

A9. ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) CONSIDERATIONS

The Manager is expected to incorporate environmental, social and governance (ESG) considerations broadly into their investment portfolio or process.

A10. REPORTING

- (a) The Manager shall provide the SBI staff with a "Derivative Report" within fifteen (15) business days after month end. The report should show each derivative contract, the number of contracts, the total notional value for each contract, and the total contribution to duration for each contract. The report should also show which contracts offset each other to calculate the total net notional value of the portfolio. The SBI reserves the right to ask for a "Derivative Report" at any time during the month. The report should also show the portfolio assets that qualify as collateral, as defined in section A5(f)(2), including the duration and market value of each security counted as collateral.
- (b) The Manager shall provide the SBI staff with a "Downgrade Restructuring Report" within fifteen (15) business days after month end. The report should list all securities held within the portfolio which have been downgraded subsequent to purchase and which carry a prevailing rating below the required minimum rating for purchase. The report should provide security identifier, security description, coupon, maturity date, market price, par amount and market value held in the portfolio, both in dollars and expressed as a percentage of the total portfolio. The report should provide the current rating, as well as the previous rating, and the effective date of the change.
- (c) The Manager shall provide the SBI staff with a report within fifteen (15) business days after month end showing the following information:
 - (1) a sector, quality and maturity breakdown on both a percent of market value basis and on a contribution to duration basis for the SBI portfolio, the benchmark and the difference between the two. In the sector breakdown, sub-total categories showing the total allocation to each of the extended sectors (e.g. non-dollar developed market bonds, emerging markets debt

and below investment grade debt) must be included. All figures should be reported to two decimal places.

- (2) a portfolio characteristics summary showing the option-adjusted duration,, spread duration, term to maturity, average quality, yield to maturity, option-adjusted spread and average coupon for the SBI portfolio and the benchmark.
- (3) a comparison of the SBI's portfolio to the benchmark by sector, maturity, country and currency, the percentage difference between the portfolio and benchmark
- (4) the 1-month, 3-month, YTD, 1-year, 3-year, 5-year, 10-year and since inception performance of the portfolio on a net of fees basis, the benchmark return for each period and a line showing value added. For periods one year and longer, the report should include the portfolio's realized tracking error and information ratio relative to the benchmark and the portfolio's Sharpe ratio.

11. DEFINITIONS

"Corporate" means an entity that is not a Sovereign or a Quasi Sovereign but is either domiciled in, or derives at least 50% of its revenues in or from, one or more Emerging Markets.

"Emerging Market": means any Sovereign included by the International Monetary Fund in its list of Emerging and Developing Economies, any country which is considered a Low-income, Lower-middle-income, or Upper-middle- income economy by the World Bank, any Sovereign which is included in an Emerging Market Index and any EM Supra-National.

"Emerging Market Index": means relevant indices in the family of J.P. Morgan Corporate Emerging Markets Bond Index, J.P. Morgan Emerging Local Markets Index, J.P. Morgan Emerging Markets Bond Index, J.P. Morgan Government Bond Index – Emerging Market and MSCI Emerging and Frontier Markets Index.

"EM Supra-National" means any Supra-National issuing in a Local Currency or linked to an Emerging Market Sovereign credit risk.

"Hard Currency" means USD or Euro currency.

"Local Currency" means the lawful currency of any Emerging Market provided that where such lawful currency is a Hard Currency then it shall be excluded.

"Quasi Sovereign" means an entity (including a local or regional governmental body) that is 100% guaranteed by a Sovereign or 100% directly or indirectly owned or controlled by a Sovereign. For the avoidance of doubt, a province and a city is classified as a Quasi Sovereign.

“Sovereign” means any Emerging Market or any EM Supra-National.

“Supra-National” means any supra-national entity or public international body to which one or more countries belong.

Investment Guidelines Effective Date: December 1, 2020

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: PUBLIC EQUITY, FIXED INCOME AND ASSIGNED RISK PLAN

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All securities held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles may not be held in the Account without the prior written approval of the SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement entered into by the Manager on behalf of the Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolio at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the Account.

Allowable derivatives positions, provided such positions are entered into and maintained with a fully offsetting amount of collateral as defined in section A5(f)(2) of the investment guidelines, shall not constitute leverage.

The Manager may not short individual securities, except that short positions in allowable derivatives are permitted as long as such positions meet all derivatives exposure and collateral requirements outlined in Part A of the guidelines.

B5. COMMUNICATION

The SBI requires its investment managers to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI Staff and shall complete and return the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI Staff, whichever is later.
- (c) The Manager is expected to provide SBI staff with a "Manager Commentary" as described in the SBI's Manager Continuation Policy, within fifteen (15) business days after quarter-end. The Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving any issuer of securities held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (1) **Share and Pricing Reconciliation**—the Manager must reconcile with the custodial bank share and price values using mystatestreet.com data and utilize the template provided by State Street. The reconciliations must be completed at least on a monthly basis. The Manager must email their completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the third business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the number of shares for each security between the Managers' records and State Street's, and any differences must be reconciled. If a discrepancy exists you must contact your daily State Street representative to resolve

the issue. The reconciliation should also include the identification of security price differences of 3% or greater at the security level. The Manager should reconcile cash as an individual holding.

Performance & Net Asset Value Comparison—the Manager must provide preliminary net asset values and month-to-date performance along with your share and price reconciliation. This report must be completed using data for the previous month. The Manager will include this information on the share and pricing reconciliation and will email the completed reconciliation to your daily State Street representative no later than the third business day of the following month by 5:00 PM EST. Net asset values are comprised of the total market value of the entire fund, plus all open trades and pending income.

- (b) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (c) **Daily Pricing Requests**—The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual security pricing requests, the Manager may send a comprehensive holdings report—with shares and prices—to the custodian bank on a daily basis as long as it is submitted before the 5:00 PM EST deadline.
- (d) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the custodian bank. The Manager may appeal to the SBI if the Manager and custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to the SBI in the quarterly Manager Commentary whether or not the Manager agrees with the Custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must immediately inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines. Unless otherwise prescribed elsewhere in the Investment Guidelines, the Manager shall cure all violations promptly or contact SBI to propose an alternative course of action.

If the Account fails to comply with the Investment Guidelines at any time for any reason beyond the Manager's reasonable control such as (but not limited to) market fluctuations and index rebalancing, the SBI acknowledges that it shall not be a breach of the Agreement. In such cases, the Manager will cause the Account to return to compliance with the Investment Guidelines promptly or contact SBI to propose an alternative course of action.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these guidelines and has been in compliance over the last three months. If the Manager has violated the guidelines in the past three months and cannot certify compliance over this period, the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time. Managers will be notified in advance of changes to the investment guidelines.

Investment Guidelines Effective Date: December 1, 2020

EXHIBIT D-10. FIXED INCOME OPPORTUNISTIC GUIDELINES

The investment actions of the Minnesota State Board of Investment (SBI) external opportunistic fixed income portfolio managers will be governed and evaluated by the following investment guidelines which are comprised of Parts A and B:

Part A:

A1. RISK/RETURN OBJECTIVES

The Manager will be evaluated, in part, based on performance in delivering cumulative returns, net of fees and expenses, in excess of a predetermined benchmark assigned to the Manager. The Manager is responsible for actively managing the absolute level and composition of the active risk of the Manager's portfolio relative to the benchmark. The Manager's objectives are:

A portfolio excess return above benchmark, net of fees and expenses, of at least 250 basis points (2.5%) over the most recent five-year period.

A portfolio information ratio of 0.50 or greater over the most recent five-year period, where the information ratio is the annualized excess return over the benchmark, net of fees and expenses, divided by the annualized standard deviation of excess returns over the benchmark.

Portfolio excess return and information ratio will also be monitored over rolling three-year, five-year and longer time periods to judge the consistency of the Manager's performance relative to expectations for the Manager's style. The Manager must notify and explain to SBI staff in the Quarterly Manager Commentary (see Investment Guidelines Part B, section B5(c)) any deviation from these objectives.

A2. BENCHMARK

The benchmark is ICE BofA U.S. 3-Month Treasury Bill Index. The SBI reserves the right to change the benchmark upon notification to the Manager.

A3. LEVERAGE

The Manager may not leverage the portfolio at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the portfolio.

A4. ELIGIBLE INVESTMENTS

The Manager may purchase or sell fixed income instruments, foreign exchange (FX), and interest rate derivatives, credit derivatives and FX-related derivatives. All securities held

must be covered by the authorization in *Minnesota Statutes Chapter 11A.24*. The investments must satisfy the following criteria:

- (a) Governmental bonds, notes, bills, mortgages, and other evidences of indebtedness, including guaranteed or insured issues of:
 - (1) the United States, its agencies, its instrumentalities, or organizations created and regulated by an act of Congress;
 - (2) Canada and its provinces, provided the principal and interest is payable in United States dollars; and
 - (3) the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, or any other United States Government sponsored organization of which the United States is a member.
- (b) Fixed income securities issued by any U.S. state, U.S. territory, or any municipality, political subdivision, agency or instrumentality thereof, provided that:
 - (1) such securities may not be purchased by the Manager directly from the issuer or the issuer's agent, such as an underwriter or underwriting syndicate; and
 - (2) all purchases of securities under this subdivision must be transacted in the secondary market.
- (c) Securities issued or guaranteed by a corporation or Real Estate Investment Trust (REIT) organized under the laws of the United States or any state thereof, or the Dominion of Canada or any province thereof.
- (d) Yankee bonds, Eurodollar bonds and other U.S. dollar-denominated obligations issued or guaranteed by companies domiciled in a developed market country other than the U.S. or Canada.
- (e) Supranational, or sovereign debt obligations of governments other than the U.S. or Canada and denominated in U.S. dollars, including debt of subdivisions, government agencies, and government-owned or government-sponsored enterprises.
- (f) Non-U.S. dollar denominated sovereign, corporate or supranational bonds from developed markets as determined by MSCI's Market Classification and included in the MSCI World Index, including debt of subdivisions, government agencies, and government-owned or government-sponsored enterprises.
- (g) Emerging market debt securities in the form of hard currency (U.S. dollar or Euro denominated) sovereign, or corporate debt, or local currency sovereign debt. The security's country of risk must be included as a member country in the JPM EMBI

Global, JPM GBI-EM Global or JPM CEMBI index. For the avoidance of doubt, local currency corporate debt is prohibited.

- (h) Foreign currency spot and forward transactions in eligible markets as outlined under section A4(f) and section A4(g) above
- (i) Bank Loans
- (j) Collateralized Loan Obligations (CLO's)
- (k) Asset-backed securities
- (l) Agency mortgage and commercial mortgage backed securities, including TBA mortgages, and REMIC/CMO trusts
- (m) Non-Agency mortgage-backed securities, including residential and commercial mortgage securitizations
- (n) Securities issued under Rule 144A
- (o) Fixed income related ETFs, including Affiliated Funds but excluding leveraged and inverse ETFs
- (p) Preferred securities and convertible bonds, including contingent convertible bonds (co-cos), are permitted, provided that the total exposure to such securities may not exceed 5% of the value of the portfolio on a market value basis.
- (q) Derivatives, including U.S. Treasury futures, Eurodollar futures, Fed Funds futures, SOFR futures, interest rate swaps, credit default swaps (synthetic indexes or synthetic single issuer), options (options on futures, swaps, and indices, including caps and floors) and currency forward contracts, currency futures and options on eligible currencies as outlined under section A4(f) and section A4(g) above, provided that:
 - (1) all derivatives must be traded on a contract market regulated by a governmental agency, or by a financial institution regulated by a governmental agency;
 - (2) all derivatives listed in this section must be entered into and maintained with a fully offsetting amount of collateral as defined in section A5(f)(2) below; and
 - (3) the portfolio may not be leveraged in any way. Net long derivative contracts shall not constitute leverage providing the portfolio is managed within relevant portfolio limits contained within these guidelines.
- (r) Repurchase Agreements that are backed by U.S. Treasuries, U.S. Government Agencies or Agency Mortgage-backed Securities and collateralized at a minimum of

102%. The maximum term of these agreements will be 90 days and the collateral must be marked to market daily.

- (s) Uninvested U.S. dollar cash reserves shall be invested in the SBI's STIF fund, managed by its custodian bank.
- (t) The Manager may purchase securities on a when-issued basis or for forward delivery.

A5. INVESTMENT CONSTRAINTS AND LIMITATIONS

(a) Duration

The option-adjusted duration of the portfolio, including the impact of all derivatives positions, must be maintained within a range of 0 – 4 years.

In addition, the contribution to the option-adjusted duration of the portfolio from the portfolio's exposure to bonds and cash, excluding the impact of all derivatives positions, must be less than or equal to six (6) years.

(b) Credit Quality

- (1) All eligible investments must be rated at or above the minimum rating criteria outlined in the below table by at least one Nationally Recognized Statistical Ratings Organization (NRSRO) at time of purchase, Notwithstanding the foregoing, the Manager may invest up to 5% of the market value of the portfolio in non-rated corporate securities.

Sector	Minimum Rating
Money Market instruments	A-2
Government and municipal securities permitted under sections A4(a) and A4(b)	BBB-
Non-agency MBS, CMBS, ABS (including CLOs)	BBB-
All other Securities	CCC-

- (2) Any security purchased in accordance with these investment guidelines that is subsequently downgraded below the required minimum rating for purchase may continue to be held, unless otherwise directed by the SBI.

(c) Sector Concentration

The following sector concentration limits shall apply on an ongoing basis. Sectors not listed have no concentration limit unless otherwise noted within these investment guidelines.

Sector Limits	Maximum Market Value Percentage
Non-U.S. dollar denominated debt	50%
Total Emerging Markets Debt (EMD)	30%
Maximum exposure to single EM country	10%
Net foreign exchange (FX) exposure (Developed + EM) ¹	10%
Total Below Investment Grade Debt (Corporate Bonds, Preferred Securities, Bank Loans, EMD)	60%

¹ Includes underlying bond exposure and notional currency exposure from currency positions including currency forwards, futures and options. Long and short exposures in the same currency may be netted for the purposes of calculating these limits, but cross hedges or proxy hedges may not be netted against other exposures and shall be included using gross notional value.

(d) Issue and Issuer Concentration

- (1) Securities of a single issuer shall be limited to no more than 5% of the total market value of the portfolio measured at the time of purchase, excluding U.S. government securities allowed under section A4(a)(1), agency mortgage-backed and commercial mortgage-backed securities allowed under section A4(l) and cash reserves held in the SBI's STIF fund, managed by its custodian bank. In the case of securitized assets, the issuer shall be the specific issuing trust.
- (2) Securities issued or guaranteed by a corporation or REIT which are either rated below BBB- or not rated by at least one Nationally Recognized Statistical Ratings Organization (NRSRO) at time of purchase are subject to the following limitations:
 - (i) participation shall be limited to 20% of a single offering; and
 - (ii) securities of a single issuer shall be limited to 10% of the issuer's total outstanding obligations, measured at the time of purchase.

(e) Currency

- (1) Currency exposure may be obtained through underlying physical securities, long outright currency positions or long or short positions in currency derivatives including currency forwards, futures and options.

- (2) Currency derivatives, including currency forwards may be used to adjust the effective non-U.S. currency exposure of the portfolio. The Manager is permitted to hedge all or any portion of the non-U.S. currency exposure back to the U.S. dollar, and may also employ net short currency positions as part of a bona fide cross-hedging or proxy-hedging strategy. Additionally, the Manager may increase the exposure to any non-U.S. currency of an eligible market beyond that established by the security holdings of the portfolio.
- (3) The total net non-U.S. currency exposure of all securities and currency derivatives may not exceed the net foreign exchange exposure limits set forth in section A5(c) in these investment guidelines.

(f) Derivative Guidelines

(1) Maximum Exposure

Total net notional exposure from all derivative contracts must be less than 100% of the Manager's portfolio net asset value, and if the total net contribution to duration exposure from derivatives is positive, the total net contribution to duration exposure from derivatives must not exceed 50% of the Portfolio's duration.

Total exposure due to derivative contracts will be calculated on a net notional value basis. All futures contracts will use their current price to calculate the net notional value.

For the purposes of calculating notional exposure for Eurodollar futures, Fed Funds futures and SOFR futures, the notional exposure shall be equal to the net notional value of the contract multiplied by the standard contract term length expressed in fractional years.

For the purposes of calculating total net notional exposure for options, all puts and calls sold by the Manager will have a notional value equal to the current notional value of the underlying contract, and all puts and calls purchased by the Manager will have a notional value of zero.

(2) Collateral Guidelines

All derivatives positions must be fully collateralized by cash, cash equivalents and highly liquid, short term securities, defined as:

- (i) Net cash, including payables and receivables and uninvested cash reserves held in the SBI's STIF fund, managed by its custodian bank;
- (ii) All U.S. Treasury securities (including US. Treasury Inflation Indexed Securities) with an effective duration of five years or less;

- (iii) All investment grade securities with an effective duration and spread duration of one year or less; and
 - (iv) Any security or currency position that will satisfy the good delivery requirement for a derivative contract or forward contract currently being held in the Manager's portfolio.
- (3) Derivative Contracts Subject to the Above Constraints
- The following derivative contracts are subject to the above constraints:
- (i) Interest rate futures, including U.S. Treasury futures, Eurodollar futures, Fed Funds futures, and SOFR futures;
 - (ii) Interest rate options on U.S. Treasury futures, Eurodollar futures, Fed Funds futures and SOFR futures;
 - (iii) Interest rate swaps and credit default swap indices;
 - (iv) Currency futures and currency options;
 - (v) Currency forward contracts are exempt from the overall concentration restrictions in section A5(f)(1), but are subject to the Collateral Guidelines in section A5(f)(2); and
 - (vi) TBA mortgages are exempt from the overall concentration restrictions in section A5(f)(1), but are subject to the Collateral Guidelines in section A5(f)(2).

A6. PROHIBITED INVESTMENTS

The Manager is prohibited from investing in the following:

- (a) Any security issued by the State of Minnesota, its agencies, authorities, instrumentalities and other related entities including, but not limited to, the following:*
- Minnesota Management and Budget
 - Minnesota Housing Finance Agency
 - Minnesota Office of Higher Education
 - Minnesota State Colleges and Universities
 - Minnesota Higher Education Facilities Authority
 - Minnesota State Armory Building Commission
 - Minnesota Rural Finance Authority
 - Minnesota Public Facilities Authority
 - Minnesota Agricultural and Economic Development Authority – conduit borrower

- Iron Range Resources and Rehabilitation
- Metropolitan Airports Commission
- Metropolitan Council
- University of Minnesota

This prohibition also extends to debt obligations for which the State of Minnesota, its agencies, authorities, instrumentalities and other related entities is a conduit borrower or lessee in a lease-purchase transaction including, but not limited to, the following:*

- Port Authority of the City of St. Paul - \$52,900,000 Lease Revenue Refunding Bonds, Series 2013-2
- Port Authority of the City of St. Paul - \$62,860,000 Lease Revenue Refunding Bonds, Series 2013-3
- City of Bemidji, Minnesota - \$6,395,000 Lease Revenue Refunding Bonds, Series 2016

Additionally, prohibited is the purchase of any security issued by any city, county or school district within the State of Minnesota.*

*** If there is any uncertainty related to this prohibition and its application to a particular security under consideration, the Manager shall not purchase the security in question.**

- (b) Any security types not specifically authorized in section A4 are prohibited from purchase without the SBI's prior written authorization.
- (c) The Manager may not purchase securities from the SBI's List of Unauthorized Investments. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided.
- (d) The Manager may not short individual securities, except that short positions in derivatives are permitted as long as the position meets the derivatives exposure and collateral requirements in section A5(f) above, and, in the case of currency forwards, futures and options, also meets the requirements in section A5(e) above.
- (e) Except for preferred securities and convertible bonds, including contingent convertible bonds (co-cos), authorized in section A4(p) above, equities and equity-linked securities are not allowed.

A7. COUNTERPARTY BANKS

Each counterparty bank used by the Manager to execute currency spot and forward transactions, except for currency transactions settled via Continuous Linked Settlement (CLS), must have a long-term credit rating of A- or its equivalent or better from at least two of the following rating organizations: S&P, Moody's, or Fitch. Prior written

authorization is required to execute currency transactions with counterparty banks whose long term credit ratings do not meet this requirement.

Any agreement entered into by the Manager on behalf of the SBI's account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that the SBI's liability for settlement, commissions and fees is limited solely to funds of the SBI under the Manager's control and does not constitute a general obligation of the State of Minnesota.

The Manager is responsible for monitoring the counterparty credit ratings of each counterparty bank and/or counterparty group, and the Manager will promptly notify the SBI of any ratings downgrade of an active or approved counterparty below the minimum required level.

A8. QUALIFIED INSTITUTIONAL BUYER

SBI is a Qualified Institutional Buyer ("QIB") as such term is defined in Rule 144A(a)(1)(i) of the General Rules and Regulations under the Securities Act of 1933 (17 CFR Part 230.144A). SBI agrees to promptly notify the Manager in writing, if SBI ceases to be a QIB and further agrees to provide such evidence of its status as a QIB as the Manager may reasonably request from time to time.

A9. ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) CONSIDERATIONS

The Manager is expected to incorporate environmental, social and governance (ESG) considerations broadly into their investment portfolio or process.

A10. REPORTING

- (a) The Manager shall provide the SBI staff with a "Derivative Report" within ten (10) business days after month end. The report should show each derivative contract, the number of contracts, the total notional value for each contract, and the total contribution to duration for each contract. The report should also show which contracts offset each other to calculate the total net notional value of the portfolio. The SBI reserves the right to ask for a "Derivative Report" at any time during the month. The report should also show the portfolio assets that qualify as collateral, as defined in section A5(f)(2), including the duration and market value of each security counted as collateral.
- (b) The Manager shall provide the SBI staff with a "Downgrade Report" within ten (10) business days after month end. The report should list all securities held within the portfolio which have been downgraded subsequent to purchase and which carry a prevailing rating below the required minimum rating for purchase. The report should provide security identifier, security description, coupon, maturity date, market price, par amount and market value held in the portfolio, both in dollars and expressed as a percentage of the total portfolio. The report should provide the current rating, as well as the previous rating, and the effective date of the change.

- (c) The Manager shall provide the SBI staff with a report within ten (10) business days after month end showing the following information:
- (1) a sector, quality and maturity breakdown on both a percent of market value basis and on a contribution to duration basis for the SBI portfolio, the benchmark and the difference between the two. In the sector breakdown, sub-total categories showing the total allocation to each of the extended sectors (e.g. non-dollar developed market bonds, emerging markets debt and below investment grade debt) must be included. All figures should be reported to two decimal places.
 - (2) a portfolio characteristics summary showing the option-adjusted duration, convexity, spread duration, term to maturity, average quality, yield to maturity, option-adjusted spread and average coupon for the SBI portfolio and the benchmark.
 - (3) a comparison of the SBI's portfolio to the benchmark by sector, maturity, country and currency, the percentage difference between the portfolio and benchmark, and a column showing the guideline constraints.
 - (4) the 1-month, 3-month, YTD, 1-year, 3-year, 5-year, 10-year and since inception performance of the portfolio on a net of fees basis, the benchmark return for each period and a line showing value added. For periods one year and longer, the report should include the portfolio's realized tracking error and information ratio relative to the benchmark and the portfolio's Sharpe ratio.
 - (5) a breakdown of risk budget, and the proportion of budget attributable to top-down factors (duration, curve) and bottom-up factors (security selection, sector rotation) or equivalent categorizations.

Investment Guidelines Effective Date: December 11, 2020

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: PUBLIC EQUITY, FIXED INCOME AND ASSIGNED RISK PLAN

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All securities held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles may not be held in the Account without the prior written approval of the SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement entered into by the Manager on behalf of the Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolio at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the Account.

The Manager may not short individual securities, except that short positions in allowable derivatives are permitted as long as such positions meet all derivatives exposure and collateral requirements outlined in Part A of the guidelines.

B5. COMMUNICATION

The SBI requires its investment managers to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI Staff and shall complete and return the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI Staff, whichever is later.
- (c) The Manager is expected to provide SBI staff with a "Manager Commentary" as described in the SBI's Manager Continuation Policy, within ten (10) business days after quarter-end. The Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving any issuer of securities held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (1) **Share and Pricing Reconciliation**—the Manager must reconcile with the custodial bank share and price values using mystatestreet.com data and utilize the template provided by State Street. The reconciliations must be completed at least on a monthly basis. The Manager must email their completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the first business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the number of shares for each security between the Managers' records and State Street's, and any differences must be reconciled. If a discrepancy exists you must contact your daily State Street representative to resolve the issue. The reconciliation should also include the identification of security price differences of 3% or greater at the security level. The Manager should reconcile cash as an individual holding.
 - (2) **Performance & Net Asset Value Comparison**—the Manager must provide preliminary net asset values and month-to-date performance along with your share and price reconciliation. This report must be completed using

data for the previous month. The Manager will include this information on the share and pricing reconciliation and will email the completed reconciliation to your daily State Street representative no later than the first business day of the following month by 5:00 PM EST. Net asset values are comprised of the total market value of the entire fund, plus all open trades and pending income.

- (b) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (1) **Daily Pricing Requests**—The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual security pricing requests, the Manager may send a comprehensive holdings report—with shares and prices—to the custodian bank on a daily basis as long as it is submitted before the 5:00 PM EST deadline.
- (2) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the custodian bank. The Manager may appeal to the SBI if the Manager and custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to the SBI in the quarterly Manager Commentary whether or not the Manager agrees with the Custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must immediately inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these guidelines and has been in compliance over the last three months. If the Manager has violated the guidelines in the past three months and cannot certify compliance over this period, the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time. Managers will be notified in advance of changes to the investment guidelines.

