

b. **Review SOC 1 Report of Empower**



Empower Retirement, LLC

**Service Organization Controls Report**  
**Recordkeeping Services**

October 1, 2022 through September 30, 2023

**Deloitte.**

This report, including the description of tests of controls and results thereof in Section IV is intended solely for the information and use of the Service Organization, user entities of Empower's Recordkeeping system during some or all of the period October 1, 2022 through September 30, 2023, and the independent auditors of such user entities, who have a sufficient understanding to consider it, along with other information including information about controls implemented by user entities themselves, when assessing the risks of material misstatements of user entities' financial statements. This report is not intended to be and should not be used by anyone other than these specified parties.

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# Section I: Independent Service Auditor's Report

# Section I:

## Independent Service Auditor's Report

Empower Retirement, LLC and Affiliated Companies

Greenwood Village, Colorado

### Scope

We have examined the description of the Recordkeeping Services system of Management of Empower Retirement, LLC (the "Service Organization" or "Empower") and certain companies affiliated with Empower including: Empower Annuity Insurance Company of America ("EAICA"), Empower Annuity Insurance Company (EAIC), Empower Life & Annuity Insurance Company of New York ("ELAINY"), and Empower Trust Company, LLC ("ETC"), for processing user entities' transactions throughout the period October 1, 2022 to September 30, 2023, included in Section III, "Management of Empower's Description of Its Recordkeeping Services System" (the "Description") and the suitability of the design and the operating effectiveness of controls included in the Description to achieve the related control objectives stated in the Description, based on the criteria identified in Section II "Management of Empower's Assertion". The controls and control objectives included in the Description are those that management of Empower believes are likely to be relevant to user entities' internal control over financial reporting and the Description does not include those aspects of the Recordkeeping Services system of Empower that are not likely to be relevant to user entities' internal control over financial reporting.

The information in Section V of the report, "Other Information Provided by Management of Empower" is presented by management of Empower to provide additional information and is not a part of management of Empower's description of its Recordkeeping Services system made available to user entities during the period October 1, 2022 to September 30, 2023. Information in Section V has not been subjected to the procedures applied in the examination of the Description of the Recordkeeping Services system and of the suitability of the design and operating effectiveness of controls to achieve the related control objectives stated in the Description of the Recordkeeping Services system and, accordingly, we express no opinion on it.

The Service Organization uses BlackLine Systems to host and maintain the BlackLine reconciliation application; Broadridge Investor Communication Solutions for document and check printing and mailing services; Amazon Web Services (AWS) for information technology infrastructure, data backups, and application hosting; Equinix for data center hosting and physical security; Matrix Trust Company for servicing Qualified & Non-Qualified Defined Contribution (DC) and Defined Benefit (DB) contracts; and Convergent Financial Technologies Inc to host and maintain the UV Cloud application, for managing separate account assets, calculation of unit and share values, and reporting (collectively the "subservice organizations"). The description in Section III includes only the controls and related control objectives of Empower and excludes the control objectives and related controls of the subservice organizations. The Description also indicates that certain control objectives specified by Empower can be achieved only if complementary subservice organization controls assumed in the design of the Service Organization's controls are suitably designed and operating effectively, along with the related controls at Empower. Our examination did not extend to controls of the subservice organizations or their functions, and we have not evaluated the suitability of the design or operating effectiveness of such complementary subservice organization controls.

The Description indicates that certain control objectives specified in the Description can be achieved only if complementary user entity controls contemplated in the design of the Service Organization's controls are suitably designed and operating effectively, along with related controls at the Service Organization. Our examination did not extend to such complementary user entity controls and we have not evaluated the suitability of the design or operating effectiveness of such complementary user entity controls.

## **Service Organization's Responsibilities**

In Section II "Management of Empower's Assertion", management of Empower has provided an assertion about the fairness of the presentation of the Description and the suitability of the design and operating effectiveness of the controls to achieve the related control objectives stated in the Description. Management of Empower is responsible for preparing the Description and its assertion, including the completeness, accuracy, and method of presentation of the Description and the assertion, providing the services covered by the Description, specifying the control objectives and stating them in the Description, identifying the risks that threaten the achievement of the control objectives, selecting the criteria stated in the assertion, and designing, implementing, and documenting controls that are suitably designed and operating effectively to achieve the related control objectives stated in the Description.