Investment Guidelines Effective Date: December 11, 2020

EXHIBIT D-11. FIXED INCOME SHORT DURATION LADDER GUIDELINES

The investment actions of the Minnesota State Board of Investment (SBI) external short duration Treasury ladder portfolio managers will be governed and evaluated by the following investment guidelines which are comprised of Parts A and B:

Part A:

A1. RISK/RETURN OBJECTIVES

The primary objectives of the portfolio are to *preserve the value and safety of principal and provide liquidity consistent with the maturity profile of the custom liability benchmark provided by the SBI*. While emphasizing these objectives, the manager should seek to maximize the rate of return on investment with the goal of outperforming the benchmark on a net of fees basis. Performance will be analyzed across a range of time periods, with emphasis placed on a rolling 3-year and rolling 5-year returns.

A2. BENCHMARKS

The performance benchmark is the ICE BofA 3-Month Treasury Bill Index. The SBI reserves the right to change the benchmark upon notification to the Manager.

Additionally, the manager shall seek to align the portfolio's maturity profile with the custom liability benchmark. The SBI shall provide the manager with an updated custom liability benchmark representing the schedule of expected portfolio withdrawals on at least a quarterly basis. The custom liability benchmark should be used for portfolio risk management and relative positioning comparisons.

A3. LEVERAGE

The Manager may not leverage the portfolio at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the portfolio.

A4. ELIGIBLE INVESTMENTS

The Manager may purchase or sell fixed income instruments and interest rate derivatives. All securities held must be covered by the authorization in Minnesota Statutes Chapter 11A.24. The investments must satisfy the following criteria:

- (a) Governmental bonds, notes, bills, mortgages, and other evidences of indebtedness, including guaranteed or insured issues of:
 - (1) the United States, its agencies, its instrumentalities, or organizations created and regulated by an act of Congress;

- (2) Canada and its provinces, provided the principal and interest is payable in United States dollars; and
 - (3) the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, or any other United States Government sponsored organization of which the United States is a member.
- (b) Fixed income securities issued by any U.S. state, U.S. territory, or any municipality, political subdivision, agency or instrumentality thereof, provided that:
 - (1) such securities may not be purchased by the Manager directly from the issuer or the issuer's agent, such as an underwriter or underwriting syndicate; and
 - (2) all purchases of securities under this subdivision must be transacted in the secondary market.
- (c) Securities issued or guaranteed by a corporation or Real Estate Investment Trust (REIT) organized under the laws of the United States or any state thereof, or the Dominion of Canada or any province thereof, including commercial paper, asset backed commercial paper and eligible private placements.
- (d) Corporate obligations, including commercial paper, asset backed commercial paper and eligible private placements, issued or guaranteed by companies domiciled in a country other than the U.S. or Canada.
- (e) Banker's acceptances (BAs), bank notes, medium term notes (MTN), certificates of deposit and other deposit notes of financial institutions subject to the regulatory authority of the U.S. Federal Reserve System or, for financial institutions domiciled outside the U.S., subject to the prevailing regulatory authority of the financial institution's country of domicile.
- (f) Repurchase Agreements that are backed by U.S. Treasuries, U.S. Government Agencies or Agency Mortgage-backed Securities and collateralized at a minimum of 102%.
- (g) Asset-backed securities
- (h) Non-Agency mortgage-backed securities, including residential and commercial mortgage securitizations
- (i) Supranational or sovereign debt obligations of governments other than the U.S. or Canada, including debt of subdivisions, government agencies, and government-owned or government-sponsored enterprises.
- (j) Securities issued under Rule 144A.

- (k) Interest rate derivatives including U.S. Treasury futures, Eurodollar futures, Fed Funds futures, SOFR futures, interest rate swaps, options on futures and options on interest rate swaps, provided that:
 - (1) All derivatives must be traded on a contract market regulated by a governmental agency, or by a financial institution regulated by a governmental agency;
 - (2) All derivatives listed in this section must be entered into and maintained with a fully offsetting amount of collateral as defined in section A5(f)(2) below; and
 - (3) The portfolio may not be leveraged in any way. Net long derivative contracts shall not constitute leverage providing the portfolio is managed within relevant portfolio limits contained within these investment guidelines.
- (l) Uninvested cash reserves shall be invested in the SBI's STIF fund, managed by its custodian bank.

A5. INVESTMENT CONSTRAINTS AND LIMITATIONS

(a) Maturity and Duration

The manager shall seek to invest the portfolio in a laddered maturity style consistent with the custom liability benchmark such that portfolio maturities are sufficient to meet expected withdrawals. In addition:

- (1) The option-adjusted duration of the portfolio must be maintained within +/- 0.25 years of the duration of the prevailing custom liability benchmark.
- (2) The maximum maturity for an individual security shall be 2 years from the settlement date of purchase. For securities with put features, the put date shall be considered the final maturity date. For amortizing assets, the security's weighted-average life (WAL) shall be used as the measure of maturity date. A security with a variable rate feature or demand feature shall be deemed to have a maturity date equal to the period remaining until the next reset date or the next date on which the principal may be recovered on demand. A callable security, for which the call option has been exercised by the issuer, shall be deemed to have a maturity equal to the call date.

(b) Credit Quality

- (1) All securities must be rated by at least one Nationally Recognized Statistical Rating Organization (NRSRO), and all ratings criteria shall be applied only at the time of purchase.

- (2) Short-term securities must be rated no lower than A-1 or its equivalent at the time of purchase by any of S&P, Moody's or Fitch.
 - (3) Long-term securities must be rated A- or its equivalent or higher at the time of purchase by at least one Nationally Recognized Statistical Rating Organization (NRSRO).
 - (4) Asset-backed securities and non-agency mortgage-backed securities must be rated AAA or its equivalent at the time of purchase by at least one NRSRO.
 - (5) In the case of split-rated securities, the manager will use the middle of 3 ratings, lower of 2 ratings methodology to determine whether a security is eligible for purchase.
 - (6) A security purchased in accordance with these investment guidelines that is subsequently downgraded below the required minimum rating for purchase may continue to be held, unless otherwise directed by the SBI.
- (c) Sector Concentration

The following sector concentration limits shall apply only at the time of purchase unless otherwise noted.

Sector	Minimum Market Value (%)	Maximum Market Value (%)
U.S. Treasuries + U.S. Gov't Agency	50% ¹	100%
U.S. Treasuries	25% ¹	100%
U.S. Government Agency	0%	75%
Repurchase Agreements	0%	50%
Corporate Bonds and Municipal Debt ²	0%	50%
ABS/MBS	0%	25%
Foreign Government and Supranational Debt	0%	25%

¹ The minimum market value percentage of 25% for U.S. Treasuries and the minimum combined market value percentage of 50% for U.S. Treasuries and U.S. Government Agency securities on a combined basis shall apply at all times.

² Includes commercial paper, CDs, bank notes and medium term notes (MTN), asset-backed commercial paper and municipal securities.

(d) Issuer Concentration

Securities of a single issuer shall be limited to no more than 3% of the total market value of the portfolio measured at the time of purchase. In the case of securitized assets, the issuer shall be the specific issuing trust.

Investments in U.S. Treasuries and U.S. Government agency securities, Repurchase Agreements and cash invested in the SBI's STIF fund are exempted from the issuer concentration limit.

(e) Currency

All securities shall be denominated in U.S. dollars and all interest and principal shall be payable in U.S. dollars.

(f) Derivative Guidelines

(1) Maximum Exposure

Total net notional exposure from all derivative contracts must be less than 50% of the Manager's portfolio net asset value and the total net contribution to duration exposure from all derivative positions must be less than 50% of the Portfolio's duration.

Total exposure due to derivative contracts will be calculated on a net notional value basis. All futures contracts will use their current price to calculate the net notional value. For the purposes of calculating notional exposure for Eurodollar futures, Fed Funds futures and SOFR futures, the notional exposure shall be equal to the net notional value of the contract multiplied by the standard contract term length expressed in fractional years.

For the purposes of calculating total net notional exposure for options, all puts and calls sold by the Manager will have a notional value equal to the current notional value of the underlying contract, and all puts and calls purchased by the Manager will have a notional value of zero.

(2) Collateral Guidelines

All derivatives positions must be fully collateralized by cash, cash equivalents and highly liquid, short term securities, defined as:

- (i) Net cash, including payables and receivables and uninvested cash reserves held in the SBI's STIF fund, managed by its custodian bank;
- (ii) All investment grade securities with an effective duration and spread duration of one year or less; and

(iii) Any security that will satisfy the good delivery requirement for a derivative contract or forward contract currently being held in the Manager's portfolio.

(3) Derivative Contracts Subject to the Above Constraints

The following derivative contracts are subject to the above constraints:

(i) U.S. Treasury futures, Eurodollar futures, Fed Funds futures and SOFR futures;

(ii) Interest rate options on U.S. Treasury futures, Eurodollar futures, Fed Funds futures and SOFR futures;

(iii) Interest rate swaps; and

(iv) TBA mortgages are exempt from the overall concentration restrictions in section A5(f)(1), but are subject to the Collateral Guidelines in section A5(f)(2).

A6. PROHIBITED INVESTMENTS

The Manager is prohibited from investing in the following:

(a) Any security issued by the State of Minnesota, its agencies, authorities, instrumentalities and other related entities including, but not limited to, the following:*

- Minnesota Management and Budget
- Minnesota Housing Finance Agency
- Minnesota Office of Higher Education
- Minnesota State Colleges and Universities
- Minnesota Higher Education Facilities Authority
- Minnesota State Armory Building Commission
- Minnesota Rural Finance Authority
- Minnesota Public Facilities Authority
- Minnesota Agricultural and Economic Development Authority – conduit borrower
- Iron Range Resources and Rehabilitation
- Metropolitan Airports Commission
- Metropolitan Council
- University of Minnesota

This prohibition also extends to debt obligations for which the State of Minnesota, its agencies, authorities, instrumentalities and other related entities is a conduit borrower or lessee in a lease-purchase transaction including, but not limited to, the following:*

- Port Authority of the City of St. Paul - \$52,900,000 Lease Revenue Refunding Bonds, Series 2013-2
- Port Authority of the City of St. Paul - \$62,860,000 Lease Revenue Refunding Bonds, Series 2013-3
- City of Bemidji, Minnesota - \$6,395,000 Lease Revenue Refunding Bonds, Series 2016

Additionally, prohibited is the purchase of any security issued by any city, county or school district within the State of Minnesota.*

*** If there is any uncertainty related to this prohibition and its application to a particular security under consideration, the manager shall not purchase the security in question.**

- (b) The Manager may not purchase securities from the SBI's List of Unauthorized Investments. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided.
- (c) Non-U.S. dollar denominated securities are prohibited.
- (d) Private placements, excluding securities issued under Rule 144A, are prohibited.
- (e) Non-rated securities are prohibited.
- (f) Preferred securities or securities convertible into common stock are prohibited.
- (g) The Manager may not short individual securities, except that short positions in derivatives are permitted as long as the position meets the derivatives exposure and collateral guidelines in section A5(f) above.
- (h) Any security types not specifically authorized in section A4 are prohibited from purchase without the SBI's prior written authorization.

A7. QUALIFIED INSTITUTIONAL BUYER

SBI is a Qualified Institutional Buyer ("QIB") as such term is defined in Rule 144A(a)(1)(i) of the General Rules and Regulations under the Securities Act of 1933 (17 CFR Part 230.144A). SBI agrees to promptly notify the Manager in writing, if SBI ceases to be a QIB and further agrees to provide such evidence of its status as a QIB as the Manager may reasonably request from time to time.

A8. ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) CONSIDERATIONS

The manager is expected to incorporate environmental, social and governance (ESG) considerations broadly into their investment portfolio or process.

A9. REPORTING

- (a) The Manager shall provide the SBI staff with a “Derivative Report” within ten (10) business days after month end. The report should show each derivative contract, the number of contracts, the total notional value for each contract, and the total contribution to duration for each contract. The report should also show which contracts offset each other to calculate the total net notional value of the portfolio. The SBI reserves the right to ask for a “Derivative Report” at any time during the month. The report should also show the portfolio assets that qualify as collateral, as defined in section A5(f)(2), including the duration and market value of each security counted as collateral.
- (b) The Manager shall provide the SBI staff with a “Downgrade Report” within ten (10) business days after month end. The report should list all securities held within the portfolio which have been downgraded subsequent to purchase and which carry a prevailing rating below the required minimum rating for purchase. The report should provide security identifier, security description, coupon, maturity date, market price, par amount and market value held in the portfolio, both in dollars and expressed as a percentage of the total portfolio. The report should provide the current rating, as well as the previous rating, and the effective date of the change.
- (c) The Manager shall provide the SBI staff with a report within ten (10) business days after month end showing the following information:
 - (1) a sector, quality and maturity breakdown on both a percent of market value basis and on a contribution to duration basis for the SBI portfolio, the custom liability benchmark and the difference between the two. The maturity breakdown report should provide a summary of maturities by month for the portfolio, the custom liability benchmark and the difference between the two. All figures should be reported to two decimal places.
 - (2) a portfolio characteristic summary showing the weighted average maturity in months, average quality, yield to maturity, and average coupon for the portfolio and the custom liability benchmark;
 - (3) a comparison of the SBI’s portfolio to the custom liability benchmark by sector and by maturity, the percentage difference between the portfolio and custom liability benchmark, and a column showing the guideline constraints.
 - (4) the 1-month, 3-month, YTD, 1-year, 3-year, 5-year, 10-year and since inception performance of the portfolio on a net of fees basis, the performance benchmark return for each period and a line showing value

added. For periods one year and longer, the report should include the portfolio's realized tracking error and information ratio relative to the performance benchmark and the portfolio's Sharpe ratio.

- (5) a breakdown of risk budget, and the proportion of budget attributable to top-down factors (duration, curve) and bottom-up factors (security selection, sector rotation) or equivalent categorizations.

Investment Guidelines Effective Date: October 1, 2020

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: PUBLIC EQUITY, FUNDS FIXED INCOME AND ASSIGNED RISK PLAN

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All securities held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles may not be held in the Account without the prior written approval of the SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement entered into by the Manager on behalf of the Account must be reviewed and approved by legal representatives of the SBI before entering into the agreement. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolio at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the Account.

The Manager may not short individual securities, except that short positions in allowable derivatives are permitted as long as such positions meet all derivatives exposure and collateral requirements outlined in Part A of the guidelines.

B5. COMMUNICATION

The SBI requires its investment managers to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI Staff and shall complete and return the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI Staff, whichever is later.
- (c) The Manager is expected to provide SBI staff with a "Manager Commentary" as described in the SBI's Manager Continuation Policy, within ten (10) business days after quarter-end. The Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving any issuer of securities held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (2) **Share and Pricing Reconciliation**—the Manager must reconcile with the custodial bank share and price values using mystatestreet.com data and utilize the template provided by State Street. The reconciliations must be completed at least on a monthly basis. The Manager must email their completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the first business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the number of shares for each security between the Managers' records and State Street's, and any differences must be reconciled. If a discrepancy exists you must contact your daily State Street representative to resolve the issue. The reconciliation should also include the identification of

security price differences of 3% or greater at the security level. The Manager should reconcile cash as an individual holding.

- (3) **Performance & Net Asset Value Comparison**—the Manager must provide preliminary net asset values and month-to-date performance along with your share and price reconciliation. This report must be completed using data for the previous month. The Manager will include this information on the share and pricing reconciliation and will email the completed reconciliation to your daily State Street representative no later than the first business day of the following month by 5:00 PM EST. Net asset values are comprised of the total market value of the entire fund, plus all open trades and pending income.
- (b) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (c) **Daily Pricing Requests**—The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual security pricing requests, the Manager may send a comprehensive holdings report—with shares and prices—to the custodian bank on a daily basis as long as it is submitted before the 5:00 PM EST deadline.
- (d) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the custodian bank. The Manager may appeal to the SBI if the Manager and custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to the SBI in the quarterly Manager Commentary whether or not the Manager agrees with the Custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must immediately inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these guidelines and has been in compliance over the last three months. If the Manager has violated the guidelines in the past three months and cannot certify compliance over this period, the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these investment guidelines at any time. Managers will be notified in advance of changes to the investment guidelines.

Investment Guidelines Effective Date: October 1, 2020

EXHIBIT D-12. FIXED INCOME STIF GUIDELINES

ANNEX D

SHORT TERM INVESTMENT FUND INVESTMENT GUIDELINES FOR RETIREMENT AND NON RETIREMENT ASSETS - GP15, GP60

Account Structure

These guidelines affect the investment parameters of the Minnesota State Board of Investment ("SBI") Retirement Short Term investment Fund Account (the "Retirement STIF" and the Non-Retirement Short Term investment Fund Account (the "Non-Retirement STIF")(each, and "Account"). The Retirement STIF will be set up as a shell with assets invested in one of the two sub portfolios (each a "portfolio"): Cash (GP15), Directed (GPB5) The Non-Retirement STIF will consist only of a cash portfolio (GP60). Participants will own pro rata interests of their respective Accounts. The accounts will employ the book value method of accounting. Realized gains and losses will be flowed through income on the day they are realized. Losses in excess of income will be carried over to the next day until they are gone, or as directed by the SBI. The SBI acknowledges that the Accounts' structure entails a higher level of risk relative to a typical short term investment fund and that the SBI is willing to bear realized and unrealized gains and losses, and a more variable level of income than a typical short term investment fund. All portfolios will be accounted for at market for the purpose of measuring performance.

Investment Objectives

The investment objective of each Account is to outperform the typical short-term investment fund over an interest rate cycle. The manager(s) will endeavor to generate positive monthly income for the Accounts. The objective of each Cash portfolio is to maintain a minimum \$1.00 Net Asset Value, to provide liquidity and current income with a goal of exceeding the iMoney Net "All Taxable Money Fund Average" by 10 basis points. The Directed portfolio will hold the assets of the SBI's CD/REPO program. No performance benchmark has been specified for the Directed Portfolio.

Cash Portfolio Guidelines (GP15 and GP60)

I. Currency

- A. All securities will pay both interest and principal in US Dollars.

II. Eligible Securities

- A. Asset - Backed Securities

- 1. Acceptable collateral includes credit card receivables, auto loan receivables, auto dealer inventory financing, home equity loans, agricultural loans, student loans, and other consumer and commercial loans.

2. Rating must be AAA by at least two (2) nationally recognized statistical rating organizations, ("**NRSRO**").
 3. Sponsor must be investment grade, unless security is insured. IF insured, the insurer must be rated AAA by at least two (2) **NRSROs**.
 4. If the rating is reduced below the level of AAA by either NRSRO or if the rating is deemed to be below AAA the security must be sold as soon as possible.
 5. Aggregate par value of Asset -backed securities may not exceed 20 percent of total par value of the portfolio.
 6. The final cash flow payment date will not exceed 397 days assuming a zero (0) pre-payment speed.
- B. Commercial Paper including asset backed commercial paper of U.S. and foreign corporations
1. Commercial paper must be rated at least A1/P1 by at least two (2) **NRSRO's**
 2. The portfolio shall hold no more than the lesser of 10 percent of the issuers total outstanding commercial paper or 5 percent of the market value of the portfolio in any one issuer.
- C. Domestic and Foreign Corporate Debt
1. Domestic Debt must be rated A by at least two (2) NRSRO's or if unrated, be determined by the manager to be of comparable quality. Foreign debt must be rated AA by at least two (2) **NRSROs**
 2. Aggregate par value of domestic and foreign debt shall not exceed 20 percent of total par value of the portfolio.
 3. No more than five percent of total par value of the portfolio may be in any one issuer.
 4. Maximum maturity of two 397 days.
 5. If the rating is reduced below the level of A by either **NRSRO** or if the rating is deemed to be below A the security must be sold as soon as possible.
- D. Repurchase Agreements
1. Collateralized at 102% by US Treasury and Agency securities.
 2. Repo counter parties will be restricted to Primary Dealers with ratings of A2/P2 or better.
 3. Maximum maturity of 60 days.
- E. Supranational and sovereign debt obligations including debt of subdivisions and agencies of foreign states.
1. Rating must be AA by at least two (2) NRSROs.
 2. Aggregate par value of supranational and sovereign debt may not exceed 20 percent of total par value of the portfolio.
 3. No more than five (5) percent of total par value of the portfolio may be invested in any single issuer.

- F. Short term cash sweep funds of the account's custodian bank.
- G. United States Treasury Debt Obligations
 - 1. No minimum rating required
 - 2. No concentration limitations
 - 3. Maximum maturity of 397 days
- H. United States Government Agency Securities including debt of Government Sponsored Enterprises (GSE) and US Agency mortgage - backed securities.
 - 1. No minimum rating required
 - 2. No concentration limitations
 - 3. Maximum maturity of 397 days

III. Prohibited Securities and Instruments

- A. Convertible bonds
- B. Structured securities that are leveraged and/or tied to more than one index range, notes, or index floaters.
- C. Futures and options, contracts and swap agreements
- D. State of MN Restricted Securities

IV. Maturity

- A. The weighted average maturity of the cash portfolio will not exceed 60 days.
- B. The weighted average life of the cash portfolio will not exceed 120 Days.

V. Portfolio Concentration Limits

- A. No more than 40 percent of the total par value of the cash portfolio will be invested in any combination of corporate notes (whether domestic or foreign), asset backed securities and supranational and sovereign debt obligations.

EXHIBIT D-13. UNINVESTED PRIVATE MARKETS S&P 500 CASH OVERLAY GUIDELINES

The investment actions of the Minnesota State Board of Investment (SBI) cash overlay manager will be governed and evaluated by the following Investment Guidelines which are comprised of Parts A and B.

Part A:

A1. CASH OVERLAY PROGRAM

1. Investment objective – the objective of the account dedicated to the Cash Overlay (the “Cash Overlay Account”) is to securitize unallocated cash held by the SBI using eligible instruments. The Cash Overlay Account may also be used to adjust (increase or decrease) the exposure to benchmark(s) as directed by SBI from time to time.
2. Base currency – United States Dollar (USD or \$).
3. Mandate size – the USD amount of U.S. investments in SBI’s Account.
4. Benchmark – the benchmark for the portfolio shall be: 100% S&P 500 Total Return Index, adjusted for relevant financing. The SBI reserves the right to modify these Investment Guidelines in consultation with the Manager. The Manager will be notified in writing, in advance, of changes to the Investment Guidelines.

The portfolio’s exposure to the Benchmark (“Benchmark Notional Exposure”) for a given month will be calculated based on 98% of the market value of the Cash Overlay Account, adjusted by contributions/unexpected withdrawals to/from the account that Manager is able to confirm same-day, and withdrawals from the account (based on information provided by SBI) that are expected to occur the following day. The resulting amount of market exposure to be targeted shall be known as the Target Overlay Amount. Benchmark Notional Exposure shall be adjusted accordingly for any mid-month adjustments where Manager adjusted overlay exposure.

During the month, if Manager reasonably believes that the Target Overlay Amount differs from the market exposures of the Cash Overlay Account by more than 2.0% of the Target Overlay Amount, a mid-month adjustment may be necessary. Additionally, adjustments can be made intra-month, at the Manager’s discretion, to bring overlay exposure closer to the Target Overlay Amount absent a 2.0% move.

From time to time, SBI, acting through its designee(s), shall provide the asset information (“Asset Data”) described in this section. Typically, it is expected that Asset Data shall be provided to Manager on a daily basis (expected by 11:00 am central time). The Asset Data shall include or SBI shall communicate relevant pending adjustments to cash accounts.

Manager may rely conclusively on the Asset Data provided by SBI or its custodian bank. SBI understands that the effective exposure may be outside of the target

weights due to (i) inaccurate Asset Data provided to Manager, (ii) Asset Data not provided to Manager in a timely fashion, (iii) subsequent market movements from the time the Asset Data is provided to Manager, (iv) differences due to futures or other position rounding, or (v) other factors that are reasonably beyond Manager's control.

It is recognized that market conditions and tactical views may result in SBI directing trades different from those determined in accordance with the above schedule. In addition, SBI, in its sole discretion, may direct Manager to adjust exposure at any point during the month. It is not contemplated the SBI will engage in tactical allocations, however, tactical adjustments can be accomplished only with appropriate written direction.

5. Credit Criteria

A. Uncleared Derivatives – the following provisions apply only to uncleared derivatives transactions.

- i. A "Counterparty" is defined as any entity with whom written swap documentation, such as the ISDA Master Agreement and all Schedules and Annexes, and guarantees, if any (the "ISDA Agreement") have been established on behalf of the Fund and with whom Manager, on behalf of the Fund, enters into an over-the-counter contract. Manager may initiate and maintain derivative transactions with any Counterparty, subject to the credit quality restrictions below.
- ii. "Counterparty Exposure" is defined as the mark-to-market value of all outstanding derivative contracts with that Counterparty (the "MTM"), including those held in other accounts managed by Manager for the Fund subject to the same ISDA Agreement, less the market value of the collateral posted by or to the Counterparty (the "Collateral"). For these purposes, Collateral that has been posted by the Fund shall be considered a negative amount and Collateral that has been posted by the Counterparty shall be considered a positive amount. Collateral and MTM shall be determined as of the close of business the previous U.S. business day.

For purposes of determining Counterparty Exposure to a particular Counterparty, Manager may conclusively rely on the relevant Counterparty's calculations and data in connection with such terms with respect to transactions over which Manager had no authority.

Counterparty Exposure to any Counterparty shall be limited to the applicable Threshold and Independent Amount (if any) plus Minimum Transfer Amount (each as specified in the relevant Credit Support Annex ("CSA") to the ISDA Master Agreement), plus or minus collateral that, under the terms of the relevant CSA, is not yet contractually payable/receivable.

Additionally, it shall not be a guideline violation if (i) the foregoing exposure is exceeded on a temporary basis because of an inadvertent error or omission of an administrative nature on the part of a Counterparty or the custodian, (ii) it is considered by Manager to be a bona fide mistake that is expected to be corrected within a reasonable amount of time, and (iii) it is not, in Manager's reasonable judgment, the result of a credit problem.

- iii. Manager may not initiate derivative transactions with a Counterparty rated below A- by either Moody's or S&P unless prior approval is received from SBI.
- iv. In the event a Counterparty that was rated at or above A- at the time a derivative transaction is initiated is subsequently downgraded below A- by either Moody's or S&P, Manager shall either:
 - a) Terminate any outstanding derivative contracts with that Counterparty,
 - b) Assign the contract to an eligible entity, or
 - c) Notify SBI of an alternative action other than a) or b) above.

Any reference herein to a credit rating of a "Counterparty" (including a "Repo Counterparty", "Clearing Member" and "FCM") shall be deemed to refer to the credit rating of the Counterparty or its guarantor whichever is higher.

B. Futures – the following provisions apply only to futures transactions.

- i. An "FCM" is defined as any futures commission merchant with whom a written futures agreement has been established on behalf of the Fund with whom Manager, on behalf of the Fund, places orders for clearing of futures contracts.
- ii. Manager may not place orders with an FCM rated below A- by either Moody's or S&P.
- iii. From time to time, cash and/or securities may be left on deposit with a FCM in order to facilitate settlement of Margin.

6. Risk/Return objective –the cash overlay program will seek to match the benchmark. This will be done in light of differences between tracking error and financing costs of eligible derivative instruments.

7. Eligible instruments – the Manager may trade the following instruments:

- CFTC approved futures and forward contracts;
- Total return, excess return, and other swaps;
- U.S. Treasury securities, and;
- Short term investment fund (STIF) selected by SBI.

Manager shall only transact OTC swaps with a Counterparty as defined in 6.A.i.above. All instruments held or traded must be covered by the authorization in Minnesota Statutes Chapter 11A.24.

8. Liquidity and Collateral - It is generally expected that with regard to cash liquidity, the Cash Overlay Account will maintain enough cash or cash equivalents for margin requirements. Manager will monitor prevailing cash levels and the cash requirements for initial margin, variation margin and settlement payments and communicate such requirements regularly to SBI.

Notwithstanding the foregoing, Manager (i) shall use reasonable best efforts to notify SBI of additional cash or collateral requirements in sufficient time to enable SBI to meet such requirements, and (ii) shall review these settlement and collateral requirements on an ongoing basis and recommend changes to the extent warranted by prevailing market conditions.

9. Reporting – the Manager will provide reports on the cash overlay program specified in Exhibit B to SBI electronically via the internet.
 - a) Within ten (10) Business Days after the end of a calendar month, the Manager will provide SBI a monthly report detailing the following for each of SBI's Accounts:
 - (i) A performance overview and activity of the market during the previous month.
 - (ii) The profit and loss on a month to date basis.
 - (iii) Mark to market valuations in USD and details of cash flows settled during the month.
 - (iv) Details of all trades executed by the Manager during the month.
 - (v) Counterparty analysis, including positions, mark to market by counterparty and a summary of each counterparty's credit ratings.
 - b) Any other reports reasonably requested by SBI at a frequency to be agreed by the Manager and SBI.

Investment Guidelines Effective Date: January 1, 2022

**MINNESOTA STATE BOARD OF INVESTMENT
INVESTMENT GUIDELINES**

EXTERNAL MANAGERS: CASH OVERLAY PROGRAMS

Part B:

B1. PERFORMANCE EVALUATION

Manager performance will be evaluated according to qualitative and quantitative guidelines set forth in the SBI's Manager Continuation Policy. These Investment Guidelines, which may change from time to time, assist the SBI in its decisions concerning retention and termination of investment managers.

B2. SEPARATE ACCOUNT AND DAILY PRICING

The Account will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank. All instruments held in the portfolio must be capable of being priced on a daily basis and accessible by the custodian. Commingled vehicles (other than STIF) may not be held in the Account without the prior written approval of SBI.

B3. DERIVATIVES TRADING AGREEMENTS

Any derivatives trading agreement shall be entered into by SBI. Any such agreement must provide that SBI's liability, including margin requirements, commissions and fees, is limited solely to funds of the SBI under Manager's control and does not constitute a general obligation of the State of Minnesota. The total SBI liability for margin requirements, commissions and fees among all brokers should be limited to the total market value of the SBI's assets under the Manager's control.

B4. LEVERAGE

The Manager may not leverage the Account at any time. Leverage exists when the net long USD position of the cash overlay program (including mark to market) in USD terms exceeds 100% of the net market value of the Cash Overlay Account in USD terms.

B5. COMMUNICATION

The SBI requires the Manager to communicate, at a minimum, with SBI staff on the following basis:

- (a) The Manager is expected to meet with SBI staff on at least an annual basis to review the results of the Manager's investment decision-making process.
- (b) The Manager is expected to complete an annual Request for Information ("RFI") each year following the end of the SBI's fiscal year ending June 30th. The Manager shall follow the RFI format provided by SBI staff and shall complete and return

the RFI no later than August 31st of the current year or fifteen (15) business days after receiving notice of the annual RFI request from SBI staff, whichever is later.

- (c) The Manager is expected to provide SBI staff with a “Manager Commentary” as described in the SBI’s Manager Continuation Policy, within ten (10) business days after quarter-end. The Manager Commentary will summarize performance results over both the most recent quarter and year, discuss current investment strategy, discuss all organizational changes affecting the management of the Account, and affirm account reconciliation with the custodian bank.
- (d) Responsibility to initiate, consider or participate in any bankruptcy, securities class action or other litigation against or involving the issuer or counterparty of any instrument held in or formerly held in the Account or to advise or take any action with respect to any litigation shall remain with the SBI, and the Manager shall not have any responsibility to, and shall not, initiate, consider or participate in any such matters on behalf of the SBI or the Account unless the SBI has given prior written approval to do so with the consent of the Minnesota Attorney General or his or her designee.

B6. ACCOUNT RECONCILIATION

The Manager shall assist in account reconciliation as follows:

- (a) To ensure accurate daily reporting, the Manager is responsible for the following:
 - (1) **Position and Pricing Reconciliation** – the Manager must reconcile positions and price values with the custodian bank using mystatestreet.com data and utilize the template provided by SBI’s custodian bank. The reconciliations must be completed at least on a monthly basis. The Manager must email its completed reconciliation to the following State Street email at MSBIMGRRecon@statestreet.com, and copy SBI Accounting at Acctg.SBI@state.mn.us no later than the first business day of the following month by 5:00 PM EST. The reconciliation will include a comparison of the position size for each instrument between the Managers’ records and the custodian’s, and any differences must be reconciled. If a discrepancy exists, the Manager must contact its daily State Street representative to resolve the issue. The reconciliation should also include the identification of total mark to market differences of 1% or greater at the position level.
 - (2) **Performance & Net Asset Value Comparison** — the Manager must provide preliminary net asset values, month-to-date performance, and position and price reconciliations. This report must be completed using data for the previous month. The Manager will include this information on the position and pricing reconciliation and will email the completed reconciliation to the daily State Street representative no later than the first business day of the following month by 5:00 PM EST. Net asset values are

comprised of the total market value of the entire fund, plus all open trades and pending income.

- (b) The Manager must report all trades to the SBI's custodian bank via facsimile, SWIFT or affirmation by Trade Date + 1 at 11:00 AM EST. For same day settlement trades, the deadline is 10:30 AM EST. Any trades after these deadlines should not be sent until the following day to ensure a smooth and accurate pricing process.
- (c) **Daily Pricing Requests** — The Manager must respond to all pricing inquiries from the custodian bank by no later than 5:00 PM EST on a daily basis. As an alternative to responding to individual instrument pricing requests, the Manager may send a comprehensive holdings report—with positions and prices—to the SBI's custodian bank on a daily basis before the 5:00 PM EST deadline.
- (d) The Account will be priced by the SBI's custodian bank and such prices will be used to measure performance of the SBI Account. The Manager agrees to accept the prices established by the SBI's custodian bank. The Manager may appeal to the SBI if the Manager and the SBI's custodian bank cannot arrive at mutually agreeable pricing. At the end of each quarter, the Manager must report to SBI in the quarterly Manager Commentary whether or not the Manager agrees with the custodian's pricing for the quarter.

B7. COMPLIANCE WITH GUIDELINES

The Manager must as soon as practicable inform the SBI, in writing, if the Manager becomes aware of any violations of these guidelines.

At the end of each quarter, the Manager must certify to the SBI in the quarterly Manager Commentary that the Manager is in compliance with these Investment Guidelines and has been in compliance over the last three months. If the Manager has violated the Investment Guidelines in the past three months and cannot certify compliance over this period, the Manager must describe in a letter all violations that occurred in the last three months.

B8. FUTURE MODIFICATIONS

The SBI reserves the right to modify these Investment Guidelines at any time in consultation with the Manager. The Manager will be notified in writing, in advance, of changes to the Investment Guidelines.

Investment Guidelines Effective Date: January 1, 2022

EXHIBIT D-14. INTERNALLY MANAGED ITC CASH GUIDELINES

The investment actions of the Minnesota State Board of Investment (SBI) cash manager will be governed and evaluated based on the following guidelines:

1. RISK/RETURN OBJECTIVES

The primary objectives of the Invested Treasurer's Cash Pool (ITC) are to *preserve capital* and to *maintain a high degree of liquidity*. Within these constraints the portfolio should *provide a level of current income that is appropriate to the level of risk in the portfolio*.

2. BENCHMARK

The primary performance benchmark for the ITC Pool shall be the iMoneyNet All Taxable Index, a common benchmark for taxable money market funds. SBI reserves the right to change the benchmark upon notification to the Manager.

3. CURRENCY

All securities shall be denominated in U.S. dollars and all interest and principal shall be payable in U.S. Dollars.

4. LEVERAGE

The Manager may not leverage the portfolio at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolios at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all of the obligations existing in the portfolio.

5. ELIGIBLE INVESTMENTS AND PORTFOLIO CONSTRAINTS

The Manager may hold only fixed income investments that meet the criteria in *Minnesota Statutes* Chapter 11A.24. References to quality categories of rating organizations do not include modifiers that may be used within categories. The investments must satisfy the following criteria and constraints listed below:

- (a) Governmental bonds, notes, bills, mortgages, and other evidences of indebtedness provided the issue is backed by the full faith and credit of the Government of the United States of America or Canada. The obligations in which the Board may invest under this subdivision include guaranteed or insured issues of:
 - (i) The United States, its agencies and its instrumentalities, or organizations created and regulated by an act of Congress.
 - (ii) Canada and its provinces.

- (iii) The International Bank of Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, or any other United States Government sponsored organization of which the United States is a member.
- (b) Securities issued by any U.S. state, U.S. territory, or any municipality, political subdivision, agency or instrumentality thereof, provided that such securities may not be purchased by the Manager directly from the issuer or the issuer's agent.
- (c) Securities issued or guaranteed by the Government of an OECD member country other than the U.S. or Canada, including government agencies, government-owned or government-sponsored enterprises, or supranational organizations principally guaranteed by OECD member countries. Such securities must carry a long-term rating in the highest two ratings categories by Moody's, Standard & Poor's (S&P), or Fitch Ratings (Fitch) at the time of purchase, or in the case of commercial paper or other short-term obligations, must carry a short-term rating of at least "A-1" or its equivalent by at least two nationally recognized rating agencies at time of purchase. A list of current OECD member countries is provided in Appendix A.
- (d) U.S. and Canadian corporate obligations, including commercial paper, asset backed commercial paper and private placements. Corporate obligations must be rated "A" or better by Moody's, Standard & Poor's (S&P), or Fitch Ratings (Fitch) at the time of purchase, while commercial paper must be rated at least "A-1" or its equivalent by at least two nationally recognized rating agencies at time of purchase.
- (e) Corporate obligations, including commercial paper, asset backed commercial paper and private placements, issued or guaranteed by companies domiciled in a country other than the U.S. or Canada which satisfy the minimum ratings requirements set forth in the immediately preceding paragraph 5(d), provided that such entities must be domiciled in an OECD member country and whose sovereign government debt is rated in the highest two ratings categories by Moody's, Standard & Poor's (S&P), or Fitch Ratings (Fitch) at the time of purchase. For the avoidance of doubt, all securities must be denominated in U.S. dollars.
- (f) Asset-backed securities rated "AAA" by Moody's, Standard & Poor's (S&P), or Fitch Ratings (Fitch) at the time of purchase. In the case of asset-backed securities carrying short-term ratings only, such securities must be rated "A-1" or its equivalent by at least two nationally recognized rating agencies at time of purchase.
- (g) Banker's acceptances (BAs), bank notes and deposit notes of U.S. banks rated "A" or better by Moody's, S&P, or Fitch at the time of purchase.
- (h) Repurchase Agreements that are backed by collateral meeting the requirements of paragraph 5(a) and:
 - (i) With a dealer, the dealer must be a primary dealer recognized by the New York Federal Reserve Bank, and:

- (1) If done on a tri-party basis, the dealer must have short-term obligation ratings no lower than A2/P2 by S&P and Moody's, respectively.
- (2) If done on a hold in custody basis, the dealer must have short-term obligation ratings no lower than A1/P1 by S&P and Moody's, respectively, and have net excess regulatory capital of at least \$200 million.
- (ii) With a bank, the bank must have deposit ratings of A1/P1 by S&P and Moody's, respectively, and be among the largest one hundred (100) banks as rated by deposits.
- (iii) If done on a delivery versus payment (DVP) basis, the counterparty may be any federally regulated bank or dealer.
- (iv) Securities must be collateralized at 102%.
- (i) The SBI shall maintain the ability to invest in Treasury/Agency only money market mutual funds or the Custodian's Treasury/Agency sweep vehicle as needed to fulfill the investment objectives of the ITC pool.
- (j) For the applicable securities listed above, if subsequent to purchase, a security's rating falls below the minimum rating required at time of purchase, SBI staff, in conjunction with the SBI Executive Director/CIO, will determine the appropriate course of action.
- (k) All investments must be denominated in U.S. dollars and all principal and interest must be payable in U.S. dollars.

6. PROHIBITED SECURITIES AND INSTRUMENTS

- (a) Any security issued by the State of Minnesota, its agencies, authorities, instrumentalities and other related entities including, but not limited to, the following:
 - Minnesota Management and Budget
 - Minnesota Housing Finance Agency
 - Minnesota Office of Higher Education
 - Minnesota State Colleges and Universities
 - Minnesota Higher Education Facilities Authority
 - Minnesota State Armory Building Commission
 - Minnesota Rural Finance Authority
 - Minnesota Public Facilities Authority
 - Minnesota Agricultural and Economic Development Authority – conduit borrower
 - Iron Range Resources and Rehabilitation
 - Metropolitan Airports Commission
 - Metropolitan Council
 - University of Minnesota

This prohibition also extends to debt obligations for which the State of Minnesota, its agencies, authorities, instrumentalities and other related entities is a conduit borrower or lessee in a lease-purchase transaction including, but not limited to, the following:*

- Port Authority of the City of St. Paul - \$52,900,000 Lease Revenue Refunding Bonds, Series 2013-2
- Port Authority of the City of St. Paul - \$62,860,000 Lease Revenue Refunding Bonds, Series 2013-3
- City of Bemidji, Minnesota - \$6,395,000 Lease Revenue Refunding Bonds, Series 2016

Except for those securities listed above, you may purchase bonds issued by Minnesota local governmental entities, such as cities, counties, and school districts, even if such local bonds are issued in connection with any State of Minnesota's credit enhancement programs.

*** If there is any uncertainty related to this prohibition and its application to a particular security under consideration, the investment manager must not purchase the security in question.**

- (b) The manager may not purchase securities from the SBI's List of Restricted Fossil Fuel Companies for the Invested Treasurer's Cash Pool. The SBI will periodically provide the Manager with an updated list and the Manager must follow direction provided.
- (c) Convertible bonds.
- (d) Structured securities that are leveraged and/or tied to more than one index, range notes, or inverse floaters.
- (e) Futures and options contracts and swap agreements.
- (f) The Manager may not purchase securities issued by companies on the SBI's Unauthorized Holdings List. The SBI will periodically provide the Manager with an updated list and Manager must follow direction provided.

7. LIMITATIONS

- (a) The portfolio may not hold a security that exceeds five and one-half years (5.5) years from settlement to its final legal maturity.
- (b) The weighted average maturity (WAM) of the ITC portfolio shall not exceed (365 days.) When calculating the WAM, a security with a variable rate feature or demand feature shall be deemed to have a maturity equal to the period remaining until the next reset date or the next date on which the principal may be recovered on demand. A callable security, for which the call option has been exercised by the issuer shall be deemed to have a maturity equal to the call date. For amortizing assets, the security's weighted-average life (WAL) shall be used as the measure of maturity date.

- (c) With the exception of securities listed in paragraph 5(a), 5(h) and 5(i), the Manager shall not hold as of the date of purchase more than the lesser of 10% of an issuer's total outstanding debt or 3% of the value of the portfolio in securities of a single issuer. The Manager may exceed this limitation for a period of up to three business days after acquisition. For asset-backed securities, the issuer shall be considered the specific trust for each asset-backed security transaction.
- (d) Under normal conditions, securities listed in paragraphs 5(c) to 5(g) shall not exceed in total 75% of the value of the portfolio with the following additional asset type restrictions:
 - (i) Commercial Paper shall not exceed 60%
 - (ii) Corporate bonds shall not exceed 60%
 - (iii) Asset-backed securities shall not exceed 25%
 - (iv) Certificates of Deposit shall not exceed 40%

8. COMMUNICATION

- (a) The Manager is expected to report periodically on returns and portfolio statistics to the SBI Executive Director/CIO and SBI Assistant Executive Directors. In addition, the Manager will meet with the SBI Executive Director/CIO and SBI Assistant Executive Directors periodically to review the results of the Manager's investment decision-making process.

9. SEPARATE ACCOUNT

- (a) The SBI's portfolio will be managed as a separate account. All assets will be held in custody by the SBI's custodian bank.

10. COMPLIANCE WITH GUIDELINES

- (a) The Manager must promptly inform the SBI Executive Director/CIO and SBI Assistant Executive Directors in writing, if the Manager becomes aware of any violations of these guidelines.
- (b) The Manager shall have 30 days to remedy any violations of these guidelines.
- (c) Within twenty (20) business days following the SBI's June 30 fiscal year end, the Manager must certify, in writing, that they are in compliance with these guidelines and have been in compliance over the last twelve months. If the Manager has violated the guidelines in the past twelve months and cannot certify compliance over this period, the Manager must describe in the letter all violations that occurred in the last twelve months.

11. FUTURE MODIFICATIONS

- (a) The SBI reserves the right to modify these investment guidelines at any time. The Manager will be notified in advance of changes to the investment guidelines.

Effective Date: October 1, 2021

APPENDIX A

LIST OF OECD MEMBER COUNTRIES SEPTEMBER 2021

AUSTRALIA
AUSTRIA
BELGIUM
CANADA
CHILE
COLOMBIA
COSTA RICA
CZECH REPUBLIC
DENMARK
ESTONIA
FINLAND
FRANCE
GERMANY
GREECE
HUNGARY
ICELAND
IRELAND
ISRAEL
ITALY
JAPAN
KOREA
LATVIA
LITHUANIA
LUXEMBOURG
MEXICO
NETHERLANDS
NEW ZEALAND
NORWAY
POLAND
PORTUGAL
SLOVAK REPUBLIC
SLOVENIA
SPAIN
SWEDEN
SWITZERLAND
TURKEY
UNITED KINGDOM
UNITED STATES

<https://www.oecd.org/about/document/list-oecd-member-countries.htm>

EXHIBIT D-15. EXCESS DEBT SERVICE RESERVE ACCOUNTS

The investment actions of the Minnesota State Board of Investment (SBI) cash manager for the excess debt service reserve assets of the state bond fund will be governed and evaluated based on the following guidelines:

1. RISK/RETURN OBJECTIVES

The primary objective for each account within the excess debt service accounts within the state bond fund is to *preserve capital*. Thereafter, the Manager shall strive to invest in eligible securities in which the yield thereon shall equal or exceed the arbitrage yield calculated on the underlying state debt issue.

2. CURRENCY

All securities will pay both principal and interest in U.S. Dollars.

3. LEVERAGE

The Manager must not leverage the portfolio at any time. Leverage exists when the market value of the assets in the portfolio exceeds the owner's (SBI) equity in the assets when viewing the portfolios at any time. Leverage is presumed to exist if the owner's equity is unable to satisfy all the obligations existing in the portfolio.

4. ELIGIBLE INVESTMENTS AND PORTFOLIO CONSTRAINTS

The Manager may hold only fixed income investments that meet the criteria in *Minnesota Statutes* Chapter 1 IA.24. References to quality categories of rating organizations do not include modifiers that may be used within categories. The investments must satisfy the following criteria and constraints listed below:

(a) U.S. Treasury bills, notes, bonds and strips

- i. No minimum rating required
- ii. No concentration limitations
- iii. Maximum maturity of 20 years

(b) Tax exempt securities issued by any U.S. state, U.S. territory, or any municipality, political subdivision, agency or instrumentality thereof, provided that such securities are backed by the full faith and credit of the issuer, without limit as to rate or amount,

and that such issues may not be purchased directly from the issuer or the issuer's agent.

- i. All securities must have a minimum rating of "A" by a Nationally Recognized Statistical Rating Organization
- ii. No more than 10 percent of the total of all excess debt reserve accounts service may be invested in any one issue
- iii. Maximum maturity of 20 years

(c) The Invested Treasurer's Cash Pool managed by the SBI.

5. PROHIBITED SECURITIES

- (a) The Manager shall not purchase new issue securities from the issuer or the issuer's agent.
- (b) Any security issued by the State of Minnesota, its agencies, authorities, instrumentalities and other related entities including, but not limited to, the following:*

- Minnesota Management and Budget
- Minnesota Housing Finance Agency
- Minnesota Office of Higher Education
- Minnesota State Colleges and Universities
- Minnesota Higher Education Facilities Authority
- Minnesota State Armory Building Commission
- Minnesota Rural Finance Authority
- Minnesota Public Facilities Authority
- Minnesota Agricultural and Economic Development Authority - conduit borrower
- Iron Range Resources and Rehabilitation
- Metropolitan Airports Commission
- Metropolitan Council
- University of Minnesota

* This prohibition also extends to debt obligations for which the State of Minnesota, its agencies, authorities, instrumentalities and other related entities is a conduit borrower or lessee in a lease-purchase transaction including, but not limited to, the following:

- Port Authority of the City of St. Paul - \$52,900,000 Lease Revenue Refunding Bonds, Series 2013-2
- Port Authority of the City of St. Paul - \$62,860,000 Lease Revenue Refunding Bonds, Series 2013-3
- City of Bemidji, Minnesota - \$6,395,000 Lease Revenue Refunding Bonds, Series 2016

Except for those securities listed above, you may purchase bonds issued by Minnesota local governmental entities, such as cities, counties, and school districts, even if such local bonds are issued in connection with any State of Minnesota's credit enhancement programs.

***If there is any uncertainty related to this prohibition and its application to a particular security under consideration, the investment manager must not purchase the security in question.**

6. COMMUNICATION

- (a) The Manager is expected to report monthly on returns and portfolio statistics to the SBI Executive Director/Chief Investment Officer and SBI Assistant Executive Director. In addition, the Manager will meet with the SBI Executive Director/Chief Investment Officer or SBI Assistant Executive Director quarterly to review the results of the Manager's investment decision-making process.

7. COMPLIANCE WITH GUIDELINES

- (a) The Manager must immediately inform the SBI Executive Director/Chief Investment Officer and SBI Assistant Executive Director, in writing, if the Manager becomes aware of any violations of these guidelines.
- (b) Within twenty (20) business days following the SBI's June 30 fiscal year end, the Manager must certify, in writing, that they are in compliance with these guidelines and have been in compliance over the last twelve months. If the Manager has violated the guidelines in the past twelve months and cannot certify compliance over this period, the Manager must describe in the letter all violations that occurred in the last twelve months.

8. FUTURE MODIFICATIONS

- (a) The SBI reserves the right to modify these investment guidelines at any time. The Manager will be notified in advance of changes to the investment guidelines.