## **Service Auditor's Responsibilities**

Our responsibility is to express an opinion on the fairness of the presentation of the Description and on the suitability of the design and operating effectiveness of the controls to achieve the related control objectives stated in the Description, based on our examination. Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA). Those standards require that we plan and perform the examination to obtain reasonable assurance about whether, in all material respects, based on the criteria in management's assertion, the Description is fairly presented and the controls were suitably designed and operating effectively to achieve the related control objectives stated in the Description throughout the period October 1, 2022 to September 30, 2023. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

An examination of a description of a service organization's system and the suitability of the design and operating effectiveness of controls involves:

- Performing procedures to obtain evidence about the fairness of the presentation of the Description and the suitability of the design and operating effectiveness of the controls to achieve the related control objectives stated in the Description, based on the criteria in management's assertion.
- Assessing the risks that the Description is not fairly presented and that the controls were not suitably designed or operating effectively to achieve the related control objectives stated in the Description.
- Testing the operating effectiveness of those controls that management considers necessary to provide reasonable assurance that the related control objectives stated in the Description were achieved.
- Evaluating the overall presentation of the Description, suitability of the control objectives stated therein, and suitability of the criteria specified by the service organization in its assertion.

## **Service Auditor's Independence and Quality Control**

We are required to be independent and to meet our other ethical responsibilities in accordance with the Code of Professional Conduct established by the AICPA. We have complied with those requirements. We applied the Statements on Quality Control Standards established by the AICPA and, accordingly, maintain a comprehensive system of quality control.

## **Inherent Limitations**

The Description is prepared to meet the common needs of a broad range of user entities and their auditors who audit and report on user entities' financial statements and therefore may not include every aspect of the system that each individual user entity may consider important in its own particular environment. Because of their nature, controls at a service organization may not prevent, or detect and correct, all misstatements in processing or reporting transactions. Also, the projection to the future of any evaluation of the fairness of the presentation of the Description, or conclusions about the suitability of the design or operating effectiveness of the controls to achieve the related control objectives, is subject to the risk that controls at a service organization may become ineffective.

## Description of Tests of Controls

The specific controls tested, and the nature, timing, and results of those tests are listed in Section IV, "Management of Empower's Description of Its Control Objectives and Related Controls, and Independent Service Auditor's Description of Tests of Controls and Results."

## Opinion

In our opinion, in all material respects, based on the criteria described in management of Empower's Assertion:

- a. The Description fairly presents the Recordkeeping Services system for processing user entities' transactions that was designed and implemented throughout the period October 1, 2022 to September 30, 2023.
- b. The controls related to the control objectives stated in the Description were suitably designed to provide reasonable assurance that the control objectives would be achieved if the controls operated effectively throughout the period October 1, 2022 to September 30, 2023, and subservice organizations and user entities applied the complementary controls assumed in the design of the Empower's controls throughout the period October 1, 2022 to September 30, 2023.
- c. The controls operated effectively to provide reasonable assurance that the control objectives stated in the Description were achieved throughout the period October 1, 2022 to September 30, 2023 if complementary subservice organization controls and user entity controls assumed in the design of Empower's controls operated effectively throughout the period October 1, 2022 to September 30, 2023.

## Restricted use

This report, including the description of tests of controls and results in Section IV, is intended solely for the information and use of management of the Service Organization, user entities of the Service Organization's Recordkeeping Services system during some or all of the period October 1, 2022 to September 30, 2023, and their auditors who audit and report on such user entities' financial statements or internal control over financial reporting and have a sufficient understanding to consider it, along with other information including information about controls implemented by user entities themselves, when assessing the risks of material misstatement of user entities' financial statements. This report is not intended to be and should not be used by anyone other than these specified parties.



November 1, 2023



# Section II: Management of Empower's Assertion

## Section II: Management of Empower's Assertion

### **EMPOWER RETIREMENT, LLC** **Management of Empower's Assertion**

*For the period from October 1, 2022 to September 30, 2023*

We have prepared the description of the Recordkeeping Services system of Management of Empower, LLC ("Empower"), and certain companies affiliated with Empower including: Empower Annuity Insurance Company of America ("EAICA"), Empower Annuity Insurance Company ("EAIC"), Empower Life & Annuity Insurance Company of New York ("ELAINY"), and Empower Trust Company, LLC ("ETC"), for processing user entities' excluding transactions processed by user entity call centers, throughout the period October 1, 2022 to September 30, 2023, included in Section III, "Management of Empower's Description of its Recordkeeping Services System" (the "Description") for user entities of the system during some or all of the period October 1, 2022 to September 30, 2023, and their auditors who audit and report on such user entities' financial statements or internal control over financial reporting and have a sufficient understanding to consider it, along with other information, including information about controls implemented by the subservice organizations and user entities of the system themselves, when assessing the risks of material misstatements of user entities' financial statements.