Effective Date: January 1, 2020

EXHIBIT D-16. 1Q 2022 MSBI UNAUTHORIZED HOLDINGS LIST

Unauthorized Holdings and Liquidation List for Thermal Coal, Tobacco, Sudan, and Iran				
Thermal Coal Restriction				
1. Applicable To:	Actively and passively managed domestic equity, international equity and fixed income portfolios for the Combined Funds, Non-Retirement Account, Stable Value Fund, and Invested Treasurer's Cash portfolios			
2. Effective:	June 30, 2021			
3. Updated:	Annually in June			
4. Source (vendor):	EIRIS CRN			
5. Schedule of Liquidation: Applies to holdings in the portfolio identified by the vendor that meet the criteria outlined in Board Resolution. Holdings must be liquidated by the date listed.				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
INE423A01024	Adani Enterprises	India	n/a	12/31/2020
ID1000111305	Adaro Energy	Indonesia	n/a	12/31/2020
BMG0130N1130	AgriTrade Resources	Hong Kong	n/a	12/31/2020
US01877R1086	Alliance Resource Partners	United States of America	n/a	12/31/2020
US0207641061	Alpha Metallurgical Resources, Inc.	United States of America	n/a	12/31/2021
CND100000DB9	Anhui Hengyuan Coal Industry and Electricity Power	China	n/a	12/31/2020
US0393804077 US03940R1077	Arch Resources	United States of America	n/a	12/31/2020
TH0148A10Z06	Banpu	Thailand	n/a	12/31/2020
NZBRLE0001S4	Bathurst Resources	New Zealand	n/a	12/31/2020
ID1000094006	Bukit Asam	Indonesia	n/a	12/31/2020
ID1000068703	Bumi Resources	Indonesia	n/a	12/31/2020
CNE100000528	China Coal Energy	China	n/a	12/31/2020
CNE1000008D7	China Coal Xinji Energy	China	n/a	12/31/2020
KYG2159E1070	China Qinfa Group	China	n/a	12/31/2020
CNE1000002R0 CNE100000767	China Shenhua Energy	China	n/a	12/31/2020
US18911Q1022	Cloud Peak Energy	United States of America	n/a	12/31/2020
INE522F01014	Coal India	India	n/a	12/31/2020
US20855T1007	CONSOL Coal Resources	United States of America	n/a	12/31/2020
US20854L1089	Consol Energy	United States of America	n/a	12/31/2020
PHY2088F1004	DMCI Holdings	Philippines	n/a	12/31/2020
ZAE000084992	Exxaro Resources	South Africa	n/a	12/31/2020
US34552U1043	Foresight Energy	United States of America	n/a	12/31/2020
CNE000000D40	Gansu Jingyuan Coal Industry and Electricity Power	China	n/a	12/31/2020
INE131A01031	Gujarat Mineral Development	India	n/a	12/31/2020
US40609P1057	Hallador Energy	United States of America	n/a	12/31/2020
CNE000001G12	Henan Dayou Energy	China	n/a	12/31/2021
CNE100000098	Huolinhe Opencut Coal Industry Corporation	China	n/a	12/31/2020
ID1000108509	Indo Tambangraya Megah	Indonesia	n/a	12/31/2020
CNE000000859	Inner Mongolia Pingzhuang Energy Resources	China	n/a	12/31/2020
CNE000000SK7	Inner Mongolia Yitai Coal	China	n/a	12/31/2020
CNE0000010H6	Jizhong Energy Resources	China	n/a	12/31/2020
KYG525931039	Kinetic Mines & Energy	China	n/a	12/31/2020
PLLWBGD00016	Lubelski Wegiel Bogdanka	Poland	n/a	12/31/2020
US62704PAM59	Murray Energy	United States of America	n/a	12/31/2020
US6295791031	Nacco Industries	United States of America	n/a	12/31/2020
US7045511000	Peabody Energy	United States of America	n/a	12/31/2020
ID1000121106	PT Golden Energy Mines	Indonesia	n/a	12/31/2020
ID1000110901	PT Indika Energy Tbk	Indonesia	n/a	12/31/2021
US76218Y2028	Rhino Resource Partners	United States of America	n/a	12/31/2020
PHY7628G1124	Semirara Mining and Power	Philippines	n/a	12/31/2020
CNE100001T64	Shaanxi Coal Industry	China	n/a	12/31/2020
CNE000001915	Shanghai Datun Energy Resources	China	n/a	12/31/2020
RU000A0AVH95	Siberian Coal Energy Co. JSC	Russia	n/a	12/31/2021
ID1000058407	United Tractors	Indonesia	n/a	12/31/2020
AU000000UNV0	Universal Coal	Australia	n/a	12/31/2021
US9608781061	Westmoreland Coal	United States of America	n/a	12/31/2020
CNE1000004Q8	Yanzhou Coal Mining	China	n/a	12/31/2020
CNE000000TS8	Zhenezhou Coal Industry & Electric Power	China	n/a	12/31/2020

Tobacco Restriction				
1. Applicable To:	Actively managed domestic and international equity portfolios that invest assets for the Combined Funds portfolio			
2. Effective:	June 30, 2021			
3. Updated	Annually in June			
4. Source (vendor):	Institutional Shareholder Services (ISS)			
5. Schedule of Liquidation: Applies to holdings in the portfolio identified by the vendor that meet the criteria outlined in Board Resolution. Holdings must be liquidated by the date listed.				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
US90137F1030	22nd Century Group, Inc.	USA	Prior to 12/31/20	Prior to 12/31/20
JO4104811016	Al-Eqbal Co. for Investment Plc	Jordan	Prior to 12/31/20	Prior to 12/31/20
XS0236951207	Altadis Emisiones Financieras SA	France	Prior to 12/31/20	Prior to 12/31/20
ES0177040138 FR0000861098	Altadis SA	Spain	Prior to 12/31/20	Prior to 12/31/20
US02209S1033	Altria Group, Inc.	USA	Prior to 12/31/20	Prior to 12/31/20
BG11ASASVT16	Asenovgrad Tabac AD	Bulgaria	Prior to 12/31/20	Prior to 12/31/20
US05526DBQ79 XS1664643746	B.A.T. Capital Corp.	USA	Prior to 12/31/20	Prior to 12/31/20
GB0000676527	B.A.T. Finance BV	Netherlands	6/30/2021	12/31/2021
XS1324911608 XS0352062995	B.A.T. International Finance Plc	United Kingdom	Prior to 12/31/20	Prior to 12/31/20
BAFDSSR00002	BADECO ADRIA dd	Bosnia/Herzegovina	Prior to 12/31/20	Prior to 12/31/20
ZZZZ00138889	British American Tobacco	Ghana	Prior to 12/31/20	Prior to 12/31/20
AU000000BAM6	British American Tobacco Australiasia Ltd.	Australia	Prior to 12/31/20	Prior to 12/31/20
BD0259BATBC9	British American Tobacco Bangladesh Co.	Bangladesh	Prior to 12/31/20	Prior to 12/31/20
CLP3712A1035	British American Tobacco Chile Operaciones SA	Chile	Prior to 12/31/20	Prior to 12/31/20
GH0000000045	British American Tobacco Co. Ltd.	Ghana	Prior to 12/31/20	Prior to 12/31/20
XS1043097630	British American Tobacco Holdings (The Netherlands) BV	Netherlands	Prior to 12/31/20	Prior to 12/31/20
KE0000000075	British American Tobacco Kenya Ltd.	Kenya	Prior to 12/31/20	Prior to 12/31/20
MYL4162OO003	British American Tobacco Malaysia Bhd.	Malaysia	Prior to 12/31/20	Prior to 12/31/20
PEP545001005	British American Tobacco Peru Holdings Ltd.	United Kingdom	Prior to 12/31/20	Prior to 12/31/20
GB0002875804	British American Tobacco plc	United Kingdom	Prior to 12/31/20	Prior to 12/31/20
UG0000000022	British American Tobacco Uganda Ltd.	Uganda	Prior to 12/31/20	Prior to 12/31/20
ZM0000000029	British American Tobacco Zambia PLC	Zambia	6/30/2021	12/31/2021
ZW0009011710	British American Tobacco Zimbabwe Ltd.	Zimbabwe	Prior to 12/31/20	Prior to 12/31/20
BG11BUSOGT14	Bulgartabac Holding AD	Bulgaria	Prior to 12/31/20	Prior to 12/31/20
LK0042N00008	Ceylon Tobacco Company Plc	Sri Lanka	Prior to 12/31/20	Prior to 12/31/20
RSDICOE58755	Coka Duvanska Industrija AD	Serbia	Prior to 12/31/20	Prior to 12/31/20
US20902E1064	Consolidated Cigar Holdings, Inc.	USA	Prior to 12/31/20	Prior to 12/31/20
CY0001350418	CTO Public Co. Ltd.	Cyprus	Prior to 12/31/20	Prior to 12/31/20
BG11DUDUBT16	Dupnitsa-Tabak AD	Bulgaria	Prior to 12/31/20	Prior to 12/31/20
RSDIBBE29987	Duvanska Industrija AD Bujanovac	Serbia	Prior to 12/31/20	Prior to 12/31/20
MEDKPGRA0PG2	Duvanski Kombinat ad Podgorica	Montenegro	Prior to 12/31/20	Prior to 12/31/20
EGS37091C013	Eastern Co. (Egypt)	Egypt	Prior to 12/31/20	Prior to 12/31/20
BA100FDBLRA9	Fabrika Duvana Banja Luka AD	Bosnia/Herzegovina	Prior to 12/31/20	Prior to 12/31/20
GB0003833695	Gallaher Group Plc	United Kingdom	Prior to 12/31/20	Prior to 12/31/20
INE260B01028	Godfrey Phillips India Ltd.	India	Prior to 12/31/20	Prior to 12/31/20
INE973A01010	Golden Tobacco Ltd.	India	Prior to 12/31/20	Prior to 12/31/20
BG11GOGOAT17	Gotse Delchev Tabac AD	Bulgaria	Prior to 12/31/20	Prior to 12/31/20
CA4158651048	Harrys Manufacturing, Inc.	Canada	6/30/2021	12/31/2021
HRHRDHRA0003	Hrvatski Duhani dd	Croatia	Prior to 12/31/20	Prior to 12/31/20
CA4524517014	Imasco Ltd.	Canada	Prior to 12/31/20	Prior to 12/31/20
XS2320459063	Imperial Brands Finance Netherlands BV	Netherlands	3/31/2022	9/30/2022
XS1040508597 XS0387847576	Imperial Brands Finance Plc	United Kingdom	Prior to 12/31/20	Prior to 12/31/20
GB0004544929	Imperial Brands Plc	United Kingdom	Prior to 12/31/20	Prior to 12/31/20
INE154A01025	ITC Limited	India	Prior to 12/31/20	Prior to 12/31/20
JP3726800000	Japan Tobacco Inc.	Japan	Prior to 12/31/20	Prior to 12/31/20
PS2003111643	Jerusalem Cigarette Co. Ltd.	Palest.Auton.Terr	Prior to 12/31/20	Prior to 12/31/20
XS1883352335	JT International Financial Services BV	Netherlands	Prior to 12/31/20	Prior to 12/31/20
GRS120003009	Karelia Tobacco Co., Inc.	Greece	Prior to 12/31/20	Prior to 12/31/20
PK0012401011	Khyber Tobacco Co. Ltd.	Pakistan	Prior to 12/31/20	Prior to 12/31/20
KR7033780008	KT&G Corp.	South Korea	Prior to 12/31/20	Prior to 12/31/20
US5441471019	Lorillard LLC	USA	Prior to 12/31/20	Prior to 12/31/20
PHY5342M1000	LT Group, Inc.	Philippines	3/31/2022	9/30/2022
VN000000NST9	Ngan Son JSC	Vietnam	Prior to 12/31/20	Prior to 12/31/20
BG1100057980	Nikotiana BT Holding AD	Bulgaria	Prior to 12/31/20	Prior to 12/31/20
ARP730411245	Nobleza Piccardo SA	Argentina	Prior to 12/31/20	Prior to 12/31/20
US6573374088	North Atlantic Trading Co., Inc.	USA	Prior to 12/31/20	Prior to 12/31/20
INE920C01017	NTC Industries Ltd.	India	Prior to 12/31/20	Prior to 12/31/20
US74737V1061	Old Holceo, Inc.	USA	Prior to 12/31/20	Prior to 12/31/20
PK0002701016	Pakistan Tobacco Co. Ltd.	Pakistan	Prior to 12/31/20	Prior to 12/31/20
BG11PAPABT16	Pazardzhik BTM AD	Bulgaria	Prior to 12/31/20	Prior to 12/31/20

Tobacco Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
PK0018201019	Philip Morris (Pakistan) Ltd.	Pakistan	Prior to 12/31/20	Prior to 12/31/20
CS0008418869	Philip Morris CR as	Czech Republic	Prior to 12/31/20	Prior to 12/31/20
US7181721090	Philip Morris International Inc.	USA	Prior to 12/31/20	Prior to 12/31/20
RSDINNE78828	Philip Morris Operations ad	Serbia	Prior to 12/31/20	Prior to 12/31/20
MWPCL0010053	Press Corporation Plc	Malawi	6/30/2021	12/31/2021
ID1000052806	PT BAT Indonesia	Indonesia	Prior to 12/31/20	Prior to 12/31/20
ID1000052509	PT Bentoel International Investama Tbk	Indonesia	Prior to 12/31/20	Prior to 12/31/20
ID1000068604	PT Gudang Garam Tbk	Indonesia	Prior to 12/31/20	Prior to 12/31/20
ID1000074008	PT Hanjaya Mandala Sampoerna Tbk	Indonesia	Prior to 12/31/20	Prior to 12/31/20
ID1000126006	PT Wismilak Inti Makmur Tbk	Indonesia	Prior to 12/31/20	Prior to 12/31/20
LU0383812293	Reinet Investments SCA	Luxembourg	Prior to 12/31/20	Prior to 12/31/20
US761713BB19 US761713AT36	Reynolds American, Inc.	USA	Prior to 12/31/20	Prior to 12/31/20
SG1H03001457	Rothmans Industries Pte Ltd.	Singapore	Prior to 12/31/20	Prior to 12/31/20
DK0060696300	Scandinavian Tobacco Group A/S	Denmark	Prior to 12/31/20	Prior to 12/31/20
US8085411069	Schweitzer-Mauduit International, Inc.	USA	Prior to 12/31/20	Prior to 12/31/20
FR0000132300	Seita SA	France	Prior to 12/31/20	Prior to 12/31/20
BG11SUSUVT18	Shumen Tabac AD	Bulgaria	Prior to 12/31/20	Prior to 12/31/20
BG1100027983	Sila Holding AD	Bulgaria	3/31/2022	9/30/2022
INE896E01023	Sinnar Bidi Udyog Ltd.	India	Prior to 12/31/20	Prior to 12/31/20
CI0000000097	SITAB	Ivory Coast	Prior to 12/31/20	Prior to 12/31/20
BG11SLSTAT17	Slantse Stara Zagora Tabac AD	Bulgaria	Prior to 12/31/20	Prior to 12/31/20
BRCRUZACNOR0	Souza Cruz SA	Brazil	Prior to 12/31/20	Prior to 12/31/20
USFDS12KIF60 US85336L1098	Standard Diversified, Inc.	USA	Prior to 12/31/20	Prior to 12/31/20
MKSTTB101013	Strumica Tabak AD	Macedonia	Prior to 12/31/20	Prior to 12/31/20
SE0015812219	Swedish Match AB	Sweden	Prior to 12/31/20	Prior to 12/31/20
TZ1996100032	Tanzania Cigarette Co. Ltd.	Tanzania	Prior to 12/31/20	Prior to 12/31/20
ZW0009011579	TSL Ltd.	Zimbabwe	Prior to 12/31/20	Prior to 12/31/20
US90041L1052	Turning Point Brands, Inc.	USA	Prior to 12/31/20	Prior to 12/31/20
MKTKPR101017	Tutunski Kombinat AD Prilep	Macedonia	Prior to 12/31/20	Prior to 12/31/20
JO3106911014	Union Investment Corp.	Jordan	Prior to 12/31/20	Prior to 12/31/20
JO4107411012	Union Tobacco & Cigarette Industries Co.	Jordan	Prior to 12/31/20	Prior to 12/31/20
US9134561094	Universal Corporation	USA	Prior to 12/31/20	Prior to 12/31/20
US92240M1080	Vector Group Ltd.	USA	Prior to 12/31/20	Prior to 12/31/20
MKVETA101016	Veles Tabak AD	Macedonia	Prior to 12/31/20	Prior to 12/31/20
INE710A01016	VST Industries Limited	India	Prior to 12/31/20	Prior to 12/31/20
TTP985721039	West Indian Tobacco Co. Ltd.	Trinidad/Tobago	Prior to 12/31/20	Prior to 12/31/20

Iran Restriction				
1. Applicable To:	Actively and passively managed domestic equity, international equity and fixed income portfolios for the Combined Funds, Non-Retirement Accounts, State Cash Accounts, Stable Value Fund portfolios, and Invested Treasurer's Cash portfolios			
2. Effective:	March 31, 2022			
3. Updated:	Quarterly			
4. Source (vendor):	Institutional Shareholder Services (ISS)			
5. Schedule of Liquidation: Applies to holdings in the portfolio identified by the vendor that meet the criteria outlined in Minnesota Statute 11A.244. Holdings must be liquidated by the date listed.				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This date	100% By This Date
CHFDS91A7154 CA00652V1022	Addax Petroleum Corp.	Switzerland	Prior to 12/31/20	Prior to 12/31/20
USG64180AA32 CA6399111146	Caspian Investments Resources Ltd.	Kazakhstan	Prior to 12/31/20	Prior to 12/31/20
CNE0000018G1	China Petroleum & Chemical Corporation	China	Prior to 12/31/20	Prior to 12/31/20
CNE1000002Q2	China Petroleum & Chemical Corporation	China	Prior to 12/31/20	Prior to 12/31/20
US32055X1046	First International Oil Corp.	USA	6/30/2021	12/31/2021
TRAGUBRF91E2	Gubre Fabrikalari TAS	Turkey	Prior to 12/31/20	Prior to 12/31/20
GB00B02PXX64	Pan-Ocean Energy Corp. Ltd.	Jersey	Prior to 12/31/20	Prior to 12/31/20
CN0009076349	SINOPEC Beijing Yanhua Petrochemical Co. Ltd.	China	Prior to 12/31/20	Prior to 12/31/20
USG81877AD72 USG81877AA34	Sinopec Capital (2013) Ltd.	Virgin Isl (UK)	Prior to 12/31/20	Prior to 12/31/20
US82937TAD46 US82937TAA07	Sinopec Capital Ltd.	Hong Kong	Prior to 12/31/20	Prior to 12/31/20
CNE100001NV2	SINOPEC Engineering (Group) Co., Ltd.	China	Prior to 12/31/20	Prior to 12/31/20
CNFDS02SWW88	SINOPEC Engineering (Group) Co., Ltd.	China	Prior to 12/31/20	Prior to 12/31/20
BMG8165U1009	Sinopec Kantons Holdings Limited	Bermuda	Prior to 12/31/20	Prior to 12/31/20
US82934W1080	Sinopec Kantons Holdings Limited	Bermuda	Prior to 12/31/20	Prior to 12/31/20
CNE000000BB2	Sinopec Shanghai Petrochemical Co. Ltd.	China	Prior to 12/31/20	Prior to 12/31/20
CNE1000004C8	Sinopec Shanghai Petrochemical Co. Ltd.	China	Prior to 12/31/20	Prior to 12/31/20
CNE100003282	Sinopec Yangzi Petrochemical Co., Ltd.	China	Prior to 12/31/20	Prior to 12/31/20
CN0008934001	Sinopec Zhenhai Refining & Chemical Co. Ltd.	China	Prior to 12/31/20	Prior to 12/31/20
JP3607800004	Toyo Engineering Corp.	Japan	Prior to 12/31/20	Prior to 12/31/20
JPFDS0XPW593	Toyo Engineering Corp.	Japan	Prior to 12/31/20	Prior to 12/31/20

Sudan Restriction				
1. Applicable To:	Actively and passively managed in domestic and international equities for the Combined Funds and Non-Retirement Account portfolios			
2. Effective:	March 31, 2022			
3. Updated:	Quarterly			
4. Source (vendor):	EIRIS CRN			
5. Schedule of Liquidation: Applies to holdings in the portfolio identified by the vendor that meet the criteria outlined in Minnesota Statute 11A.243. Holdings must be liquidated by the date listed.				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
RU0009109391	AAK PROGRESS PAO	Russia	6/30/2021	12/31/2021
HK8298013897	AKM INDUSTRIAL CO LTD	Hong Kong	9/30/2021	3/31/2022
AT0000730007	ANDRITZ AG	Austria	Prior to 12/31/20	Prior to 12/31/20
US0345221024	ANDRITZ AG	Austria	Prior to 12/31/20	Prior to 12/31/20
CNE100000B57	ANHUI JIANGNAN CHEMICAL INDUSTRY CO LTD	China	12/30/2021	6/30/2022
CNE000000XS0	ASIA POTASH INTERNATIONAL INVESTMENT GUANGZHOU CO LTD	China	6/30/2021	12/31/2021
SE0011166610	ATLAS COPCO AB	Sweden	Prior to 12/31/20	Prior to 12/31/20
SE0011166628	ATLAS COPCO AB	Sweden	Prior to 12/31/20	Prior to 12/31/20
US0492557063	ATLAS COPCO AB	Sweden	Prior to 12/31/20	Prior to 12/31/20
US0492558053	ATLAS COPCO AB	Sweden	Prior to 12/31/20	Prior to 12/31/20
DE0006757008	AUDI AG	Germany	6/30/2021	12/31/2021
CND10001WSL0	AVIATION INDUSTRY CORPORATION OF CHINA LTD	China	Prior to 12/31/20	Prior to 12/31/20
RU0007796926	AVIATIONNNYI KOMPLEKS IM. S.V. ILIUSHINA PAO	Russia	6/30/2021	12/31/2021
CNE000000GZ0	AVIC AVIATION HIGH TECHNOLOGY CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE000000KC1	AVIC CAPITAL CO LTD aka AVIC INDUSTRY FINANCE HOLDINGS CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE000001JY5	AVIC ELECTROMECHANICAL SYSTEMS CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE000000N22	AVIC HEAVY MACHINERY CO LTD	China	6/30/2021	12/31/2021
CNE1000002B4	AVIC INTERNATIONAL HOLDINGS LTD	China	Prior to 12/31/20	Prior to 12/31/20
BMG0719V1063	AVIC INTERNATIONAL HOLDINGS LTD aka CONTINENTAL AEROSPACE TECHNOLOGIES HOLDING LTD	China	Prior to 12/31/20	Prior to 12/31/20
BMG2381M1091	AVIC JONHON OPTRONIC TECHNOLOGY CO LTD	China	6/30/2021	12/31/2021
CNE1000007T5	AVIC SHENYANG AIRCRAFT CO LTD	China	6/30/2021	12/31/2021
CNE000000MH6	AVIC XIAN AIRCRAFT INDUSTRY GROUP CO LTD	China	6/30/2021	12/31/2021
CNE000000RF9	AVICHINA INDUSTRY & TECHNOLOGY CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE1000001Y8	AVICOPTER PLC	China	6/30/2021	12/31/2021
RU0009090567	AVTODIZEL' PAO	Russia	6/30/2021	12/31/2021
RU0009090575	AVTODIZEL' PAO	Russia	Prior to 12/31/20	Prior to 12/31/20
BRB1KRBDR005	BAKER HUGHES CO	USA	Prior to 12/31/20	Prior to 12/31/20
US05722G1004	BAKER HUGHES CO	USA	Prior to 12/31/20	Prior to 12/31/20
CNE000001KL0	BAOSHENG SCIENCE AND TECHNOLOGY INNOVATION CO LTD	China	6/30/2021	12/31/2021
RU0009831358	BERIEV AIRCRAFT PAO aka TANTK IM. G.M. BERIYEVA PAO	Russia	Prior to 12/31/20	Prior to 12/31/20
INE263A01024	BHARAT ELECTRONICS LTD	India	Prior to 12/31/20	Prior to 12/31/20
INE257A01026	BHARAT HEAVY ELECTRICALS LIMITED	India	Prior to 12/31/20	Prior to 12/31/20
CNE000000VY2	CHANGCHUN YIDONG CLUTCH CO LTD	China	12/30/2021	6/30/2022
INE178A01016	CHENNAI PETROLEUM CORP LTD	India	Prior to 12/31/20	Prior to 12/31/20
CNE0000018C0	CHINA AVIONICS SYSTEMS CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE000001R27	CHINA HAI SUM ENGINEERING CO LTD	China	6/30/2021	12/31/2021
CND10001Q4W3	CHINA NATIONAL PETROLEUM CORP AKA CNPC	China	Prior to 12/31/20	Prior to 12/31/20
CND10000KSK9	CHINA NORTH INDUSTRIES GROUP CORP LTD	China	9/30/2021	3/31/2022
CND100038280	CHINA PETROCHEMICAL CORP AKA SINOPEC GROUP	China	Prior to 12/31/20	Prior to 12/31/20
ARDEUT114071	CHINA PETROLEUM & CHEMICAL CORP AKA SINOPEC CORP	China	Prior to 12/31/20	Prior to 12/31/20
BRC1HIBDR009	CHINA PETROLEUM & CHEMICAL CORP AKA SINOPEC CORP	China	Prior to 12/31/20	Prior to 12/31/20
CNE0000018G1	CHINA PETROLEUM & CHEMICAL CORP AKA SINOPEC CORP	China	Prior to 12/31/20	Prior to 12/31/20
CNE1000002Q2	CHINA PETROLEUM & CHEMICAL CORP AKA SINOPEC CORP	China	Prior to 12/31/20	Prior to 12/31/20
CNE1000018G1	CHINA PETROLEUM & CHEMICAL CORP AKA SINOPEC CORP	China	Prior to 12/31/20	Prior to 12/31/20
US16941R1086	CHINA PETROLEUM & CHEMICAL CORP AKA SINOPEC CORP	China	Prior to 12/31/20	Prior to 12/31/20
CNE000001642	CHINA PETROLEUM ENGINEERING CORP	China	Prior to 12/31/20	Prior to 12/31/20
CND1000317Y9	CHINA POLY GROUP CORPORATION	China	Prior to 12/31/20	Prior to 12/31/20
CND10001PSZ4	CHINA THREE GORGES NEW ENERGY GROUP CO LTD	China	6/30/2022	12/31/2022
CNE000001G87	CHINA YANGTZE POWER CO LTD	China	6/30/2022	12/31/2022
CNE000000SN1	CHONGQING THREE GORGES WATER CONSERVANCY AND ELECTRIC POWER CO LTD	China	6/30/2022	12/31/2022
CNE000000MS3	CNPC CAPITAL CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE000001402	DAQING HUAKE CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE 100000312	DONGFENG MOTOR GROUP COMPANY LIMITED	China	Prior to 12/31/20	Prior to 12/31/20
CNE100000312	DONGFENG MOTOR GROUP COMPANY LIMITED	China	Prior to 12/31/20	Prior to 12/31/20
US2577382037	DONGFENG MOTOR GROUP COMPANY LIMITED	China	Prior to 12/31/20	Prior to 12/31/20
RU000A0DKUU3	ELEKTROSIGNAL OAO	Russia	6/30/2022	12/31/2022
KW0EQ0601801	ENERGY HOUSE HOLDING CO KSCP/THE	Kuwait	Prior to 12/31/20	Prior to 12/31/20
BW0000000058	ENGEN BOTSWANA LTD	Malaysia	Prior to 12/31/20	Prior to 12/31/20
BREGIEACNOR9	ENGIE BRASIL ENERGIA SA	Brazil	Prior to 12/31/20	Prior to 12/31/20
US29286U1079	ENGIE BRASIL ENERGIA SA	Brazil	Prior to 12/31/20	Prior to 12/31/20
CL0001583070	ENGIE ENERGIA CHILE SA	Chile	Prior to 12/31/20	Prior to 12/31/20
PEP702101002	ENGIE ENERGIA PERU SA	Peru	Prior to 12/31/20	Prior to 12/31/20
FR0012650166	ENGIE EPS aka NHOA SA	France	Prior to 12/31/20	Prior to 12/31/20

Sudan Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
FR0010208488	ENGIE SA	France	Prior to 12/31/20	Prior to 12/31/20
FR001208488	ENGIE SA	France	Prior to 12/31/20	Prior to 12/31/20
US29286D1054	ENGIE SA	France	Prior to 12/31/20	Prior to 12/31/20
AT00000FACC2	FACC AG	Austria	Prior to 12/31/20	Prior to 12/31/20
CNE000000875	FIYTA PRECISION TECHNOLOGY CO LTD	China	6/30/2021	12/31/2021
CNE000000883	FIYTA PRECISION TECHNOLOGY CO LTD	China	6/30/2021	12/31/2021
RU0009034268	GAZ PJSC	Russia	Prior to 12/31/20	Prior to 12/31/20
RU0009102834	GAZ PJSC	Russia	Prior to 12/31/20	Prior to 12/31/20
RU0009034268	GAZ PJSC	Russia	Prior to 12/31/20	Prior to 12/31/20
RU000A0ZYHF5	GAZ PJSC	Russia	Prior to 12/31/20	Prior to 12/31/20
CNE0000019K1	GUIZHOU GUIHANG AUTOMOTIVE COMPONENTS CO LTD	China	6/30/2021	12/31/2021
CNE10000003C0	HARBIN ELECTRIC CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE1000003C0	HARBIN ELECTRIC CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE1000041C0	HEFEI JIANGHANG AIRCRAFT EQUIPMENT CORPORATION LTD	China	9/30/2021	3/31/2022
INE094A01015	HINDUSTAN PETROLEUM CORP LTD	India	Prior to 12/31/20	Prior to 12/31/20
CND10001L4M9	HUBEI ENERGY GROUP CO LTD	China	6/30/2022	12/31/2022
INE242A01010	INDIAN OIL CORP LTD AKA IOCL	India	Prior to 12/31/20	Prior to 12/31/20
CNE000001HP7	INNER MONGOLIA FIRST MACHINERY GROUP CO LTD	China	9/30/2021	3/31/2022
CNE000001386	INNER MONGOLIA NORTH HAULER JOINT STOCK CO LTD	China	9/30/2021	3/31/2022
RU0006752979	IRKUT CORP PJSC	Russia	Prior to 12/31/20	Prior to 12/31/20
CNE0000015N3	JIANGXI HONGDU AVIATION INDUSTRY CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE000001HS1	JINXI AXLE CO LTD	China	9/30/2021	3/31/2022
RU0006935954	JSC ROSTVERTOL AKA ROSTOV HELICOPTER PRODUCTION COMPLEX	Russia	Prior to 12/31/20	Prior to 12/31/20
RU0008959580	KAMAZ PJSC	Russia	Prior to 12/31/20	Prior to 12/31/20
DE0006578008	KHD HUMBOLDT WEDAG INTERNATIONAL AG	Germany	Prior to 12/31/20	Prior to 12/31/20
DE000A1X3WW8	KHD HUMBOLDT WEDAG VERMOEGENSVERWALTUNGS-AG	Germany	6/30/2021	12/31/2021
MYL5235SS008	KLCCP STAPLED GROUP	Malaysia	Prior to 12/31/20	Prior to 12/31/20
RU000A0JWN06	KOVLKINSKIY ELEKTROMEKHANICHESKIY ZAVOD PAO	Russia	6/30/2021	12/31/2021
RU000A0JWN14	KOVLKINSKIY ELEKTROMEKHANICHESKIY ZAVOD PAO	Russia	6/30/2021	12/31/2021
RU0007940839	KRASNOGORSKIY ZAVOD IMENI SA ZVEREVA OAO	Russia	Prior to 12/31/20	Prior to 12/31/20
RU0009124010	KRASNOGORSKIY ZAVOD IMENI SA ZVEREVA OAO	Russia	Prior to 12/31/20	Prior to 12/31/20
BMG5320C1082	KUNLUN ENERGY CO LTD	Bermuda	Prior to 12/31/20	Prior to 12/31/20
US50126A1016	KUNLUN ENERGY CO LTD	Bermuda	Prior to 12/31/20	Prior to 12/31/20
RU0009098974	KURGANMASHZAVOD	Russia	Prior to 12/31/20	Prior to 12/31/20
RU0009098982	KURGANMASHZAVOD	Russia	Prior to 12/31/20	Prior to 12/31/20
CNE100000HC6	LANGOLD REAL ESTATE CO LTD	China	6/30/2021	12/31/2021
LK0345N00005	LANKA IOC PLC	India	Prior to 12/31/20	Prior to 12/31/20
CNE000001FN6	LING YUN INDUSTRIAL CORP LTD	China	9/30/2021	3/31/2022
KR7010120004	LS ELECTRIC CO LTD	Korea South	Prior to 12/31/20	Prior to 12/31/20
RU000A0JSNE2	LYTKARINSKIY ZAVOD OPTICHESKOGO STEKLA AO	Russia	6/30/2021	12/31/2021
RU000A0JSNF9	LYTKARINSKIY ZAVOD OPTICHESKOGO STEKLA AO	Russia	6/30/2021	12/31/2021
MYL381600005	MALAYSIA INTERNATIONAL SHIPPING COMPANY AKA MISC BHD	Malaysia	Prior to 12/31/20	Prior to 12/31/20
MYL518600001	MALAYSIA MARINE AND HEAVY ENGINEERING HOLDINGS BHD	Malaysia	Prior to 12/31/20	Prior to 12/31/20
MA0000011058	MANAGEM SA	Morocco	Prior to 12/31/20	Prior to 12/31/20
INE103A01014	MANGALORE REFINERY & PETROCHEMICALS LTD	India	Prior to 12/31/20	Prior to 12/31/20
INE103A04018	MANGALORE REFINERY & PETROCHEMICALS LTD	India	Prior to 12/31/20	Prior to 12/31/20
RU0006758984	MOSKOVSKIY VERTOLETNIY ZAVOD IMENI MILYA AKA MIL MOSCOW HELICOPTERS PLANT JSC	Russia	Prior to 12/31/20	Prior to 12/31/20
RU0006758992	MOSKOVSKIY VERTOLETNIY ZAVOD IMENI MILYA AKA MIL MOSCOW HELICOPTERS PLANT JSC	Russia	Prior to 12/31/20	Prior to 12/31/20
Not Available	NAUCHNO-PROIZVODSTVENNAYA KOMPANIYA RITM AO	Russia	12/30/2021	6/30/2022
RU0009115604	NEFTEKAMSKY AVTOZAVOD AKA NEFAZ	Russia	Prior to 12/31/20	Prior to 12/31/20
KYG6501M1050	NEXTEER AUTOMOTIVE GROUP LTD	Cayman Islands	Prior to 12/31/20	Prior to 12/31/20
CNE000000VZ9	NORINCO INTERNATIONAL COOPERATION LTD	China	9/30/2021	3/31/2022
CNE100000BW7	NORTH CHEMICAL INDUSTRIES CO LTD	China	9/30/2021	3/31/2022
CNE000001G61	NORTH ELECTRO-OPTIC CO LTD	China	9/30/2021	3/31/2022
CNE000000NY9	NORTH HUAJIN CHEMICAL INDUSTRIES CO LTD	China	9/30/2021	3/31/2022
CNE000000198	NORTH INDUSTRIES GROUP RED ARROW CO LTD	China	9/30/2021	3/31/2022
CNE000001F88	NORTH NAVIGATION CONTROL TECHNOLOGY CO LTD	China	9/30/2021	3/31/2022
RU000A0JRP2H	ODK AVIADVIGATEL' AO	Russia	6/30/2021	12/31/2021
RU0009095244	ODK UMPO PAO	Russia	6/30/2021	12/31/2021
RU0007774998	ODK-SATURN PAO	Russia	6/30/2021	12/31/2021
RU000A0JQQH2	ODK-STAR AO	Russia	9/30/2021	3/31/2022
RU000A0JQQJ8	ODK-STAR AO	Russia	9/30/2021	3/31/2022
INE213A01029	OIL & NATURAL GAS CORP LTD	India	Prior to 12/31/20	Prior to 12/31/20
INE274J01014	OIL INDIA LTD	India	Prior to 12/31/20	Prior to 12/31/20
RU0006766912	OKB IM. A.S. YAKOVLEVA OAO	Russia	6/30/2021	12/31/2021
RU0006766920	OKB IM. A.S. YAKOVLEVA OAO	Russia	6/30/2021	12/31/2021
CA68558N1024	ORCA GOLD INC	Canada	Prior to 12/31/20	Prior to 12/31/20
RU0009083240	PAVLOVO BUS PJSC	Russia	Prior to 12/31/20	Prior to 12/31/20
ARDEUT113958	PETROCHINA CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
BRPTCHBDR008	PETROCHINA CO LTD	China	Prior to 12/31/20	Prior to 12/31/20

Sudan Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
CNE100003W8	PETROCHINA CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE100007Q1	PETROCHINA CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
US71646E1001	PETROCHINA CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
USY68851AK32	PETROLIAM NASIONAL BHD AKA PETRONAS	Malaysia	Prior to 12/31/20	Prior to 12/31/20
MYL51830O008	PETRONAS CHEMICALS GROUP BHD	Malaysia	Prior to 12/31/20	Prior to 12/31/20
MYL56810O001	PETRONAS DAGANGAN BHD	Malaysia	Prior to 12/31/20	Prior to 12/31/20
MYL60330O004	PETRONAS GAS BHD	Malaysia	Prior to 12/31/20	Prior to 12/31/20
CNE100001S81	POLY CULTURE GROUP CORP LTD	China	Prior to 12/31/20	Prior to 12/31/20
FR0010097592	POLY CULTURE GROUP CORP LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE000001ND1	POLY DEVELOPMENTS AND HOLDINGS GROUP CO LTD	China	6/30/2021	12/31/2021
CNE100003PV3	POLY PROPERTY SERVICES CO LTD	China	6/30/2021	12/31/2021
CNE000001L15	POLY UNION CHEMICAL HOLDING GROUP CO LTD	China	6/30/2021	12/31/2021
DE000PAH0038	PORSCHE AUTOMOBIL HOLDING SE	Germany	6/30/2021	12/31/2021
US73328P1066	PORSCHE AUTOMOBIL HOLDING SE	Germany	6/30/2021	12/31/2021
CNE1000017G1	POWER CONSTRUCTION CORP OF CHINA LTD	China	Prior to 12/31/20	Prior to 12/31/20
CND1000041R9	POWER CONSTRUCTION CORPORATION OF CHINA (POWERCHINA)	China	Prior to 12/31/20	Prior to 12/31/20
RU000A0JQ920	RADIY AO	Russia	9/30/2021	3/31/2022
RU000A0JQ938	RADIY AO	Russia	9/30/2021	3/31/2022
CNE100000PS5	RAINBOW DIGITAL COMMERCIAL CO LTD	China	6/30/2021	12/31/2021
BRGEPAACNOR2	RIO PARANAPANEMA ENERGIA SA	Brazil	6/30/2022	12/31/2022
BBG000VD1BK8	ROSTEC STATE CORPORATION	Russia	Prior to 12/31/20	Prior to 12/31/20
RU000A0JQHY6	RYAZANSKIY RADIOZAVOD AO	Russia	6/30/2021	12/31/2021
RU000A0JQHZ3	RYAZANSKIY RADIOZAVOD AO	Russia	6/30/2021	12/31/2021
BBG001R1ZC73	SERPUKHOVSKIY ZAVOD METALLIST AO	Russia	12/30/2021	6/30/2022
CNE100000437	SHANGHAI ELECTRIC GROUP CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE100000D55	SHANGHAI ELECTRIC GROUP CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
US81943J1088	SHANGHAI ELECTRIC GROUP CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE100000D55	SHANGHAI ELECTRIC WIND POWER GROUP CO LTD	China	9/30/2022	3/31/2023
CNE000000B91	SHANGHAI MECHANICAL AND ELECTRICAL INDUSTRY CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE000000G39	SHANGHAI MECHANICAL AND ELECTRICAL INDUSTRY CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE100003373	SHENNAN CIRCUITS CO LTD	China	44377	44561
CNE100001ZM5	SHENZHEN YINGHE TECHNOLOGY CO LTD	China	44377	44561
CNE100000890	SICHUAN CHENGFEI INTEGRATION TECHNOLOGY CORP	China	Prior to 12/31/20	Prior to 12/31/20
CNE000000FV1	SICHUAN MEIFENG CHEMICAL INDUSTRY CO LTD	China	44469	44651
CNE100001NV2	SINOPEC ENGINEERING GROUP CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE100001NV2	SINOPEC ENGINEERING GROUP CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
US82938M1062	SINOPEC ENGINEERING GROUP CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
BMG8165U1009	SINOPEC KANTON HOLDINGS LTD	Hong Kong	Prior to 12/31/20	Prior to 12/31/20
US82934W2070	SINOPEC KANTON HOLDINGS LTD	Hong Kong	Prior to 12/31/20	Prior to 12/31/20
CNE000000XK7	SINOPEC OILFIELD EQUIPMENT	China	Prior to 12/31/20	Prior to 12/31/20
CNE000000HS3	SINOPEC OILFIELD SERVICE CORP	China	Prior to 12/31/20	Prior to 12/31/20
CNE1000004D6	SINOPEC OILFIELD SERVICE CORP	China	Prior to 12/31/20	Prior to 12/31/20
CNE000000669	SINOPEC SHANDONG TAISHAN PETROLEUM CO LTD	China	44377	44561
CNE000000BB2	SINOPEC SHANGHAI PETROCHEMICAL CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
CNE1000004C8	SINOPEC SHANGHAI PETROCHEMICAL CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
US82935M1099	SINOPEC SHANGHAI PETROCHEMICAL CO LTD	China	Prior to 12/31/20	Prior to 12/31/20
KZ0009093902	SNPS-AKTOBEMUNAYGAZ AO	Kazakhstan	44377	44561
MA0000010068	SOCIETE METALLURGIQUE D'IMITER	Morocco	Prior to 12/31/20	Prior to 12/31/20
RU000A0JVD75	SR SIGNAL PAO	Russia	44377	44561
RU000A0JVDW9	SR SIGNAL PAO	Russia	44377	44561
RU000A0JRG69	STUPINSKOYE MASHINOSTROITEL'NOYE PROIZVODSTVENNOYE PREDPRIYATIYE AO	Russia	44377	44561
RU000A0JRG77	STUPINSKOYE MASHINOSTROITEL'NOYE PROIZVODSTVENNOYE PREDPRIYATIYE AO	Russia	44377	44561
CNE1000010Z6	SUZHOU THVOW TECHNOLOGY CO LTD	China	44377	44561
CNE000000HT1	TIANMA MICROELECTRONICS CO LTD	China	44377	44561
DE000TRATON7	TRATON SE	Germany	44377	44561
DE000TRATON7	TRATON SE	Germany	44377	44561
RU0002637182	TUPOLEV PAO	Russia	44377	44561
RU0009843064	TUTAYEVSKIY MOTORNYI ZAVOD PAO	Russia	44377	44561
RU0009843072	TUTAYEVSKIY MOTORNYI ZAVOD PAO	Russia	44377	44561
RU000A0HL7A2	TUYMAZINSKIY ZAVOD AVTOBETONOVZOV PAO	Russia	Prior to 12/31/20	Prior to 12/31/20
RU000A0JNLL2	TVERSKOY ESKAVATOR OAO	Russia	44377	44561
RU000A0JPLZ7	UNITED AIRCRAFT CORP PJSC	Russia	Prior to 12/31/20	Prior to 12/31/20
DE0007664005	VOLKSWAGEN AG	Germany	44377	44561
DE0007664039	VOLKSWAGEN AG	Germany	44377	44561
US9286625010	VOLKSWAGEN AG	Germany	44377	44561
US9286626000	VOLKSWAGEN AG	Germany	44377	44561
RU000A0JNZU3	VOMZ AO	Russia	44377	44561
RU000A0JNZV1	VOMZ AO	Russia	44377	44561

Sudan Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
RU0009107650	VORONEZHSKOYE AKTSIONERNOYE SAMOLETOSTROITEL'NOYE OBSHCHESTVO PAO	Russia	44377	44561
RU0009107676	VORONEZHSKOYE AKTSIONERNOYE SAMOLETOSTROITEL'NOYE OBSHCHESTVO PAO	Russia	44377	44561
FI0009003727	WARTSILA OYJ ABP	Finland	Prior to 12/31/20	Prior to 12/31/20
US9365441057	WARTSILA OYJ ABP	Finland	Prior to 12/31/20	Prior to 12/31/20
CNE000000FH0	XUZHOU CONSTRUCTION MACHINERY CO LTD	China	44196	44377
RU0009848360	YAROSLAVSKIY ZAVOD DIZEL'NOY APPARATURY AO	Russia	44377	44561
RU0004883123	YAROSLAVSKIY ZAVOD TOPLIVNOY APPARATURY AO	Russia	Prior to 12/31/20	Prior to 12/31/20
CNE0000006C5	YUEYANG XINGCHANG PETRO-CHEMICAL CO LTD	China	44469	44651
RU000A0JVKA0	ZAGORSKIY OPTIKO-MEKHANICHESKIY ZAVOD AO	Russia	44469	44651
CNE100000T08	ZHONGHANG ELECTRONIC MEASURING INSTRUMENTS CO LTD	China	44377	44561

EXHIBIT D-17. 1Q 2022 ITC FOSSIL FUEL RESTRICTED LIST

ITC Fossil Fuel Restriction				
1. Applicable To:	Invested Treasurer's Cash Pool			
2. Effective:	March 31, 2022			
3. Updated:	Annually in June			
4. Source (vendor):	EIRIS CRN			
5. Schedule of Liquidation: Applies to holdings in the portfolio identified by the vendor that meet the criteria outlined in Board Resolution . Holdings must be liquidated by the date listed.				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
US0038303048	Abraxas Petroleum Corp.	United States of America		
US0063513081	Adams Resources & Energy, Inc.	United States of America		
CA00765F1018	Advantage Oil & Gas Ltd.	Canada		
CL0001880955	AES Gener	Chile		
CA00829Q1019	Africa Oil Corp	Canada		
US001355AA49	AI Candelaria	Spain		
NO0010234552	Aker ASA	Norway		
NO0010345853	Aker BP ASA	Norway		
US010392EZ75	Alabama Power Co.	United States of America		
FR0000060402	Albioma SA	France		
US0185223007	ALLETE	United States of America		
US01877R1086	Alliance Resource Partners LP	United States of America		
US0188021085	Alliant Energy Corp.	United States of America		
US0207641061	Alpha Metallurgical Resources, Inc.	United States of America		
US02133L1098	Alta Mesa Resources	United States of America		
CA0213611001	AltaGas	Canada		
US0236081024	Ameren Corp.	United States of America		
US0255371017	American Electric Power Co., Inc.	United States of America		
GB0032087826	Amerisur Resources	United Kingdom		
US03212B1035	Amplify Energy	United States of America		
US03350F1066	Andeavor Logistics	United States of America		
US03676B1026	Antero Midstream	United States of America		
US03674X1063	Antero Resources	United States of America		
AU000000APA1	APA Group	Australia		
US03743Q1085	Apache	United States of America		
BE6242927075	Apetra	Netherlands		
US0377357928	Appalachian Power	United States of America		
US03834A1034	Approach Resources	United States of America		
CA00208D4084	Arc Resources	Canada		
US03940R1077	Arch Resources	United States of America		
US04085MM650	Arkansas Electric Cooperative	United States of America		
USU04354AC78	Ascent Resources Utica Holdings	United States of America		
CA0467894006	ATCO	Canada		
CA04682R1073	Athabasca Oil	Canada		
CA04878Q8636	Atlantic Power Corporation	Canada		
AU000000AZJ1	Aurizon Holdings	Australia		
US05379B1070	Avista	United States of America		
US05722G1004	Baker Hughes	United States of America		
US06985P2092	Basic Energy Services	United States of America		
NZBRLE0001S4	Bathurst Resources	New Zealand		
US40537Q6052	Battalion Oil	United States of America		
CA07317Q1054	Baytex Energy	Canada		
US084659AF84	Berkshire Hathaway Energy	United States of America		
US08579X1019	Berry	United States of America		
GB00BH0P3Z91	BHP Group (UK)	United Kingdom		

ITC Fossil Fuel Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
US06846N1046	Bill Barrett	United States of America		
CA0906971035	Birchcliff Energy	Canada		
US0921131092	Black Hills Corporation	United States of America		
US095796AE85	Blue Racer Midstream	United States of America		
US0966271043	Boardwalk Pipeline Partners	United States of America		
US0977934001	Bonanza Creek Energy	United States of America		
CA09784Y1088	Bonavista Energy Corporation	Canada		
GB0007980591	BP	United Kingdom		
US10918L1035	Brigham Minerals	United States of America		
BMG162341090	Brookfield Business Partners	United States of America		
BMG162521014	Brookfield Infrastructure Partners	Canada		
US1182301010	Buckeye Partners	United States of America		
KVE00001189	Buckeye Power, Inc.	United States of America		
BMG173841013	Bw Lpg	Norway		
US1270971039	Cabot Oil & Gas	United States of America		
GB00BN0SMB92	Cairn Energy	United Kingdom		
CA1295841086	Calfrac Well Services	Canada		
US13057Q2066	California Resources Corporation	United States of America		
US13123X5086	Callon Petroleum	United States of America		
US1313473043	Calpine	United States of America		
US1314761032	Calumet Specialty Products	United States of America		
US133434AA86	Cameron LNG	United States of America		
CA1348082035	Canacol Energy Ltd.	Canada		
CA1363851017	Canadian Natural Resources	Canada		
CA1367178326	Canadian Utilities Ltd.	Canada		
CA14042M1023	Capital Power	Canada		
US1445771033	Carrizo Oil & Gas	United States of America		
CA15135U1093	Cenovus Energy	Canada		
US15136A1025	Centennial Resource Development	United States of America		
US15138AAC45	Centennial Resource Production	United States of America		
US15189T1079	CenterPoint Energy, Inc.	United States of America		
CZ0005112300	CEZ	Czech Republic		
US15942R2085	Chaparral Energy	United States of America		
US16411R2085	Cheniere Energy	United States of America		
US16411Q1013	Cheniere Energy Partners, L.P.	United States of America		
US1651677437	Chesapeake Energy	United States of America		
US1653031088	Chesapeake Utilities	United States of America		
US1667641005	Chevron Corporation	United States of America		
US1717981013	Cimarex Energy	United States of America		
US76116A3068	Cimarex Resolute LLC	United States of America		
US18539C1053	Clearway Energy, Inc.	United States of America		
US12561W1053	Cleco Corporate Holdings	United States of America		
US18911Q1022	Cloud Peak Energy	United States of America		
US1258961002	CMS Energy	United States of America		
US12653C1080	CNX Resources	United States of America		
US19075F3047	Cobalt International Energy	United States of America		
CLP3615W1037	Colbun	Chile		
US1982801094	Columbia Pipeline Group	United States of America		
USP30179AM09	Comision Federal de Electricidad	Mexico		
ES0132580004	Compania Espanola de Petroleos, S.A.	Spain		
US2057683029	Comstock Resources	United States of America		
US20605P1012	Concho Resources	United States of America		
US20825C1045	ConocoPhillips	United States of America		

ITC Fossil Fuel Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
US20855T1007	CONSOL Coal Resources	United States of America		
US20854L1089	Consol Energy	United States of America		
US21075N2045	Contango Oil & Gas	United States of America		
US2120151012	Continental Resources	United States of America		
GB00BF448H58	ContourGlobal	United Kingdom		
NL0000200384	Core Laboratories	United States of America		
US21870U5020	CorEnergy Infrastructure Trust	United States of America		
CA22576C1014	Crescent Point Energy	Canada		
US2263442087	Crestwood Equity Partners LP	United States of America		
US2263781070	Crestwood Midstream Partners LP	United States of America		
CA2265331074	Crew Energy	Canada		
USU22870AE65	CrownRock LP	United States of America		
US1264081035	CSX	United States of America		
US12662P1084	CVR Energy	United States of America		
AU0000120628	Dalrymple Bay Infrastructure Ltd	Australia		
DK0060083210	Dampskibsselskabet Norden	Denmark		
US23311P1003	DCP Midstream	United States of America		
IL0010841281	Delek Group	Israel		
US24665A1034	Delek US Holdings	United States of America		
US2479162081	Denbury Resources Inc.	United States of America		
US25179M1036	Devon Energy	United States of America		
MHY2065G1219	DHT Holdings, Inc.	United States of America		
US25271C1027	Diamond Offshore Drilling	United States of America		
MHY206761055	Diamond S Shipping	United States of America		
US25278X1090	Diamondback Energy	United States of America		
GB00BYX7JT74	Diversified Gas & Oil Plc	United States of America		
NO0003921009	DNO	Norway		
GB0033032904	DNO North Sea	United Kingdom		
US25746U1097	Dominion Energy	United States of America		
MHY2106R1100	Dorian LPG	United States of America		
US2333311072	DTE Energy Co.	United States of America		
US26441C2044	Duke Energy	United States of America		
US27032D3044	Earthstone Energy	United States of America		
COC04PA00016	Ecopetrol	Colombia		
XS0235372140	Eesti Energia	Estonia		
KVE00002973	EIG Global Energy Partners LLC	United States of America		
US2836778546	El Paso Electric	United States of America		
XS0856023493	Electricity Supply Board	Ireland		
CA2908761018	Emera	Canada		
US29245JAL61	Empresa Nacional del Petroleo	Chile		
US2924801002	Enable Midstream Partners, LP	United States of America		
CA29250N1050	Enbridge	Canada		
US29250R1068	Enbridge Energy Partners, L.P.	United States of America		
US29260FAC41	Endeavor Energy Resources	United States of America		
PLENEA000013	ENEA SA	Poland		
KVE00000115	ENECO Group	Netherlands		
IT0003128367	Enel	Italy		
CLP3710M1090	Enel Generacion Chile	Chile		
PLENERG00022	Energa	Poland		
GB00BG12Y042	Energean	United Kingdom		
KVE000000487	Energeticky a Prumyslovy Holding	Czech Republic		
XS1684813493	Energia Group Limited	Ireland		
PTEDP0AM0009	Energias de Portugal	Portugal		
US29273V1008	Energy Transfer	United States of America		