Empower uses BlackLine Systems to host and maintain the BlackLine reconciliation application; Broadridge Investor Communication Solutions for document and check printing and mailing services; Amazon Web Services (AWS) for information technology infrastructure, data backups, and application hosting, Equinix for data center hosting and physical security; Matrix Trust Company for servicing Qualified & Non-Qualified Defined Contribution (DC) and Defined Benefit (DB) contracts; and Convergent Financial Technologies Inc to host and maintain the UV Cloud application, for managing separate account assets, calculation of unit and share values, and reporting (collectively the "subservice organizations"). The Description in Section III includes only the controls and related control objectives of Empower and excludes the control objectives and related controls of the subservice organizations. The Description also indicates that certain control objectives specified by Empower can be achieved only if complementary subservice organization controls assumed in the design of Empower's controls are suitably designed and operating effectively, along with the related controls at Empower. The description does not extend to controls of the subservice organizations.

The Description indicates that certain control objectives specified in the Description can be achieved only if complementary user entity controls assumed in the design of Empower's controls are suitably designed and operating effectively, along with related controls at the service organization. The Description does not extend to controls of the user entities.

We confirm, to the best of our knowledge and belief, that:

1. The Description fairly presents the defined contribution plan recordkeeping services system made available to user entities of the system during some or all of the period October 1, 2022 to September 30, 2023 for processing their transactions as it relates to controls that are likely to be relevant to user entities' internal control over financial reporting. The criteria we used in making this assertion were that the Description:
  - a. Presents how the system made available to user entities of the system was designed and implemented to process relevant user entity transactions, including, if applicable:
    - i. The types of services provided including, as appropriate, the classes of transactions processed.

- ii. The procedures, within both automated and manual systems, by which those services are provided, including, as appropriate, procedures by which transactions are initiated, authorized, recorded, processed, corrected as necessary, and transferred to the reports and other information prepared for user entities of the system.
  - iii. The information used in the performance of the procedures, including, if applicable, related accounting records, whether electronic or manual, and supporting information involved in initiating, authorizing, recording, processing, and reporting transactions; this includes the correction of incorrect information and how information is transferred to the reports and other information prepared for user entities.
  - iv. How the system captures and addresses significant events and conditions other than transactions.
  - v. The process used to prepare reports and other information provided for user entities.
  - vi. Services performed by a subservice organization, if any, including whether the carve-out method or the inclusive method has been used in relation to them.
  - vii. The specified control objectives and controls designed to achieve those objectives, including, as applicable, complementary user entity controls assumed in the design of the service organization's controls.
  - viii. Other aspects of our control environment, risk assessment process, information and communications (including the related business processes), control activities, and monitoring activities that are relevant to the services provided.
- b. Includes relevant details of changes to Empower's system during the period covered by the Description.
- c. Does not omit or distort information relevant to the service organization's system, while acknowledging that the Description is prepared to meet the common needs of a broad range of user entities of the Recordkeeping Services system and their user auditors and may not, therefore, include every aspect of the system that each individual user entity of the system and its user auditor may consider important in its own particular environment.
2. The controls related to the control objectives stated in the description were suitably designed and operated effectively throughout the period October 1, 2022 to September 30, 2023 to achieve those control objectives if the subservice organizations and user entities applied the complementary controls assumed in the design of the Empower's controls throughout the period October 1, 2022 to September 30, 2023. The criteria we used in making this assertion were that:
- a. The risks that threaten the achievement of the control objectives stated in the Description have been identified by management of Empower.
  - b. The Controls identified in the Description would, if operating effectively, provide reasonable assurance that those risks would not prevent the control objectives stated in the Description from being achieved.
  - c. The controls were consistently applied as designed, including whether manual controls were applied by individuals who have the appropriate competence and authority.