ITC Fossil Fuel Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
US29278MAA36	Energy Ventures GOM LLC	United States of America		
CA2927661025	Enerplus Corporation	Canada		
CL0001583070	Engie Energia Chile	Chile		
IT0003132476	ENI	Italy		
US29336T1007	EnLink Midstream LLC	United States of America		
US29336U1079	Enlink Midstream Partners LP	United States of America		
GB00B635TG28	EnQuest	United Kingdom		
CA2935701078	Ensign Energy Services	Canada		
US29364G1031	Entergy Corp.	United States of America		
US29379VAV53	Enterprise Products Operating	United States of America		
US2937921078	Enterprise Products Partners L.P.	United States of America		
US26875P1012	EOG Resources	United States of America		
XS0783933350	EP Energy	Czech Republic		
US2687851020	EP Energy Corp	United States of America		
XS2034622048	EP Infrastructure	Czech Republic		
US26884L1098	EQT Corporation	United States of America		
NO0010096985	Equinor	Norway		
IL0007550176	Equital Ltd.	Israel		
US2946001011	Equitrans Midstream	United States of America		
IT0001157020	ERG	Italy		
XS0434144969	Ervia	Ireland		
BE0003816338	Euronav	Belgium		
US30034W1062	Evergy	United States of America		
US30049A1079	Evolution Petroleum Corporation	United States of America		
DE000A0Z2A12	EWE	Germany		
US2692795014	EXCO Resources	United States of America		
IM00B58FMW76	Exillon Energy	United Kingdom		
US30227M1053	Extraction Oil & Gas	United States of America		
US30231G1022	Exxon Mobil	United States of America		
US31503AAA25	Fermaca Enterprises S de RL de CV	Mexico		
US3379321074	FirstEnergy	United States of America		
BE0974265945	Fluxys Belgium	Belgium		
US34552U1043	Foresight Energy	United States of America		
CA3565001086	Freehold Royalties	Canada		
US30306VAA70	Freeport LNG Development	United States of America		
CA35905B1076	Frontera Energy	Canada		
US30283W3025	FTS International	United States of America		
JP3160300004	Fuji Oil	Japan		
PTGAL0AM0009	Galp Energia	Portugal		
XS0858803066	Gas Networks Ireland	Ireland		
US3614481030	GATX	United States of America		
MHY268891089	Gener8 Maritime	United States of America		
US3719271047	Genesis Energy, L.P.	United States of America		
BMG383271050	GeoPark Limited	United States of America		
US373334JN28	Georgia Power	United States of America		
CA3748252069	Gibson Energy	Canada		
JE00B4T3BW64	Glencore	United Kingdom		
BMG9456A1009	Golar LNG	United States of America		
BMG396372051	Golden Ocean Group Limited	Norway		
KVE00002839	Golden Spread Electric Cooperative	United States of America		
US3824108431	Goodrich Petroleum Corporation	United States of America		
US38500T1016	Gran Tierra Energy	United States of America		

ITC Fossil Fuel Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
US39121JAF75	Great River Energy	United States of America		
PLLOTOS00025	Grupa LOTOS	Poland		
COE01PA00026	Grupo Energia Bogota	Colombia		
KR7078930005	GS Holdings Corp.	South Korea		
BMG4209G2077	Gulf Keystone Petroleum Limited	United States of America		
US402479CF43	Gulf Power Company	United States of America		
US4026355028	Gulfport Energy	United States of America		
US40609P1057	Hallador Energy	United States of America		
US4062161017	Halliburton	United States of America		
US4198701009	Hawaiian Electric Industries	United States of America		
GRS298343005	Hellenic Petroleum	Greece		
US4234521015	Helmerich & Payne	United States of America		
US42809H1077	Hess	United States of America		
US4281031058	Hess Midstream LP	United States of America		
US43114K2078	HighPoint Resources	United States of America		
US431318AQ79	Hilcorp Energy	United States of America		
VIGEIRIS0426	H-Line Shipping	South Korea		
US4361061082	HollyFrontier	United States of America		
US439223AA66	Hoosier Energy Rural Electric Cooperative	United States of America		
GB00B580MF54	Hurricane Energy	United Kingdom		
CA4480551031	Husky Energy	Canada		
ES0144580Y14	Iberdrola	Spain		
US4511001012	Icahn Enterprises	United States of America		
US4511071064	Idacorp	United States of America		
MX01IE060002	IEnova	Mexico		
CA4530384086	Imperial Oil	Canada		
US4534156066	Independence Contract Drilling	United States of America		
US454889AM82	Indiana Michigan Power	United States of America		
USU4529LAA27	Indigo Natural Resources LLC	United States of America		
CA45833V1094	Inter Pipeline	Canada		
US45867EAB20	Intergas Finance	Netherlands		
US45867XAG97	InterGen	Netherlands		
CA46016U1084	International Petroleum Corporation	Canada		
MHY410531021	International Seaways	United States of America		
IT0003027817	Iren	Italy		
IL0005760173	Israel Corporation	Israel		
US4651414066	Isramco	United States of America		
US47009K1079	Jagged Peak Energy	United States of America		
PLJSW0000015	Jastrzebska Spolka Weglowa SA	Poland		
US478045AA52	John Sevier Combined Cycle	United States of America		
US47987LAA98	Jonah Energy LLC	United States of America		
US48019TAF12	Jones Energy	United States of America		
US4851703029	Kansas City Southern	United States of America		
US48244LAA61	KCA Deutag	United Kingdom		
CA4882951060	Kelt Exploration	Canada		
KR7015760002	Kepco	South Korea		
CA4932711001	Keyera	Canada		
US49456B1017	Kinder Morgan	United States of America		
US4972661064	Kirby Corporation	United States of America		
KR7036460004	Korea Gas	South Korea		
KR6066563547	Korea Midland Power	South Korea		
XS0877974815	Korea National Oil	South Korea		

ITC Fossil Fuel Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
US5168062058	Laredo Petroleum	United States of America		
US5247073043	Legacy Reserves	United States of America		
US50188FAD78	LG&E KU Energy	United States of America		
US53115L1044	Liberty Oilfield Services	United States of America		
US5324032011	Lilis Energy, Inc.	United States of America		
PLLWBGD00016	Lubelski Wegiel Bogdanka	Poland		
SE0000825820	Lundin Energy	Sweden		
US5590801065	Magellan Midstream Partners	United States of America		
US5658491064	Marathon Oil	United States of America		
US56585A1025	Marathon Petroleum Corp.	United States of America		
US5707591005	MarkWest Energy Partners LP	United States of America		
US5764852050	Matador Resources	United States of America		
FR0000051070	Maurel et Prom	France		
CA5527041084	MEG Energy	Canada		
US55277P1049	MGE Energy	United States of America		
US595620AJ40	Midamerican Energy	United States of America		
KVE00002851	Minnkota Power Cooperative, Inc.	United States of America		
US605417BZ68	Mississippi Power	United States of America		
HU0000153937	MOL Hungarian Oil Gas	Hungary		
US61179L1008	Montage Resources	United States of America		
GRS426003000	Motor Oil Hellas Corinth	Greece		
US3735415A52	Municipal Electric Authority of Georgia	United States of America		
US6267171022	Murphy Oil	United States of America		
US62704PAM59	Murray Energy	United States of America		
BMG6359F1370	Nabors Industries	United States of America		
US6295791031	Nacco Industries	United States of America		
VGG6375R1073	National Energy Services Reunited	United States of America		
US6361801011	National Fuel Gas	United States of America		
US63900P6088	Natural Resource Partners L.P.	United States of America		
ES0116870314	Naturgy Energy Group	Spain		
XS0419587745	Nederlandse Gasunie NV	Netherlands		
KVE000000590	Neptune Energy Group	United Kingdom		
FI0009013296	Neste	Finland		
XS1090450047	Net4Gas	Czech Republic		
US65342K1051	NextDecade Corporation	United States of America		
US65339F1012	NextEra Energy, Inc.	United States of America		
US65290C1053	NexTier Oilfield Solutions	United States of America		
US62912XAC83	NGPL PipeCo	United States of America		
US65473P1057	NiSource, Inc.	United States of America		
US6550441058	Noble Energy	United States of America		
GB00BFG3KF26	Noble Holding Corporation plc	United States of America		
CA663307AB20	North West Redwater Partnership	Canada		
US6655313079	Northern Oil and Gas	United States of America		
KVE00002749	Northern Star Generation	United States of America		
CA6665111002	Northland Power	Canada		
US6680743050	NorthWestern Corporation	United States of America		
GB00BGP6Q951	Nostrum Oil & Gas	United Kingdom		
US6293775085	NRG Energy, Inc.	United States of America		
US67058H1023	NuStar Energy L.P.	United States of America		
US67059TAC99	NuStar Logistics	United States of America		
CA67072Q1046	NuVista Energy	Canada		
US67073YAA47	NV Energy	United States of America		

ITC Fossil Fuel Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
US6742151086	Oasis Petroleum, Inc.	United States of America		
US6745991058	Occidental Petroleum	United States of America		
US6708371033	OGE Energy	United States of America		
US677050AC00	Oglethorpe Power	United States of America		
US67773DAF24	Ohio Valley Electric Corp	United States of America		
IL0025902482	Oil Refineries	Israel		
JP3194700005	Okinawa Electric Power Co. Inc.	Japan		
US679574AH65	Old Dominion Electric Cooperative	United States of America		
AT0000743059	OMV	Austria		
US6826801036	ONEOK	United States of America		
GB00B24CT194	Ophir Energy	United Kingdom		
AU0000000ORG5	Origin Energy	Australia		
US6896481032	Otter Tail Corporation	United States of America		
US69036R8631	Overseas Shipholding Group	United States of America		
US69047Q1022	Ovintiv	United States of America		
US6512901082	Ovintiv Exploration	United States of America		
US695114BT48	Pacificorp	United States of America		
GB00B125SX82	Pantheon Resources	United Kingdom		
US69888T2078	Par Pacific Holdings	United States of America		
CA6993202069	Paramount Resources	Canada		
CA69946Q1046	Parex Resources	Canada		
US7010815071	Parker Drilling	United States of America		
US7018771029	Parsley Energy	United States of America		
US7034811015	Patterson-UTI Energy	United States of America		
IL0011000077	Paz Oil	Israel		
US69318G1067	PBF ENERGY	United States of America		
US69327R1014	PDC Energy	United States of America		
US7045511000	Peabody Energy	United States of America		
CA7063271034	Pembina Pipeline	Canada		
US70788V1026	Penn Virginia Corporation	United States of America		
US02563LAB45	Permian Resources Holding	United States of America		
KVE00000107	Petoro	Norway		
XS0456477578	Petroleos Mexicanos	Mexico		
CA7170461064	Peyto Exploration & Development	Canada		
GB00B572ZV91	Pharos Energy	United Kingdom		
US7185461040	Phillips 66	United States of America		
US7185492078	Phillips 66 Partners LP	United States of America		
US69291A1007	PHX Minerals Inc.	United States of America		
US7234841010	Pinnacle West Capital	United States of America		
US7236641087	Pioneer Energy Services	United States of America		
US7237871071	Pioneer Natural Resources	United States of America		
US7265031051	Plains All American Pipeline	United States of America		
US72651A2078	Plains GP Holdings	United States of America		
US69349H1077	PNM Resources	United States of America		
PLPGER000010	Polska Grupa Energetyczna	Poland		
PLPKN0000018	Polski Koncern Naftowy Orlen	Poland		
PLPGNIG00014	Polskie Gornictwo Naftowe i Gazownictwo	Poland		
US7365088472	Portland General Electric	United States of America		
US69351T1060	PPL Corporation	United States of America		
CA7397211086	Prairiesky Royalty	Canada		
CA74022D4075	Precision Drilling Corporation	Canada		
GB00BLGYGY88	Premier Oil	United Kingdom		

ITC Fossil Fuel Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
US74158E1047	PrimeEnergy Resources Corporation	United States of America		
COI04PA00021	Promigas	Colombia		
US74347M1080	ProPetro Holding	United States of America		
GRS434003000	Public Power Corporation	Greece		
US7445731067	Public Service Enterprise Group, Inc.	United States of America		
US7453101021	Puget Energy, Inc.	United States of America		
US74733V1008	QEP Resources	United States of America		
US74875T1034	Quintana Energy Services	United States of America		
US75134P3038	Ramaco Resources	United States of America		
US75281A1097	Range Resources	United States of America		
PTREL0AM0008	Redes Energeticas Nacionais	Portugal		
XS1223842847	Redexis Gas SA	Spain		
ES0173516115	Repsol	Spain		
US76218Y2028	Rhino Resource Partners	United States of America		
US76680V1089	Ring Energy	United States of America		
GG00BBHXCL35	Riverstone Energy	United Kingdom		
US7697551098	Roan Resources	United States of America		
USU75111AG60	Rockies Express Pipeline	United States of America		
US7773851057	Rosehill Resources Inc.	United States of America		
GB00B03MLX29	Royal Dutch Shell	United Kingdom		
NL0009432491	Royal Vopak	Netherlands		
US74978Q1058	RSP Permian	United States of America		
FR0013269123	Rubis	France		
DE0007037129	RWE	Germany		
US785592AV86	Sabine Pass Liquefaction	United States of America		
FR0011347608	SAGESS	France		
US797440BK95	San Diego Gas & Electric	United States of America		
US79970Y1055	Sanchez Energy	United States of America		
US80007P8692	SandRidge Energy	United States of America		
AU000000STO6	Santos	Australia		
NL0000360618	SBM Offshore NV	Netherlands		
AN8068571086	Schlumberger	United States of America		
BMG7998G1069	Seadrill	Norway		
CA81373C1023	Secure Energy Services	Canada		
US81663A1051	SemGroup Corporation	United States of America		
US8168511090	Sempra Energy	United States of America		
GB00B0CY5V57	Serica Energy Plc	United Kingdom		
CA81783Q1054	Seven Generations Energy	Canada		
JP3366800005	Showa Shell Sekiyu K.K.	Japan		
US82836G1022	SilverBow Resources	United States of America		
AU000000SEH2	Sino Gas & Energy Holdings	Australia		
KR7034730002	SK Holdings	South Korea		
KR7096770003	SK Innovation	South Korea		
US78454L1008	SM Energy	United States of America		
IT0003153415	Snam SpA	Italy		
KR7010950004	S-Oil Corporation	South Korea		
US8454373007	Southwestern Electric	United States of America		
US8454671095	Southwestern Energy	United States of America		
CA8467856081	Spartan Energy	Canada		
US852212AE93	Square Butte Electric Cooperative	United States of America		
US78470V1089	SRC Energy	United States of America		
GB0007908733	SSE	United Kingdom		
US86722A1034	SunCoke Energy	United States of America		

ITC Fossil Fuel Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
CA8672241079	Suncor Energy	Canada		
AU000000SEA7	Sundance Energy Australia	Australia		
US86765BAQ23	Sunoco Logistics Partners	United States of America		
CA86880Y1097	Surge Energy	Canada		
US87422J1051	Talen Energy	United States of America		
US8746961072	Tallgrass Energy Partners LP	United States of America		
US87484T1088	Talos Energy	United States of America		
US87612G1013	Targa Resources	United States of America		
PLTAURN00011	Tauron Polska Energia	Poland		
CA87807B1076	TC Energy	Canada		
US87233Q1085	TC PipeLines	United States of America		
CA8787422044	Teck Resources	Canada		
US8723751009	Teco Energy	United States of America		
MHY8564W1030	Teekay Corporation	United States of America		
MHY8565N3002	Teekay Tankers	United States of America		
US879068AA20	Teine Energy Ltd.	Canada		
US87968A1043	Tellurian	United States of America		
US880591ER96	Tennessee Valley Authority	United States of America		
FR0012881555	Terega	France		
SE0014399424	Tethys Oil AB	Sweden		
US00130H1059	The AES Corporation	United States of America		
US8425871071	The Southern Company	United States of America		
US02752P1003	Third Coast Midstream, LLC	United States of America		
CA8908953034	TORC Oil & Gas	Canada		
GB00BZ3CNK81	Torm Plc	United Kingdom		
FR0000120271	Total	France		
CA89156V1067	Tourmaline Oil	Canada		
CA89346D1078	TransAlta Corporation	Canada		
CA8934631091	TransAlta Renewables	Canada		
US89376V1008	TransMontaigne Partners LLC	United States of America		
CH0048265513	Transocean	Switzerland		
US89566EAD04	Tri-State Generation and Transmission Association	United States of America		
US898813AP54	Tucson Electric Power	United States of America		
GB0001500809	Tullow Oil	United Kingdom		
CA9039142083	Ultra Petroleum Corp.	United States of America		
US90400GAA94	Ultra Resources	United States of America		
US9092181091	Unit Corporation	United States of America		
AU000000UNV0	Universal Coal	Australia		
BMG9460G1015	Valaris	United States of America		
US91913Y1001	Valero Energy	United States of America		
KYG9325C1050	Vantage Drilling International	United States of America		
US92240G1013	Vectren	United States of America		
GB0033277061	Vedanta Resources	United Kingdom		
CA9237251058	Vermilion Energy	Canada		
XS0942082115	Vier Gas Transport GmbH	Germany		
US927375AB16	Vine Oil & Gas	United States of America		
US92840M1027	Vistra	United States of America		
US92922P1066	W&T Offshore	United States of America		
US93627C1018	Warrior Met Coal	United States of America		
IE00BLNN3691	Weatherford International	United States of America		
US92939U1060	WEC Energy Group, Inc.	United States of America		
US9582541044	Western Midstream Operating	United States of America		

ITC Fossil Fuel Restriction				
ISIN	Company Name	Country	Schedule of Liquidation	
			50% By This Date	100% By This Date
US9608781061	Westmoreland Coal	United States of America		
CA96145A2002	Westshore Terminals Investment	Canada		
CA96467A2002	Whitecap Resources	Canada		
US9663875089	Whiting Petroleum	United States of America		
US96812T1025	WildHorse Resource Development	United States of America		
US9694571004	Williams Companies	United States of America		
XS2054210252	Wintershall Dea	Germany		
US98212B1035	WPX Energy	United States of America		
US98389B1008	Xcel Energy, Inc.	United States of America		
AU000000ZEN5	Zenith Energy	Australia		

ATTACHMENT A – ACCOUNT CHARTS

Chart A - Number of accounts as of June 30 for the following years:

Type	2017	2018	2019	2020	2021
Public					
Corporate					
Endowment/Foundations					
Taft Hartley					
Other					

Chart B - Market Value of Domestic and International accounts as of June 30 (\$ billions) for the following years:

Type	2017		2018		2019		2020		2021	
	Dom.	Int'l	Dom.	Int'l	Dom.	Int'l	Dom.	Int'l	Dom.	Int'l
Public										
Corporate										
Endowment/Foundations										
Taft Hartley										
Other										

Chart C - Account sizes as of June 30, 2021 (Market Value \$ Millions):

Type	Average	Smallest	Largest	Median
Public				
Corporate				
Endowment/Foundations				
Taft Hartley				
Other				

Chart D - Total tax exempt trust and custody clients gained and lost for the past six (6) years:

	Clients Gained (# Accounts)	Clients Gained (\$ Millions)	Clients Lost (# Accounts)	Clients Lost (\$ Millions)
2021				
2020				
2019				
2018				
2017				
2016				

Chart E - Number and title of professional personnel gained and lost for the past six (6) years:

	Number and Title Gained	Number and Title Lost
2021		
2020		
2019		
2018		
2017		
2016		

ATTACHMENT B: RESPONDER DECLARATIONS

The undersigned certifies, to the best of his or her knowledge and belief, that:

- A. **Response Contents.** The information provided is true, correct, and reliable for purposes of evaluation for potential contract award. The submission of inaccurate or misleading information may be grounds for disqualification from the award as well as subject the Responder to suspension or debarment proceedings as well as other remedies available by law
- B. **Authorized Signature.** This Declaration is signed by the appropriate person(s), with the authority to contractually bind the Responder, as required by applicable articles, bylaws, resolutions, minutes, and ordinances.
- C. **Non-Collusion Certification.**
 - 1. The Proposal has been arrived at by the Responder independently and has been submitted without collusion and without any agreement, understanding or planned common course of action with any other vendor designed to limit fair or open competition; and
 - 2. The contents of the Response have not been communicated by the Responder or its employees or agents to any person not an employee or agent of the Responder and will not be communicated to any other individual prior to the due date and time of this Solicitation. Any evidence of collusion among Responders in any form designed to defeat competitive responses will be reported to the Minnesota Attorney General for investigation and appropriate action.
- D. **Organizational Conflicts of Interest.** To the best of Responder's knowledge and belief, and except as otherwise disclosed, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest. An organizational conflict of interest exists when, because of existing or planned activities or because of relationships with other persons,
 - 1. a vendor is unable or potentially unable to render impartial assistance or advice to the State;
 - 2. the vendor's objectivity in performing the contract work is or might be otherwise impaired; or
 - 3. the vendor has an unfair competitive advantage.

If after award, an organizational conflict of interest is discovered, an immediate and full disclosure in writing must be made to the State's Chief Procurement Officer which must include a description of the action which the contractor has taken or proposes to take to avoid or mitigate such conflicts. If an organizational conflict of interest is determined to exist, the State may, at its discretion, cancel the contract. In the event the Contractor was aware of an organizational conflict of interest prior to the award of the contract and did not disclose the conflict to OSP, the State may terminate the contract for default. Organizational conflicts of interest terms apply to any subcontractors for this work.

- E. **Certification Regarding Lobbying.** For State of Minnesota Contracts and Grants over \$100,000, the undersigned certifies, to the best of his or her knowledge and belief that:
 - 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the

extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, Disclosure Form to Report Lobbying in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into and is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

- F. **Copyrighted Material Waiver.** By signing its Response, the Responder certifies that it has obtained all necessary approvals for the reproduction and distribution of the contents of its response.
- G. **Diverse Spend Reporting.** The Sample Contract contains a clause for Diverse Spend Reporting. When this clause applies, Contractor will be required to register in a free portal to report diverse spend.

Please see [Diverse Spend Reporting Frequently Asked Questions](#) for additional information.

By signing this form, Responder acknowledges and certifies compliance with all applicable requirements indicated above.

Company Name: _____

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Phone Number: _____

Email Address: _____

ATTACHMENT C: EXCEPTIONS TO STATE'S TERMS AND CONDITIONS

The State presumes a responder agrees to the terms and conditions of this solicitation unless a responder takes specific exception to one or more of the conditions on this form.

The State reserves the right to reject, negotiate, or accept any exception listed to the State's terms and conditions (including those found in the attached Sample Contract).

INSTRUCTIONS: A responder must explicitly list all exceptions to State's terms and conditions, if any (including those found in the attached Sample Contract). Reference the clause number and page number of the State's term and condition for each of a responder's exceptions. If no exceptions exist, state "NONE" specifically on the form below. Whether or not exceptions are taken, the Responder must sign and date this form and submit it as part of their response. *(Add additional pages if necessary.)*

Clause and Page Number	Suggested Change to Clause	Explanation or Justification

By signing this form, I acknowledge that the above-named responder accepts, without qualification, all terms and conditions stated in this solicitation (including the sample contract) except those clearly outlined as exceptions above.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

ATTACHMENT D

STATE OF MINNESOTA VETERAN-OWNED PREFERENCE FORM

Unless a greater preference is applicable and allowed by law, in accordance with Minn. Stat. §16C.16, subd. 6a, the State will award a 6% preference on State procurement to certified small businesses that are majority owned and operated by veterans.

Veteran-Owned Preference Requirements - See Minn. Stat. § 16C.19(d):

- 1) The business has been certified by the Office of Equity in Procurement as being a veteran-owned or service-disabled veteran-owned small business.
- or**
- 2) The principal place of business is in Minnesota AND the United States Department of Veterans Affairs verifies the business as being a veteran-owned or service-disabled veteran-owned small business under Public Law 109-461 and Code of Federal Regulations, title 38, part 74 (Supported By Documentation).

Statutory requirements and appropriate documentation must be met **by the solicitation response due date and time** to be awarded the veteran-owned preference.

Claim the Preference

By signing below, I confirm that:

My company is claiming the veteran-owned preference afforded by Minn. Stat. § 16C.16, subd. 6a. By making this claim, I verify that:

- The business has been certified by the Office of Equity in Procurement as being a veteran-owned or service-disabled veteran-owned small business.
- or**
- My company's principal place of business is in Minnesota **and** the United States Department of Veteran's Affairs verifies my company as being a veteran-owned or service-disabled veteran-owned small business (Supported By Attached Documentation)

Name of Company: _____ Date: _____

Authorized Signature: _____ Telephone: _____

Printed Name: _____ Title: _____

Attach documentation, sign, and return this form with your solicitation response to claim the veteran-owned preference.

ATTACHMENT E

STATE OF MINNESOTA – WORKFORCE CERTIFICATE INFORMATION

Information required for ALL bids or proposals that could exceed \$100,000

Complete Box A or B of this form, and sign and return it with your bid or proposal. A Workforce Certificate or exemption from the Minnesota Department of Human Rights (MDHR) is required to execute a contract in excess of \$100,000 under Minn. Stat. §363A.36.

BOX A – COMPANIES that have employed 40 or more full-time employees in this state or a state where the business has its primary place of business on any single working day during the previous 12 months, check one option below:

- ☐ Attached is our current Workforce Certificate issued by the Minnesota Department of Human Rights (MDHR).
- ☐ Attached is confirmation that MDHR received our application for a Minnesota Workforce Certificate on _____ (date).
- ☐ Our company does not yet have a Workforce Certificate, but we acknowledge that a Workforce Certificate is required before a contract in excess of \$100,000 can be executed with the State of Minnesota or other covered entities.

BOX B – EXEMPT COMPANIES that have not employed 40 or more full-time employees on a single working day in Minnesota or any state where it has its primary place of business during the previous 12 months, check option below if applicable:

- ☐ We attest to MDHR that we are exempt. If our company is awarded a contract, upon request, we will submit to MDHR within 5 business days after the contract is fully signed, the names of our employees during the previous 12 months, the date of separation, if applicable, and the state in which the persons were employed.
Send to compliance.MDHR@state.mn.us.

Signature

By signing this statement, I certify that the information provided is accurate and that I am authorized to sign on behalf of the company.