# Section III: Management of Empower's Description of Its Recordkeeping Services System

# Section III: Management of Empower's Description of its Recordkeeping System

## I. OVERVIEW

Empower and its affiliated companies described below offer products and services in the retirement markets. Empower provides enrollment, recordkeeping, and investment allocation services for participant-directed defined contribution retirement plans. While services may be provided for any type of tax-qualified participant-directed defined contribution plan or non-qualified deferred compensation plan, the majority of plans served operate under Section 401(a), 401(k), 403(b), or 457 of the Internal Revenue Code.

Agreements for recordkeeping and communication services serve as the basis for Empower to provide enrollment, recordkeeping, and investment allocation services to various plan and professional employer organization (PEO) sponsors. These contracts provide plan sponsors an investment platform that includes a variety of investment options to which plan participants can contribute on a pre-tax or post-tax (including, for example, Roth contributions) basis via payroll deductions. Pre-tax contributions grow on a tax-deferred basis until distributed; Roth contributions may be distributed, tax free, if certain federally imposed conditions are met. Participants may also direct other types of contributions (e.g., employer-matching, profit sharing, and other after-tax contributions) to the same array of investment options, depending on the type of plan served and its provisions.

Investment options include external and affiliated mutual funds, fixed interest rate investments, collective investment trusts, and other investments, including, but not limited to, life insurance and access to self-directed brokerage accounts. Empower, through its affiliated broker-dealer (as discussed in more detail below), serves as the intermediary for most asset purchases and redemptions, except in special circumstances. Certain fixed interest rate investments are backed by the general account of Empower Annuity Insurance Company of America or Empower Life & Annuity Insurance Company of New York, while other fixed interest rate investments and "variable" investments are made through these insurance company's separate accounts. "Guaranteed Separate Account" investments are available for large plan sponsors who wish to have their assets segregated from the general account of these insurance companies.

Empower offers a diverse package of retirement planning products and services customized for 401(a) Defined Contribution, 401(k) Cash or Deferred Arrangements, 403(b) Tax Deferred Annuity, 457 Deferred Compensation and Non-qualified Deferred Compensation (NQDC) and Defined Benefit (NQDB) plans. Services include marketing, enrollment, and counseling of employees of public schools and universities, hospitals, and nonprofit sectors, as well as those working within state and local governments. In addition to its headquarters in Greenwood Village, Colorado, Empower operates out of numerous field, satellite, and home-based offices.

Empower uses subservice organizations for physical security, and application hosting services. The services provided by these subservice organizations are not covered within the scope of this report. The subservice organizations are described in the "Description of Entity Level Controls" section below.

Empower uses the services of its affiliate Empower Financial Services, Inc. (EFSI), a broker-dealer registered with the Financial Industry Regulatory Authority (FINRA), and independent broker-dealers to market its products and services to the plan sponsors. EFSI serves as the intermediary for purchases and redemptions for external and affiliated mutual funds and collective investment trusts.

EFSI serves as introducing broker-dealer for trading certain other securities, utilizing fully disclosed clearing agreement with another broker-dealer.

Empower and its affiliates, Empower Annuity Insurance Company of America (EAIC), Empower Life & Annuity Insurance Company of New York (ELAINY), Empower Trust Company, LLC (ETC) provide certain services for employer-sponsored defined contribution plans. Empower itself is a service provider and recordkeeper for defined contribution retirement plans and other qualified employee benefit retirement plans and their participants and institutional partners. Empower also works directly with separate third party administrators for entities that may not have a need for marketing or investment services. Empower provides customized recordkeeping and administration utilizing its recordkeeping system, a proprietary online, real-time system. Defined contribution services include account valuation and cash processing, withdrawal processing, transfers

and changes in investment allocation, automated account inquiry, production of account statements, and annuity payment administration.

Empower Trust Company, LLC (ETC), a trust company chartered under the laws of the State of Colorado and affiliate of the Company, serves as a trustee, custodian or sub-custodian for certain retirement plans and plan assets for which Empower provides recordkeeping services. ETC also offers proprietary collective investment trust options for certain retirement plans; these collective investment trusts are advised by Empower Capital Management, LLC (ECM, as discussed in more detail below).

Empower Advisory Group, LLC (EAG) is a wholly owned subsidiary of Empower Annuity Insurance Company of America and an affiliate of Empower. It is also a federally registered investment adviser with the Securities and Exchange Commission (SEC). EAG provides non-discretionary investment advice and discretionary managed account services ("Advisory Services") for participants of defined contribution plans and other qualified employee benefit retirement plans for which Empower is the recordkeeper. EAG also offers Advisory Services for Empower Individual Retirement Account and Empower taxable account customers. EAG does not maintain custody of its clients' cash, bank accounts, or securities. However, pursuant to the amended custody rule in the Advisers Act, EAG is deemed to have constructive custody with respect to client funds and securities held in those retirement plan accounts for which its related party, ETC, is the custodian or for accounts held in group annuity insurance contracts established or sponsored by Empower Annuity Insurance Company of America or its subsidiary Empower Life & Annuity Insurance Company of New York.

Empower Capital Management, LLC (ECM) is a wholly owned subsidiary of Empower Annuity Insurance Company of America and affiliate of Empower. It is also a federally registered investment adviser with the SEC. ECM provides investment management services to pooled investment vehicles only and does not provide investment management services to individuals. ECM does not maintain custody of its clients' cash, bank accounts or securities as they are held by "qualified" custodians as defined under the Advisers Act. For certain advisory clients of ECM such as various separate accounts or pooled investment vehicles established or sponsored by Empower Annuity Insurance Company of America and for which the contract owners are otherwise the "beneficial owners" (the "Separate Account Clients"), ECM may be deemed to have custody of these assets. ECM otherwise uses a qualified custodian with respect to the Separate Account Clients with such qualified custodians conducting routine audits by independent and publicly registered accounting firms.

The Massachusetts Mutual Life Insurance Company Retirement Services Business (MassMutual) was acquired by Empower Annuity Insurance Company of America (EAICA), an affiliate of Empower Retirement, LLC, on December 31, 2020. Conversions from the MassMutual recordkeeping systems to the Empower recordkeeping system completed October 2022.

The Prudential Financial Inc. Retirement Services Business (Prudential) was acquired by Empower Annuity Insurance Company of America (EAICA), an affiliate of Empower Retirement, LLC, on April 1, 2022. This acquisition was comprised of approximately 4,200 plan sponsor clients with approximately 4 million participants. As part of the acquisition, EAICA entered into a Transitions Service Agreement (TSA) on April 1, 2022 under which Prudential will continue to provide specified services as necessary to ensure the business continues to operate without disruption until such time that the business can be converted to the Empower environment. Conversions from the Prudential recordkeeping systems to the Empower recordkeeping system are scheduled to occur in waves starting in 2023 and continuing into 2024.

## **II. DESCRIPTION OF ENTITY LEVEL CONTROLS**

### **CONTROL ENVIRONMENT**

The control environment reflects the overall attitude, awareness, and actions of the Board of Directors, management, employees, and others concerning the importance and relevant components of internal controls and their emphasis within the organization through its policies, procedures, and organizational structure. The following is a description of the key control environment elements of the company.

#### ***A. Integrity and Ethical Values***

Companywide objectives are cascaded down from Senior Leadership and have established core competencies supporting the company values. The ethical and behavioral standards are embodied in the company's Code of Business Conduct and Ethics ("Code of Business Conduct and Ethics") and various corporate policies, which are

available to all employees on the firm's intranet and in part, cover the company's internal control requirements. The Code of Business Conduct and Ethics provides the framework and sets the expectations for business conduct by defining employee responsibility to clients, suppliers, competitors, fellow employees, and the communities that the company serves. Annually, all employees are required to certify that they have read, understand, and are in compliance with the Code of Business Conduct and Ethics as well as other company policies and procedures.

#### *B. Oversight by the Board of Directors*

The Board of Directors of Empower Annuity Insurance Company of America, which is the parent company and sole owner of Empower and its affiliates identified in this report, has the ultimate responsibility for overseeing the affairs of all related operations. The Board of Directors, which is composed of qualified affiliated directors and directors that are independent of management and who are neither officers nor employees of any of EAICA's affiliates, generally meets at least once per quarter, to discuss significant matters, pertinent to Empower and to review financial results. The Audit Committee of the Board of Directors meets quarterly and is responsible for, among other things: (1) reviewing the financial results, (2) reviewing the results of the audits by the independent auditor, (3) overseeing the control environment, (4) overseeing internal audit activities, (5) reviewing the findings and recommendations identified as a result of internal and external audits, and (6) reviewing compliance issues and major litigation. The Chairman of the Audit Committee reports to the Board of Directors at the next meeting of the Board of Directors subsequent to each Audit Committee meeting. Management, the Internal Audit Department (IA), and the independent auditor have an open channel of communication to both the Audit Committee and the Board of Directors.