Name of Company

Authorized Signature

Date

Printed Name

Phone Number

Title

For assistance with this form, contact:

Minnesota Department of Human Rights

Web: <http://mn.gov/mdhr/>

Toll Free: 1-800-657-3704

Email: compliance.mdhr@state.mn.us

MN Relay: 711/ 1-800-627-3529

Rev. 7/21

Rev. 6/2020

ATTACHMENT F

STATE OF MINNESOTA EQUAL PAY CERTIFICATE

If your response could be in excess of \$500,000, please complete and submit this form with your submission. **It is your sole responsibility to provide the information requested and when necessary to obtain an Equal Pay Certificate (Equal Pay Certificate) from the Minnesota Department of Human Rights (MDHR) prior to contract execution. You must supply this document with your submission.** Please contact MDHR with questions at: 651-539-1095 (metro), 1-800-657-3704 (toll free), 711 or 1-800-627-3529 (MN Relay) or at compliance.MDHR@state.mn.us.

Option A – If you have employed 40 or more full-time employees on any single working day during the previous 12 months in Minnesota or the state where you have your primary place of business, please check the applicable box below:

- ☐ Attached is our current MDHR Equal Pay Certificate.
- ☐ Attached is MDHR's confirmation of our Equal Pay Certificate application.

Option B – If you have not employed 40 or more full-time employees on any single working day during the previous 12 months in Minnesota or the state where you have your primary place of business, please check the box below.

- ☐ We are exempt. We agree that if we are selected we will submit to MDHR within five (5) business days of final contract execution, the names of our employees during the previous 12 months, date of separation if applicable, and the state in which the persons were employed. Documentation should be sent to compliance.MDHR@state.mn.us.

The State of Minnesota reserves the right to request additional information from you. **If you are unable to check any of the preceding boxes, please contact MDHR to avoid a determination that a contract with your organization cannot be executed.**

Your signature certifies that you are authorized to make the representations, the information provided is accurate, the State of Minnesota can rely upon the information provided, and the State of Minnesota may take action to suspend or revoke any agreement with you for any false information provided.

Authorized Signature	Printed Name	Title
Organization	MN/FED Tax ID#	Date
Issuing Entity	Project # or Lease Address	



State of Minnesota Professional and Technical Services Contract

SWIFT Contract Number: _____

This Contract is between the State of Minnesota, acting through MN State Board of Investment ("State") and [Contractor] whose designated business address is [Contractor's business address] ("Contractor"). State and Contractor may be referred to jointly as "Parties."

Contract

1. Term of Contract

- 2.1 Effective date. May 1, 2023, or the date the State obtains all required signatures under Minn. Stat. § 16C.05, subd. 2, whichever is later. The Contractor must not begin work under this Contract until this Contract is fully executed and the Contractor has been notified by the State's Authorized Representative to begin the work.
- 2.2 Expiration date. April 30, 2028, or until all obligations have been satisfactorily fulfilled, whichever occurs first.

2. Contractor's Duties

The Contractor shall perform all duties described in this Contract to the satisfaction of the State.

The Contractor, who is not a State employee, shall:

3. Representations and Warranties

- 3.1 Under Minn. Stat. §§ 15.061 and 16C.03, subd. 3, and other applicable law the State is empowered to engage such assistance as deemed necessary.
- 3.2 Contractor warrants that it is duly qualified and shall perform its obligations under this Contract in accordance with the commercially reasonable standards of care, skill, and diligence in Contractor's industry, trade, or profession, and in accordance with the specifications set forth in this Contract, to the satisfaction of the State.
- 3.3 Contractor warrants that it possesses the legal authority to enter into this Contract and that it has taken all actions required by its procedures, by-laws, and applicable laws to exercise that authority, and to lawfully authorize its undersigned signatory to execute this Contract, or any part thereof, and to bind Contractor to its terms.

4. Time

The Contractor must comply with all the time requirements described in this Contract. In the performance of this Contract, time is of the essence.

5. Consideration and Payment

Consideration. The State will pay for performance by the Contractor under this Contract as follows:

- 5.1.1 Compensation. The Contractor will be paid
- 5.1.2 Total obligation. The total obligation of the State for all compensation and reimbursements to the Contractor under this Contract will not exceed \$

5.2 Payment.

- 5.2.1 Invoices. The State will promptly pay the Contractor after the Contractor presents an itemized invoice for the goods received or services actually performed, and the State's Authorized Representative accepts the invoiced goods or services. Invoices must be submitted timely and according to the following schedule:
- 5.2.2 Retainage. Under Minn. Stat. § 16C.08, subd. 2 (10), no more than 90 percent of the amount due under this Contract may be paid until the final product of this Contract has been reviewed by the State. The balance due will be paid when the State determines that the Contractor has satisfactorily fulfilled all the terms of this Contract.
- 5.2.3 Conditions of payment. All services delivered by the Contractor under this Contract must be performed to the State's satisfaction and in accordance with all applicable federal, state, and local laws, ordinances, rules, and regulations including business registration requirements of the Office of the Secretary of State. The Contractor will not receive payment for work found by the State to be unsatisfactory or performed in violation of federal, state, or local law.

6. Authorized Representative

The State's Authorized Representative is, or his/her successor or delegate, and has the responsibility to monitor the Contractor's performance.

Contractor's Authorized Representative. The Contractor's Authorized Representative is [name, title] at the following business address and telephone number: [insert business address and telephone number], or his/her successor. If the Contractor's Authorized Representative changes at any time during this Contract, the Contractor must immediately notify the State.

7. Exhibits

The following Exhibits are attached and incorporated into this Contract. In the event of a conflict between the terms of this Contract and its Exhibits, or between Exhibits, the order of precedence is first the Contract, and then in the following order:

- Exhibit A: Contract Terms
- Exhibit B: Insurance Terms
- Exhibit C: Specifications, Duties, and Scope of Work

Exhibit D: Price and Payment Schedule

1. State Encumbrance Verification

Individual certifies that funds have been encumbered as required by Minn. Stat. §§ 16A.15 and 16C.05

Print Name: _____

Signature: _____

Title: _____ Date: _____

SWIFT Contract No. _____

3. Contractor

The Contractor certifies that the appropriate person has executed the Contract on behalf of the Contractor as required by applicable articles, bylaws, resolutions, or ordinances.

Print Name: _____

Signature: _____

Title: _____ Date: _____

4. State Agency

With delegated authority

Print Name: _____

Signature: _____

Title: _____ Date: _____

5. Commissioner of Administration

As delegated to The Office of State Procurement

Print Name: _____

Signature: _____

Title: _____ Date: _____

Admin ID: _____

Exhibit A: Contract Terms

1. Prompt Payment and Invoicing.

- 1.1 Prompt Payment. The State will pay the Contractor pursuant to Minn. Stat. § 16A.124, which requires payment within 30 days following receipt of an undisputed invoice, or merchandise or service, whichever is later. Terms requesting payment in less than 30 days will be changed to read "Net 30 days." Notwithstanding the foregoing, the State may pay the Contractor in advance for purchases as allowed pursuant to Minn. Stat. §16A.065.

The payment for each order will only be made for goods received or services actually performed that have been accepted by the ordering entity, and meet all terms, conditions, and specifications of the Contract and the ordering document.

- 1.2 Invoicing. The invoice must be in the same format as the sample invoice form approved as Exhibit D, Supplement 1 with the Contract, unless an alternative format is approved in writing by the State Authorized Representative, or delegate. See Exhibit D, Supplement 1 for a list of minimum invoice requirements.

2. Assignment, Amendments, Waiver, and Contract Complete.

- 2.1 Assignment. The Contractor may neither assign nor transfer any rights or obligations under this Contract without the prior consent of the State and a fully executed assignment agreement, executed and approved by the authorized parties or their successors.
- 2.2 Amendments. Any amendment to this Contract must be in writing and will not be effective until it has been executed and approved by the authorized parties or their successors.
- 2.3 Waiver. If the State fails to enforce any provision of this Contract, that failure does not waive the provision or its right to enforce it.
- 2.4 Contract Complete. This Contract contains all negotiations and agreements between the State and the Contractor. No other understanding regarding this Contract, whether written or oral, may be used to bind either party.

3. Termination.

- 3.1 Termination for Convenience. The State or Commissioner of Administration may cancel this Contract at any time, with or without cause, upon 30 days' written notice to the Contractor. Upon termination for convenience, the Contractor will be entitled to payment, determined on a pro rata basis, for services or goods satisfactorily performed or delivered.
- 3.2 Termination for Breach. The State may terminate this Contract, with cause, upon 30 days' written notice to Contractor of the alleged breach and opportunity to cure. If after 30 days, the alleged breach has not been remedied, the State may immediately terminate the Contract.
- 3.3 Termination for Insufficient Funding. The State may immediately terminate this Contract if it does not obtain funding from the Minnesota Legislature, or other funding source; or if funding cannot be continued at a level sufficient to allow for the payment of the services addressed within this Contract. Termination must be by written notice to the Contractor. The State is not obligated to pay for any services that are provided after notice and effective date of termination. However, the Contractor will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed to the extent that dedicated funds are available. The State will not be assessed any penalty if the Contract is terminated because of the decision of the Minnesota

Legislature, or other funding source, not to appropriate funds. The State must provide the Contractor notice of the lack of funding. This notice will be provided within a reasonable time of the State's receiving notice.

4. Force Majeure.

Neither party shall be responsible to the other or considered in default of its obligations within this Contract to the extent that performance of any such obligations is prevented or delayed by acts of God, war, riot, disruption of government, or other catastrophes beyond the reasonable control of the party unless the act or occurrence could have been reasonably foreseen and reasonable action could have been taken to prevent the delay or failure to perform. A party relying on this provision to excuse performance must provide the other party prompt written notice of the inability to perform and take all necessary steps to bring about performance as soon as practicable.

5. Indemnification.

5.1 In the performance of this Contract, the Indemnifying Party must indemnify, save, and hold harmless the State, its agents, and employees, from any claims or causes of action, including attorney's fees incurred by the State, to the extent caused by Indemnifying Party's:

- Intentional, willful, or negligent acts or omissions; or
- Actions that give rise to strict liability; or
- Breach of contract or warranty.

The Indemnifying Party is defined to include the Contractor, Contractor's reseller, any third party that has a business relationship with the Contractor, or Contractor's agents or employees, and to the fullest extent permitted by law. The indemnification obligations of this section do not apply in the event the claim or cause of action is the result of the State's sole negligence. This clause will not be construed to bar any legal remedies the Indemnifying Party may have for the State's failure to fulfill its obligation under this Contract.

5.2 Nothing within this Contract, whether express or implied, shall be deemed to create an obligation on the part of the State to indemnify, defend, hold harmless or release the Indemnifying Party. This shall extend to all agreements related to the subject matter of this Contract, and to all terms subsequently added, without regard to order of precedence.

6. Governing Law, Jurisdiction, and Venue.

Minnesota law, without regard to its choice-of-law provisions, governs this Contract. Venue for all legal proceedings out of this Contract, or its breach, must be in the appropriate state or federal court with competent jurisdiction in Ramsey County, Minnesota.

7. Subcontracting and Subcontract Payment.

7.1 Subcontracting Allowed. A subcontractor is a person or company that has been awarded a portion of the Contract by Contractor. Only subcontractors that have been approved by the State's Authorized Representative can be used for this Contract.

After the effective date of the Contract, the Contractor shall not, without prior written approval of the State's Authorized Representative, subcontract for the performance of any of the Contractor's obligations that were not already approved for subcontracting when the Contract was awarded. During this Contract, if an approved subcontractor is determined to be performing unsatisfactorily by the State's Authorized Representative, the Contractor will receive written notification that the subcontractor can no longer be used for this Contract.

The provisions of the Contract shall apply with equal force and effect to all approved subcontractors engaged by the Contractor. Notwithstanding approval by the State, no subcontract shall serve to terminate or in any

way affect the primary legal responsibility of the Contractor for timely and satisfactory performances of the obligations contemplated by the Contract.

7.2 Subcontractor Payment. Contractor must pay any subcontractor in accordance with Minn. Stat. § 16A.1245.

8. Data Disclosure.

Under Minn. Stat. § 270C.65, subd. 3 and other applicable law, the Contractor consents to disclosure of its social security number, federal employer tax identification number, and Minnesota tax identification number, already provided to the State, to federal and state agencies, and state personnel involved in the payment of state obligations. These identification numbers may be used in the enforcement of federal and state laws which could result in action requiring the Contractor to file state tax returns, pay delinquent state tax liabilities, if any, or pay other state liabilities.

9. Government Data Practices.

The Contractor and State must comply with the Minnesota Government Data Practices Act, Minn. Stat. Ch. 13, (or, if the State contracting party is part of the Judicial Branch, with the Rules of Public Access to Records of the Judicial Branch promulgated by the Minnesota Supreme Court as the same may be amended from time to time) as it applies to all data provided by the State under this Contract, and as it applies to all data created, collected, received, stored, used, maintained, or disseminated by the Contractor under this Contract. The civil remedies of Minn. Stat. § 13.08 apply to the release of the data governed by the Minnesota Government Practices Act, Minn. Stat. Ch. 13, by either the Contractor or the State.

If the Contractor receives a request to release the data referred to in this clause, the Contractor must immediately notify and consult with the State's Authorized Representative as to how the Contractor should respond to the request. The Contractor's response to the request shall comply with applicable law.

10. Intellectual Property Rights.

10.1 Definitions. For the purpose of this Section, the following words and phrases have the assigned definitions:

10.1.1 "Documents" are the originals of any databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, disks, or other materials, whether in tangible or electronic forms, prepared by the Contractor, its employees, agents, or subcontractors, in the performance of this Contract.

10.1.2 "Pre-Existing Intellectual Property" means intellectual property developed prior to or outside the scope of this Contract, and any derivatives of that intellectual property.

10.1.3 "Works" means all inventions, improvements, discoveries (whether or not patentable), databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, and disks conceived, reduced to practice, created or originated by the Contractor, its employees, agents, and subcontractors, either individually or jointly with others in the performance of this Contract. "Works" includes Documents.

10.2 Ownership. The State owns all rights, title, and interest in all of the intellectual property rights, including copyrights, patents, trade secrets, trademarks, and service marks in the Works and Documents created and paid for under this Contract. The Documents shall be the exclusive property of the State and all such Documents must be immediately returned to the State by the Contractor upon completion or cancellation of this Contract. To the extent possible, those Works eligible for copyright protection under the United States

Copyright Act will be deemed to be “works made for hire.” The Contractor assigns all right, title, and interest it may have in the Works and the Documents to the State. The Contractor must, at the request of the State, execute all papers and perform all other acts necessary to transfer or record the State’s ownership interest in the Works and Documents.

10.3 Pre-existing Intellectual Property. Each Party shall retain ownership of its respective Pre-Existing Intellectual Property. The Contractor grants the State a perpetual, irrevocable, non-exclusive, royalty free license for Contractor’s Pre-Existing Intellectual Property that are incorporated in the products, materials, equipment, deliverables, or services that are purchased through the Contract.

10.4 Obligations.

10.4.1 Notification. Whenever any invention, improvement, or discovery (whether or not patentable) is made or conceived for the first time or actually or constructively reduced to practice by the Contractor, including its employees and subcontractors, in the performance of this Contract, the Contractor will immediately give the State’s Authorized Representative written notice thereof, and must promptly furnish the State’s Authorized Representative with complete information and/or disclosure thereon.

10.4.2 Representation. The Contractor must perform all acts, and take all steps necessary to ensure that all intellectual property rights in the Works and Documents are the sole property of the State, and that neither Contractor nor its employees, agents, or subcontractors retain any interest in and to the Works and Documents. The Contractor represents and warrants that the Works and Documents do not and will not infringe upon any intellectual property rights of other persons or entities.

10.4.3 Indemnification. Notwithstanding any other indemnification obligations addressed within this Contract, the Contractor will indemnify; defend, to the extent permitted by the Attorney General; and hold harmless the State, at the Contractor’s expense, from any action or claim brought against the State to the extent that it is based on a claim that all or part of the Works or Documents infringe upon the intellectual property rights of others. The Contractor will be responsible for payment of any and all such claims, demands, obligations, liabilities, costs, and damages, including but not limited to, attorney fees. If such a claim or action arises, or in the Contractor’s or the State’s opinion is likely to arise, the Contractor must, at the State’s discretion, either procure for the State the right or license to use the intellectual property rights at issue or replace or modify the allegedly infringing works or documents as necessary and appropriate to obviate the infringement claim. This remedy of the State will be in addition to and not exclusive of other remedies provided by law.

11. Copyright.

The Contractor shall save and hold harmless the State of Minnesota, its officers, agents, servants and employees, from liability of any kind or nature, arising from the use of any copyrighted or noncopyrighted compositions, secret process, patented or nonpatented invention, article or appliance furnished or used in the performance of the Contract.

12. Contractor’s Documents.

Any licensing and maintenance agreement, or any order-specific agreement or document, including any pre-installation, linked or “click through” agreement that is allowed by, referenced within or incorporated within the Contract whenever the Contract is used for a State procurement, whether directly by the Contractor or through a Contractor’s agent,

subcontractor or reseller, is agreed to only to the extent the terms within any such agreement or document do not conflict with the Contract or applicable Minnesota or Federal law, and only to the extent that the terms do not modify, diminish or derogate the terms of the Contract or create an additional financial obligation to the State. Any such agreement or document must not be construed to deprive the State of its sovereign immunity, or of any legal requirements, prohibitions, protections, exclusions or limitations of liability applicable to this Contract or afforded to the State by Minnesota law. A State employee's decision to choose "accept" or an equivalent option associated with a "click-through" agreement does not constitute the State's concurrence or acceptance of terms, if such terms are in conflict with this section.

13. State Audits.

Under Minn. Stat. § 16C.05, subd. 5, the Contractor's books, records, documents, and accounting procedures and practices relevant to this Contract are subject to examination by the State, the State Auditor, or Legislative Auditor, as appropriate, for a minimum of six years from the expiration or termination of this Contract.

14. Diverse Spend Reporting.

If the total value of the Contract may exceed \$500,000, including all extension options, Contractor must track and report, on a quarterly basis, the amount paid to diverse businesses both: 1) directly to subcontractors performing under the Contract, and 2) indirectly to diverse businesses that provide supplies/services to your company (in proportion to the revenue from this Contract compared to Contractor's overall revenue). When this applies, Contractor will register in a free portal to help report the Tier 2 diverse spend, and the requirement continues as long as the Contract is in effect.

15. Publicity and Endorsement.

15.1 Publicity. Any publicity regarding the subject matter of this Contract must identify the State as the sponsoring agency and must not be released without prior written approval from the State's Authorized Representative. For purposes of this provision, publicity includes notices, informational pamphlets, press releases, information posted on corporate or other websites, research, reports, signs, and similar public notices prepared by or for the Contractor individually or jointly with others, or any subcontractors, with respect to the program, publications, or services provided resulting from this Contract.

15.2 Endorsement. The Contractor must not claim that the State endorses its products or services.

16. Debarment by State, its Departments, Commissions, Agencies, or Political Subdivisions.

Contractor certifies that neither it nor its principals is presently debarred or suspended by the Federal government, the State, or any of the State's departments, commissions, agencies, or political subdivisions. Contractor's certification is a material representation upon which the Contract award was based. Contractor shall provide immediate written notice to the State's Authorized Representative if at any time it learns that this certification was erroneous when submitted or becomes erroneous by reason of changed circumstances.

17. Contingency Fees Prohibited.

Pursuant to Minn. Stat. § 10A.06, no person may act as or employ a lobbyist for compensation that is dependent upon the result or outcome of any legislation or administrative action.

18. Certification of Nondiscrimination (in accordance with Minn. Stat. § 16C.053).

If the value of this Contract, including all extensions, is \$50,000 or more, Contractor certifies it does not engage in and has no present plans to engage in discrimination against Israel, or against persons or entities doing business in Israel, when making decisions related to the operation of the vendor's business. For purposes of this section, "discrimination" includes but is not limited to engaging in refusals to deal, terminating business activities, or other actions that are intended to limit commercial relations with Israel, or persons or entities doing business in Israel, when such actions are taken in a manner that in any way discriminates on the basis of nationality or national origin and is not based on a valid business reason.

19. Non-discrimination (in accordance with Minn. Stat. § 181.59).

The Contractor will comply with the provisions of Minn. Stat. § 181.59.

20. E-Verify Certification (in accordance with Minn. Stat. § 16C.075).

For services valued in excess of \$50,000, Contractor certifies that as of the date of services performed on behalf of the State, Contractor and all its subcontractors will have implemented or be in the process of implementing the federal E-Verify Program for all newly hired employees in the United States who will perform work on behalf of the State. Contractor is responsible for collecting all subcontractor certifications and may do so utilizing the E-Verify Subcontractor Certification Form available at <http://www.mmd.admin.state.mn.us/doc/EVerifySubCertForm.doc>. All subcontractor certifications must be kept on file with Contractor and made available to the State upon request.

21. Affirmative Action Requirements

The State intends to carry out its responsibility for requiring affirmative action by its contractors.

21.1 Covered Contracts and Contractors. If the Contract exceeds \$100,000 and the Contractor employed more than 40 full-time employees on a single working day during the previous 12 months in Minnesota or in the state where it has its principal place of business, then the Contractor must comply with the requirements of Minn. Stat. § 363A.36 and Minn. R. 5000.3400-5000.3600.

21.2 General. Minn. R. 5000.3400-5000.3600 implements Minn. Stat. § 363A.36. These rules include, but are not limited to, criteria for contents, approval, and implementation of affirmative action plans; procedures for issuing certificates of compliance and criteria for determining a contractor's compliance status; procedures for addressing deficiencies, sanctions, and notice and hearing; annual compliance reports; procedures for compliance review; and contract consequences for non-compliance. The specific criteria for approval or rejection of an affirmative action plan are contained in various provisions of Minn. R. 5000.3400-5000.3600 including, but not limited to, Minn. R. 5000.3420-5000.3500 and 5000.3552-5000.3559.

21.3 Disabled Workers. The Contractor must comply with the following affirmative action requirements for disabled workers.

AFFIRMATIVE ACTION FOR DISABLED WORKERS

21.3.1 The Contractor must not discriminate against any employee or applicant for employment because of physical or mental disability in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled persons without discrimination based upon their physical or mental disability in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

21.3.2 The Contractor agrees to comply with the rules and relevant orders of the Minnesota Department of Human Rights issued pursuant to the Minnesota Human Rights Act.

21.3.3 In the event of the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with Minn. Stat. § 363A.36, and the rules and relevant orders of the Minnesota Department of Human Rights issued pursuant to the Minnesota Human Rights Act.

21.3.4 The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Commissioner. Such notices must state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled employees and applicants for employment, and the rights of applicants and employees.

21.3.5 The Contractor must notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Minn. Stat. § 363A.36, of the Minnesota Human Rights Act and is committed to take affirmative action to employ and advance in employment physically and mentally disabled persons.

21.4 Consequences. The consequences for the Contractor's failure to implement its affirmative action plan or make a good faith effort to do so include, but are not limited to, suspension or revocation of a certificate of compliance by the Commissioner, refusal by the Commissioner to approve subsequent plans, and termination of all or part of this Contract by the Commissioner or the State.

21.5 Certification. The Contractor hereby certifies that it is in compliance with the requirements of Minn. Stat. § 363A.36 and Minn. R. 5000.3400-5000.3600 and is aware of the consequences for noncompliance.

22. Equal Pay Certification.

If required by Minn. Stat. §363A.44, the Contractor must have a current Equal Pay Certificate prior to Contract execution. If Contractor's Equal Pay Certificate expires during the term of this Contract, Contractor must promptly re-apply for an Equal Pay Certificate with the Minnesota Department of Human Rights and notify the State's Authorized Representative once the Contractor has received the renewed Equal Pay Certificate. If Contractor claims to be exempt, the State may require Contractor to verify its exempt status.

23. IT Accessibility Standard.

Contractor acknowledges and is fully aware that the State of Minnesota (Executive branch state agencies) has developed IT Accessibility Standard effective September 1, 2010. The standard entails, in part, the Web Content Accessibility Guidelines (WCAG) and Section 508 which can be viewed at: <https://mn.gov/mnit/government/policies/accessibility/>.

The Standards apply to web sites, software applications, electronic reports and output documentation, training delivered in electronic formats (including, but not limited to, documents, videos, and webinars), among others. As upgrades are made to the software, products, or subscriptions available through this Contract, the Contractor agrees to develop functionality which supports accessibility. If any issues arise due to nonconformance with the above-mentioned accessibility Standards, the Contractor agrees to provide alternative solutions upon request at no additional charge to the State.

When updates or upgrades are made to the products or services available through this Contract, the Contractor agrees to document how the changes will impact or improve the product's or service's accessibility and usability. This documentation, upon request, must be provided to the State in advance of the change, occurring within an agreed upon timeframe sufficient for the state to review the changes and either approve them or request a remediation plan from the Contractor. Contractor warrants that its Products comply with the above-mentioned accessibility Standards and agrees to indemnify, defend, and hold harmless the State against any claims related to non-compliance of Contractor's Product with the above-mentioned accessibility Standards. If agreed-upon updates fail to improve the product or service's accessibility or usability as planned, the failure to comply with this requirement may be cause for contract cancellation or for the State to consider the Contractor in default.

24. Nonvisual Access Standards.

Pursuant to Minn. Stat. § 16C.145, the Contractor must comply with the following nonvisual technology access standards to the extent required by law:

- That the effective interactive control and use of the technology, including the operating system applications programs, prompts, and format of the data presented, are readily achievable by nonvisual means;
- That the nonvisual access technology must be compatible with information technology used by other individuals with whom the blind or visually impaired individual must interact;
- That nonvisual access technology must be integrated into networks used to share communications among employees, program participants, and the public; and
- That the nonvisual access technology must have the capability of providing equivalent access by nonvisual means to telecommunications or other interconnected network services used by persons who are not blind or visually impaired; and
- Executive branch state agencies subject to Section 16E.03, subdivision 9, are not required to include nonvisual technology access standards developed under this Section in contracts for the procurement of information technology.