Additionally, each of ECM<sup>1</sup>, EFSI<sup>1</sup>, EAG<sup>1</sup>, ETC<sup>1</sup>, and Empower have their own respective oversight and governance structures as required either by applicable state and/or federal laws and regulations.

#### *C. Organizational Structure*

Empower uses a "Strategic Business Unit" (SBU) structure that provides the overall framework for planning, directing, and controlling operations for various markets including Core (401k), Government, Large/Mega/Not for Profit, and Institutional business (also known as "segments"). This approach allows Empower to clearly define responsibilities, lines of reporting, and communications, permitting employees to focus on the specific business issues impacting their customers.

Empower performs and delivers recordkeeping and administrative services to Empower Retirement, LLC-Defined Contribution Plans SBU's customers. In addition, certain Empower corporate departments, including the Investments Department and shared services, provide support functions to all SBUs. These support functions include processing, calculation of unit values, bank transactions, bank account reconciliations, share balance reconciliations, and financial reporting.

There are five primary departments within Empower that provide services to defined contribution plan sponsors and their participants:

- Conversions
- Trust/Financial Operations
- Transaction Operations
- Participant Services
- Client Services

The segregation of duties between these departments and the oversight, monitoring, and other control functions within the departments provide the overall foundation for the control environment.

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<sup>1</sup>This outside entity, department, process or system is not part of the scope of this report. Descriptions of system and objectives for this outside entity, department, process, or system have been intentionally excluded from this report and any information provided is for informational purposes only.

<b>Departments</b>	<b>Duties</b>
<b>Conversion</b>	<ul style="list-style-type: none"> <li>• Implementation</li> <li>• Mass Conversions</li> <li>• Deconversion/Plan Terminations</li> <li>• Payroll Services</li> </ul>
<b>Trust/Financial Operations</b>	<ul style="list-style-type: none"> <li>• Product/Fund Setup/Fund Changes</li> <li>• Fund Reporting</li> <li>• Tax Reporting</li> <li>• Trust Operations</li> <li>• Mutual Fund Operations</li> <li>• Employer Stock</li> <li>• Fees/Billing</li> <li>• Reconciliations</li> <li>• Plan Documents</li> </ul>
<b>Transaction Operations</b>	<ul style="list-style-type: none"> <li>• Mail/Records Control</li> <li>• Enrollments</li> <li>• Account Changes</li> <li>• Contributions, Common Remitter Contributions, and Loan Repayments</li> <li>• Distributions and Loans</li> <li>• Returned Checks</li> <li>• Plan and Participant Statement Reporting</li> <li>• Client Updates and Changes</li> </ul>
<b>Participant Services</b>	<ul style="list-style-type: none"> <li>• Inbound Contact Center</li> </ul>
<b>Client Services</b>	<ul style="list-style-type: none"> <li>• Client Services</li> <li>• Compliance</li> </ul>

#### Empower Recordkeeping System

Various teams within ITS jointly support the maintenance and operation of the recordkeeping system, the Empower defined contribution plan recordkeeping's primary application system, as well as other system applications that draw upon the recordkeeping system database, including maintenance and operation of the SAP application system in data processing, the centralized software package for processing accounting, and payment transactions for Empower.

Systems support is functionally segregated into six groups:

- Recordkeeping System Software Engineering – responsible for the maintenance and development of core application systems as well as the Enterprise Interactive Voice Response (EIVR), participant website, Plan Service Center and PartnerLink® websites (Plan Sponsor websites).
- Database Administration – responsible for database configuration for the recordkeeping system.
- Production Support – responsible for job scheduling and support of hardware and software utilization for the recordkeeping system.
- Software Configuration Management – responsible for promoting the recordkeeping system application code into production environments.
- ITS Division – responsible for the recordkeeping system operating system administration on the recordkeeping system servers.
- Corporate Systems – responsible for the development, maintenance, and support of the SAP system.

#### *D. Personnel Controls*

Formal policies and/or procedures have been developed covering critical aspects of employment, including hiring, training and development, performance appraisals, advancement, and termination. New employees are



provided with access to an employee handbook via the intranet, which documents various procedural and administrative matters.