These standards do not require the installation of software or peripheral devices used for nonvisual access when the information technology is being used by individuals who are not blind or visually impaired.

25. Survival of Terms.

The following clauses survive the expiration or cancellation of this Contract: Indemnification; State Audits; Government Data Practices; Intellectual Property; Publicity and Endorsement; Governing Law, Jurisdiction, and Venue; and Data Disclosure. Any other Contract term that expressly states or by its nature shall survive, shall survive.

26. Vaccination/Testing Requirements

- 26.1 **Applicability.** This section applies to Contractor's employees or subcontractors who are performing contracted work in the following types of project settings: indoors with regular in-person contact with State agency employees or members of the public; and outdoors with substantial and/or regular in-person, non-socially distanced contact with State agency employees or members of the public ("Covered Individuals").
- 26.2 **Requirements.** In accordance with HR/LR Policy #1446, Covered Individuals must be fully vaccinated against COVID-19 as defined in the policy or submit to testing at least once a week.
- 26.3 **Compliance.** Contractor is responsible for the following:
- 26.3.1 Tracking and maintaining proof of vaccination status for vaccinated Covered Individuals;
 - 26.3.2 Ensuring Covered Individuals who are not vaccinated are tested on a weekly basis;
 - 26.3.3 Monitoring test results and ensuring that Covered Individuals with positive test results do not access the State workplace to perform contractual services until the Covered Individual has been medically cleared; and
 - 26.3.4 Ensuring its Covered Individuals do not access the location where the contracted work is occurring if the Covered Individual is not in compliance with the requirements stated in item Requirements, detailed in this clause.

26.4 **Reporting.** Upon request, Contractor shall provide the State with documentation demonstrating compliance with these requirements. Contractor shall maintain documentation for a minimum of thirty (30) days past the end date of the contract.

27. Security and Data Protection. Contractor is responsible for the security and protection of State data subject to and related to Cloud Services in this Contract. The terms, conditions, and provisions of this Security and Data Protection section take precedence and will prevail over any other terms, conditions, and provisions of the Contract, if in conflict. This Security and Data Protection section, including its sub-sections, survives the completion, termination, expiration, or cancellation of the Contract.

For the purposes of this Security and Data Protection section, the following terms have the following meanings:

"Cloud Services" includes "cloud computing" as defined by the U.S. Department of Commerce, NIST Special Publication 800-145 (currently available online at: <http://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-145.pdf>) and any other software, hardware, hosting service, subscription, or other service or product by which Contractor stores, transmits, processes or otherwise has access to State data.

"State" means the State, or a cooperative purchasing venture ("CPV") member when the CPV member is the ordering entity (if CPV purchases are permitted under this Contract).

"Data" has the meaning of "government data" in Minn. Stat. § 13.02, subd. 7.

"Not public data" has the meaning in Minn. Stat. § 13.02, subd. 8a.

"Security incident" means any actual, successful or suspected: (1) improper or unauthorized access to, viewing of, obtaining of, acquisition of, use of, disclosure of, modification of, alteration to, loss of, damage to or destruction of State data; (2) interference with an information system; (3) disruption of or to Contractor's service(s); or (4) any similar or related incident.

"Privacy incident" means violation of the Minnesota Government Data Practices Act (Minnesota Statutes chapter 13); violation of federal data disclosure or privacy requirements in federal laws, rules and regulations; or breach of a contractual obligation to protect State data. This includes, but is not limited to, improper or unauthorized access to, viewing of, obtaining of, acquisition of, use of, disclosure of, damage to, loss of, modification of, alteration to or destruction of State data protected by such State or federal laws or by contract.

27.1 Data Ownership. The State solely and exclusively owns and retains all right, title and interest, whether express or implied, in and to any and all State data. Contractor has no and acquires no right, title or interest, whether express or implied, in and to State data.

Contractor will only use State data for the purposes set forth in the Contract. Contractor will only access State data as necessary for performance of this Contract. Contractor will not access State user accounts except to respond to service or technical problems or at the State's specific request.

All State data, including copies, summaries and derivative works thereof, must be remitted, in a mutually agreeable format and media, to the State by the Contractor upon request or upon completion, termination or cancellation of the Contract. The foregoing sentence does not apply if the State Chief Information Security Officer or delegate authorizes in writing the Contractor to sanitize or destroy the data and the Contractor certifies in writing the sanitization or destruction of the data. Within ninety days following any remittance of State data to the State, Contractor shall, unless otherwise instructed by the State in writing, sanitize or destroy any remaining data and certify in writing that the sanitization or destruction of the data has occurred. Any such remittance, sanitization or destruction will be at the Contractor's sole cost and expense.

In the event Contractor receives a request to release any State data, Contractor must immediately notify the State's data practices compliance official. The State will give Contractor instructions concerning the release of the data to the requesting party before the data is released. Contractor must comply with the State's instructions. The civil remedies of Minn. Stat. § 13.08 apply to the release of the data by Contractor.

27.2 Notification of Incidents. If Contractor becomes aware of or has reasonable suspicion of a privacy incident or security incident regarding any State data, Contractor must report such incident to the State and the State Chief Information Security Officer as soon as possible, but no later than twenty-four (24) hours after such incident. The decision to notify the affected data subjects and the form of such notice following report of a privacy incident or security incident are the responsibility of the State. Notwithstanding anything to the contrary in this Contract, Contractor will indemnify, hold harmless and defend the State and its officers, and employees for and against any claims, damages, costs and expenses related to any privacy incident or security incident involving any State data. For purposes of clarification, the foregoing sentence shall in no way limit or diminish Contractor's obligation(s) to indemnify, save, hold harmless, or defend the State under any other term of this Contract. Contractor will reasonably mitigate any harmful effects resulting from any privacy incident or security incident involving any State data.

27.3 Security Program. Contractor will make best efforts to protect and secure the State data related to this Contract. Contractor will establish and maintain an Information Security Program ("Program") that includes an information security policy applicable to any and all Cloud Services ("Policy"). Contractor's Program and Policy must align with appropriate industry security frameworks and standards such as National Institute of Standards and Technology ("NIST") 800-53 Special Publication Revision 4, Federal Information Processing Standards ("FIPS") 199, Federal Risk and Authorization Management Program ("FedRamp"), or Control Objectives for Information and Related Technology ("COBIT").

Upon the State's request, Contractor will make its Policy available to the State on a confidential, need-to-know basis, along with other related information reasonably requested by the State regarding Contractor's security practices and policies. Unless inconsistent with applicable laws, Contractor and the State must treat the Policy and related information on security practices and policies that are specific to the State as confidential information and as not public data pursuant to Minn. Stat. § 13.37.

27.4 Data Management. Contractor will not use State data, including production data, for testing or development purposes unless authorized in writing by the State Chief Information Security Officer or delegate. Contractor will implement and maintain procedures to physically and logically segregate State data, unless otherwise explicitly authorized by the State Chief Information Security Officer or delegate.

27.5 Data Encryption. Contractor must encrypt all State data at rest and in transit, in compliance with FIPS Publication 140-2 or applicable law, regulation or rule, whichever is a higher standard. All encryption keys must be unique to State data. Contractor will secure and protect all encryption keys to State data. Encryption keys to State data will only be accessed by Contractor as necessary for performance of this Contract.

27.6 Data Storage. Contractor warrants that any and all State data will be stored, processed, and maintained solely on designated servers and that no such data at any time will be processed on or transferred to any portable computing device or any portable storage medium, unless that storage medium is in use as part of the Contractor's designated backup and recovery processes.

27.7 Data Center and Monitoring/Support Locations. During the term of the Contract, Contractor will: (1) locate all production and disaster recovery data centers that store, process or transmit State data only in the continental United States, (2) store, process and transmit State data only in the continental United States, and (3) locate all monitoring and support of all Cloud Services only in the continental United States. The State has the right to on-site visits and reasonable inspection of the data centers upon notice to Contractor of seven calendar days prior to visit.

27.8 Security Audits & Remediation. Contractor will audit the security of the systems and processes used to provide any and all Cloud Services, including those of the data centers used by Contractor to provide any and all Cloud Services to the State. This security audit: (1) will be performed at least once every calendar year beginning with 2016; (2) will be performed according Statement on Standards for Attestation Engagements (“SSAE”) 16 Service Organization Control (“SOC”) 2, International Organization for Standardization (“ISO”) 27001, or FedRAMP; (3) will be performed by third party security professionals at Contractor’s election and expense; (4) will result in the generation of an audit report (“Contractor Audit Report”), which will, to the extent permitted by applicable law, be deemed confidential information and as not public data under the Minnesota Government Data Practices Act (Minnesota Statutes chapter 13); and (5) may be performed for other purposes in addition to satisfying this section.

Upon the State’s reasonable, advance written request, Contractor will provide to the State a copy of the Contractor Audit Report.

Contractor will make best efforts to remediate any control deficiencies identified in the Contractor Audit Report in a commercially reasonable timeframe.

If the State becomes aware of any other Contractor controls that do not substantially meet the State’s requirements, the State may request remediation from Contractor. Contractor will make best efforts to remediate any control deficiencies identified by the State or known by Contractor, in a commercially reasonable timeframe.

27.9 Insurance and Liability. Contractor warrants that it has and will maintain the insurance described below in force and effect throughout the term of the Contract. An Umbrella or Excess Liability insurance policy may be used to supplement the Contractor’s policy limits to satisfy the full policy limits required by the Contract provided that Contractor warrants that the minimum coverage requirements below are met.

Professional/Technical, Errors and Omissions, including Network Security and Privacy Liability Insurance (or equivalent Network Security and Privacy Liability coverage endorsed on another form of liability coverage or written as a standalone policy):

This policy must provide coverage for all claims Contractor may become legally obligated to pay resulting from any actual or alleged negligent act, error, or omission related to the Contract, including but not limited to claims which may arise from failure of Contractor’s or a subcontractor’s security resulting in, but not limited to, computer attacks, unauthorized access, disclosure of confidential or private information, transmission of a computer virus or denial of service.

Contractor is required to carry the following minimum limits:

\$2,000,000 – per claim or event

\$2,000,000 – annual aggregate

Any deductible will be the sole responsibility of the Contractor and, unless Contractor maintains an audited net worth of at least \$100 million, the deductible may not exceed \$100,000 without the written approval of the State. If the Contractor desires authority from the State to have a deductible in a higher amount, the Contractor shall so request in writing, specifying the amount of the desired deductible and providing financial documentation by submitting the most current audited financial statements so that the State can ascertain the ability of the Contractor to cover the deductible from its own resources. The retroactive or prior acts date of such coverage shall not be after the effective date of the Contract. Contractor shall maintain such insurance for a period of at least three (3) years following expiration or termination of the Contract. If such insurance is discontinued, extended reporting period coverage must be obtained by Contractor to fulfill this requirement.

Contractor's policy(ies) shall be primary insurance to any other valid and collectible insurance available to the State with respect to any claim arising out of Contractor's performance under this Contract. If Contractor receives a cancellation notice from an insurance carrier affording coverage herein, Contractor will notify the State within five (5) business days with a copy of the cancellation notice, unless Contractor's policy(ies) contain a provision that coverage afforded under the policy(ies) will not be cancelled without at least thirty (30) days advance written notice to the State. Contractor is responsible for payment of Contract related insurance premiums and deductibles. If Contractor is self-insured, a Certificate of Self-Insurance must be provided to the State. Contractor shall obtain insurance policy(ies) from insurance company(ies) having an "AM BEST" rating of A- (minus); Financial Size Category ("FSC") VII or better, and authorized to do business in the State. All insurance policies must be open to inspection by the State, and copies of policies must be submitted to the State's authorized representative upon written request. The State reserves the right to immediately terminate the Contract if the Contractor is not in compliance with the insurance requirements of this sub-section and retains all rights to pursue any legal remedies against the Contractor.

Notwithstanding any limitation of liabilities in the Contract, the Contractor shall be liable for all damages to the extent such damages are within the insurance limit.

27.10 Subcontractors and Third Parties. Contractor warrants that no State data will be transmitted, exchanged or otherwise provided to other parties except as specifically agreed to in writing by the State Chief Information Security Officer or delegate. Contractor must ensure that any contractors, subcontractors, agents and others to whom it provides State data, agree in writing to be bound by the same restrictions and conditions under this Contract that apply to Contractor with respect to such data.

27.11 Compliance with Data Privacy and Security Laws and Standards. Contractor shall comply with all applicable State and federal data privacy and data security laws, rules, and regulations.

27.12 Remedies. Contractor acknowledges that the State, because of the unique nature of its data, would suffer irreparable harm in the event that Contractor breaches its obligation under this Security and Data Protection section, and monetary damages may not adequately compensate the State for such a breach. In such circumstances, the State will be entitled, in addition to monetary relief, to injunctive relief or specific performance as may be necessary to restrain any continuing or further breach by Contractor, without showing or proving any actual damages sustained by the State.

27.13 Business Continuity. Contractor shall have written business continuity and disaster recovery plans that define the roles, responsibilities and procedures necessary to ensure that Cloud Services provided under this Contract shall be maintained continuously in the event of a disruption to the Contractor's operations, regardless of the cause of the disruption. Such plans must, at a minimum, define the Contractor's actions to address the impacts of the following key areas likely to cause a disruption to Contractor's operations: loss of key personnel, loss of facility, and loss of information technology. Contractor must conduct testing and review of its business continuity and disaster recovery plan at least annually. Upon State request, Contractor must also participate, at mutually agreed upon times, in State business continuity and disaster recovery testing, training, and exercise activities.

Any term or condition that allows the Contractor to terminate the Contract for any or no reason (i.e., termination for convenience) is null and void. In the event of termination or cancellation of this Contract for any reason, the Contractor shall continue to provide any then-existing Cloud Services for as long as the State needs to transfer its data, software and other assets to an alternate service or service provider. After any such termination or cancellation, the State may purchase the continuing Cloud Services at the pricing in effect prior to such termination or cancellation. The fee for any such purchase shall be prorated for the period of time needed, as determined by the State, and shall be reduced by the amount paid for Cloud Services that were not used prior to such termination or cancellation. The amount of any such fee reduction shall be determined on a pro-rata basis. The Contractor shall refund to the State any unused portion of payments for Cloud Services.

27.14 Background Checks. Contractor represents that it has conducted and will conduct background investigations into all of Contractor's agents, employees, and subcontractors that will provide Cloud Services to the State. Such background investigations must have been or will be conducted by investigating local, state and federal criminal records, local, state and federal civil case records, and employment references.

If any provision of this sub-section is found to violate any applicable laws, rules, or State policies, then the Contractor will be relieved of all obligations arising under such provision. Notwithstanding anything to the contrary in this sub-section, this sub-section is only applicable and effective to extent that it is consistent with applicable laws, rules, and State policies.

27.15 Secure Coding. Contractor warrants that all Cloud Services are free from any and all defects in materials, workmanship, and design. Contractor warrants that all Cloud Services are free from any and all viruses, malware, and other harmful or malicious code. Contractor must scan all source code for vulnerabilities, including before and after any source code changes are made and again before being placed into production, and must promptly remediate any and all vulnerabilities. Contractor must follow best practices for application code review and the most current version of the OWASP top 10.

27.16 Compliance with Data Privacy and Security Laws and Standards. Contractor must comply with all requirements, restrictions, and conditions that apply to the Office of MN.IT Services in the July 1, 2015, Amended MNSure Data Sharing Contract, currently available at <https://www.mnsure.org/images/MNIT-MNSure-data-sharing-Contract-2015-07.pdf>, and as amended. This document, as amended, is fully incorporated herein.

Contractor shall comply with the Health Insurance Portability Accountability Act ("HIPAA"), the HITECH Act, and other similar privacy laws. Contractor also shall comply with the HIPAA Privacy Rule, HIPAA Security Rule, and other similar rules, regulations, and laws, including future amendments thereto.

Contractor shall comply with all applicable requirements, restrictions, and conditions set forth in the Criminal Justice Information Services ("CJIS") – Security Policy, Version 5.3, dated 8/4/2014, including, but not limited to, conducting FBI fingerprint background checks on all of Contractor's agents, employees, and subcontractors that have or will have access to Criminal Justice Information ("CJI").

Contractor acknowledges that for the purposes of this Contract when storing, processing, transmitting or otherwise accessing State data subject to the Family Educational Rights and Privacy Act ("FERPA"), it is designated as a "school official" with "legitimate educational interests" in State data and associated metadata, as those terms have been defined under FERPA and its implementing regulations, and Contractor agrees to abide by the limitations and requirements imposed by 34 CFR 99.33(a) on school officials. Contractor shall use State data only for the purpose of fulfilling its duties under the Contract and it will not monitor or share such data with or disclose it to any third party except as provided for in this Contract, as required by law, or as authorized in writing by the State. By way of illustration and not of limitation, Contractor will not use such data for Contractor's own benefit and, in particular, will not engage in "data mining" of such data or communications, whether through automated or human means, except as necessary to fulfill its duties under this Contract, or as specifically and expressly provided for in this Contract, as required by law, or authorized in writing by the State. Contractor agrees, upon request, to provide the State with a written summary of the procedures Contractor uses to safeguard State data.

All of Contractor's systems and components that process, store, or transmit Cardholder Data shall comply with the most recent version of the Payment Card Industry Data Security Standard ("PCI DSS") promulgated by the PCI Security Standards Council, currently available online at: https://www.pcisecuritystandards.org/document_library. The Contractor shall, upon request, provide the State with Contractor's current Attestation of Compliance signed by a PCI QSA ("Qualified Security Assessor"). For purposes of this sub-section, "Cardholder Data" has the meaning defined by the PCI Security Standards Council, Payment Card Industry (PCI) Data Security Standard (DSS) and

Payment Application Data Security Standard (PA-DSS), Glossary of Terms, Abbreviations, and Acronyms, currently available online at: https://www.pcisecuritystandards.org/document_library.

Contractor shall comply with IRS Publication 1075, Exhibit 7, which is incorporated herein.

For the term of this Contract, Contractor will maintain a provisional Authority to Operate (ATO) at the Moderate Level from the Federal Risk and Authorization Management Program (FedRAMP) Joint Authorization Board (JAB) or Federal Agency for any and all Cloud Services provided under this Contract.

For the term of this Contract, Contractor will maintain an ISO 27001 Certification for any and all Cloud Services provided under this Contract.

SAMPLE

Exhibit B: Insurance Requirements

1. Notice to Contractor.

- 1.1 The Contractor is required to submit Certificates of Insurance acceptable to the State as evidence of insurance coverage requirements prior to commencing work under this Contract.
- 1.2 Contractor shall not commence work under the contract until they have obtained all the insurance described below and the State has approved such insurance. Contractor shall maintain such insurance in force and effect throughout the term of this Contract, unless otherwise specified in this Contract
- 1.3 The failure of the Contractor to provide a Certificate of Insurance, for the policies required under this Contract or renewals thereof, or failure of the insurance company to notify the State of the cancellation of policies required under this Contract shall not constitute a waiver by the State to the Contractor to provide such insurance.
- 1.4 The State reserves the right to immediately terminate this Contract if the Contractor is not in compliance with the insurance requirements and retains all rights to pursue any legal remedies against the Contractor. All insurance policies must be open to inspection by the State, and copies of policies must be submitted to the State's Authorized Representative upon written request.

2 Notice to Insurer.

- 2.1 The Contractor's insurance company(ies) waives its right to assert the immunity of the State as a defense to any claims made under said insurance.
- 2.2 Insurance certificate holder should be addressed as follows:

3 Additional Insurance Conditions. The following apply to the Contractor, or the Contractor's subcontractor:

- 3.1 Contractor's policy(ies) shall be primary insurance to any other valid and collectible insurance available to the State with respect to any claim arising out of Contractor's performance under this Contract.
- 3.2 If Contractor receives a cancellation notice from an insurance carrier affording coverage herein, Contractor agrees to notify the State within five (5) business days with a copy of the cancellation notice, unless Contractor's policy(ies) contain a provision that coverage afforded under the policy(ies) will not be cancelled without at least thirty (30) days advance written notice to the State;
- 3.3 Contractor is responsible for payment of Contract related insurance premiums and deductibles;
- 3.4 If Contractor is self-insured, a Certificate of Self-Insurance must be attached;
- 3.5 Contractor's policy(ies) shall include legal defense fees in addition to its policy limits with the exception of professional liability.
- 3.6 Contractor's insurance companies must either (1) have an AM Best rating of A- (minus) and a Financial Size Category of VII or better, and be authorized to do business in the State of Minnesota or (2) be domiciled in the State of Minnesota and have a Certificate of Authority/Compliance from the Minnesota Department of Commerce if they are not rated by AM Best.
- 3.7 An Umbrella or Excess Liability insurance policy may be used to supplement the Contractor's policy limits to satisfy the full policy limits required by the Contract.

4.1 Coverages. Contractor is required to maintain and furnish satisfactory evidence of the following insurance policies:

5.1 Commercial General Liability Insurance. Contractor is required to maintain insurance protecting it from claims for damages for bodily injury, including sickness or disease, death, and for care and loss of services as well as from claims for property damage, including loss of use which may arise from operations under the Contract whether the operations are by the Contractor or by a subcontractor or by anyone directly or indirectly employed by the Contractor under the contract. Insurance minimum limits are as follows:

\$2,000,000 – per occurrence

\$2,000,000 – annual aggregate

\$2,000,000 – annual aggregate – applying to Products/Completed Operations

The following coverages shall be included:

- Premises and Operations Bodily Injury and Property Damage
- Personal and Advertising Injury
- Blanket Contractual Liability
- Products and Completed Operations Liability
- Other; if applicable, please list _____
- **State of Minnesota named as an Additional Insured**, to the extent permitted by law

5.2 Commercial Automobile Liability Insurance. Contractor is required to maintain insurance protecting it from claims for damages for bodily injury as well as from claims for property damage resulting from the ownership, operation, maintenance or use of all owned, hired, and non-owned autos which may arise from operations under this contract, and in case any work is subcontracted the contractor will require the subcontractor to maintain Commercial Automobile Liability insurance. Insurance minimum limits are as follows:

\$2,000,000 – per occurrence Combined Single limit for Bodily Injury and Property Damage

In addition, the following coverages should be included: Owned, Hired, and Non-owned Automobile.

Evidence of Subcontractor insurance shall be filed with the Contractor.

5.3 Workers' Compensation Insurance. Statutory Compensation Coverage. Except as provided below, Contractor must provide Workers' Compensation insurance for all its employees and, in case any work is subcontracted, Contractor will require the subcontractor to provide Workers' Compensation insurance in accordance with the statutory requirements of the State, including Coverage B, Employer's Liability. Insurance **minimum** limits are as follows:

\$100,000 – Bodily Injury by Disease per employee

\$500,000 – Bodily Injury by Disease aggregate

\$100,000 – Bodily Injury by Accident

If Minn. Stat. § 176.041 exempts Contractor from Workers' Compensation insurance or if the Contractor has no employees in the State, Contractor must provide a written statement, signed by an authorized representative, indicating the qualifying exemption that excludes Contractor from the Minnesota Workers' Compensation requirements.

If during the course of the contract the Contractor becomes eligible for Workers' Compensation, the Contractor must comply with the Workers' Compensation Insurance requirements herein and provide the State with a certificate of insurance.

- 5.4 Professional Liability, Errors, and Omissions.** This policy will provide coverage for all claims the contractor may become legally obligated to pay resulting from any actual or alleged negligent act, error, or omission related to Contractor's professional services required under the contract. Insurance **minimum** limits are as follows:

\$2,000,000 - per claim or event
\$2,000,000 - annual aggregate

Any deductible will be the sole responsibility of the Contractor and may not exceed \$50,000 without the written approval of the State. If the Contractor desires authority from the State to have a deductible in a higher amount, the Contractor shall so request in writing, specifying the amount of the desired deductible and providing financial documentation by submitting the most current audited financial statements so that the State can ascertain the ability of the Contractor to cover the deductible from its own resources.

The retroactive or prior acts date of such coverage shall not be after the effective date of this Contract and Contractor shall maintain such insurance for a period of at least three (3) years, following completion of the work. If such insurance is discontinued, extended reporting period coverage must be obtained by Contractor to fulfill this requirement.

- 5.5 Network Security and Privacy Liability Insurance (or equivalent).** The coverage may be endorsed on another form of liability coverage or written on a standalone policy. Contractor shall maintain insurance to cover claims which may arise from failure of Contractor's security resulting in, but not limited to, computer attacks, unauthorized access, disclosure of not public data including but not limited to confidential or private information, transmission of a computer virus or denial of service. Insurance minimum limits are as follows:

\$2,000,000 per occurrence
\$2,000,000 annual aggregate

The following coverage shall be included: State of Minnesota named as an Additional Insured unless the coverage is written under a Professional Liability policy.

- 5.6 Privacy Liability Insurance (or equivalent).** The coverage may be endorsed on another form of liability coverage or written on a standalone policy. The Contractor shall maintain insurance to cover claims which may arise from failure of the Contractor to ensure the security of not public data stored on the State's documents, including but not limited to paper, microfilms, microfiche, magnetic computer tapes, cassette tapes, photographic negatives, photos, hard disks, floppy disks, and carbon sheets, while in the Contractor's care, custody, and control. Insurance minimum limits are as follows:

\$2,000,000 - Per Occurrence
\$2,000,000 - Annual Aggregate

The following coverage shall be included: State of Minnesota named as an Additional Insured unless the coverage is written under a Professional Liability policy.

- 5.7 Property of Others Insurance (or equivalent).** [Include this insurance requirement when there is property owned by the state that is or may be in the Contractor's care, custody, and control. Please note this coverage should be used if the Contractor is removing the state property from state grounds.] The

Contractor shall maintain a Property insurance policy covering “All Risk” of direct physical loss or damage, or equivalent, including the perils of theft, flood, transit, earthquake, and pollution clean-up expense for property owned by the state that is in the Contractor’s care, custody, and control. Any deductible shall be the sole responsibility of the Contractor. Insurance **minimum** limits are as follows: The Contractor is solely responsible for the coverage equal to that of the actual cash value of state-owned property in the Contractor’s care, custody, and control at any given point in time.

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