The company's Human Resources Department is primarily responsible for recruiting and evaluating job applicants and has created an affirmative action plan. Background checks are performed on applicants prior to or following their employment. In addition, employees with access to cash, securities, and other valuable assets are bonded.

Performance appraisals are given to employees by their immediate supervisor on an annual basis. To supplement on-the-job training, a wide range of in-house training programs are offered, covering areas, such as general leadership and management development, customer service, and industry-specific topics.

## RISK ASSESSMENT

### *A. Risk Assessment*

Empower has a risk management process, designed to identify and mitigate risks that could affect its ability to provide reliable transaction processing. This process requires management to identify risks inherent to Empower's operations and to implement controls to mitigate each and monitor the effectiveness of controls.

Risks identified in this process include operational risk associated with computerized information systems, manual transaction processing, and reliance on external systems outside of Empower's direct control.

Management has controls in place to mitigate and monitor these risks, including both prevention and detection controls and processes for reviewing key controls on a periodic basis through independent internal audit reviews. Furthermore, internal processes are in place to support a strong risk management culture. These internal processes require, for significant outsourced processes, third party service providers to give periodic assurances to Empower through the provision of third party reviews, and/or certifications regarding their control environment.

Empower contracts with third party security assessment firms to test for network vulnerabilities and to conduct penetration testing of web applications at least once a year. Vulnerabilities are evaluated and corrective actions are implemented pursuant to the security level required to maintain business continuity.

### *B. Fraud*

Empower considers the potential for fraud in assessing risks to the achievement of its objectives. Empower's comprehensive internal control and operational risk management practices assist with preventing and detecting fraud within our operational, reporting, and compliance processes.

## CONTROL ACTIVITIES

### *A. Control Activities*

Empower management engages in a variety of control activities including manual and automated controls, preventive and detective controls, as well as policies and procedures. The execution of these controls mitigates the risk level to the achievement of objectives to acceptable levels based on business unit or system. The control environment is continuously monitored for control effectiveness and remediation steps are taken when a control needs enhancement or is not deemed effective.

### *B. General Control Activities Over Technology*

Empower's information technology, security, risk, and identity protection control program is designed to meet the needs of our clients and provide a range of controls over the implementation, acquisition, and management of information technology used within the business. Key areas of focus include information technology controls over entity level, infrastructure, security, change management, and backup and recovery procedures and processes.

### *C. Policies and Procedures*

Empower establishes clear standards for complying with laws and regulations, as well as managing risk, through the deployment of Empower policies. The policies identify the personnel or business unit(s) to whom they apply as well as the purpose for which they have been established. Policies intend to address identified risks and specify how the risks are to be mitigated within our risk appetite. Policies communicate mandates of management and support consistency and transparency, in addition to defining roles and responsibilities throughout our business units.

Procedures consist of actions that implement an Empower policy, as well as defining roles and responsibilities for each action in the process.

Policies and procedures may be communicated orally or in writing. Significant changes in our businesses, regulatory requirements, processes, and risk appetite may trigger the need for new or revised policies and procedures. Management regularly monitors and measures compliance with policies and procedures, and also considers each employee's compliance when evaluating employee performance.

## INFORMATION AND COMMUNICATION

### *A. Internal Communication*

Empower has various methods of communication to ensure employees understand their roles and responsibilities related to transaction processing and controls and to ensure significant events are communicated in a timely manner. For newly hired employees, these methods include an orientation program and training. For both new hires and existing employees, methods include Town Halls, company's intranet, polices, as well as a system of internal email communication.

### *B. External Communication*

Empower communicates regularly with external parties such as regulators, external auditors, shareholders, and clients. Communication varies by intended recipient, but can include scheduled regulatory reporting, sharing of Internal Audit and Compliance reports, company filings, seminars, conferences and road shows.

## MONITORING ACTIVITIES

### *A. Regulatory Compliance*

The regulated financial services affiliates of Empower (including EFSI, EAG and ECM) are subject to ongoing testing and periodic internal compliance reviews by the Compliance Department. The Compliance Department reports directly to the Chief Compliance Officer (CCO). This team is staffed with experienced financial/compliance and operational professionals.

The Compliance Department conducts ongoing compliance testing and reviews, as well as periodic audits of certain functions. The ongoing compliance reviews are reviewed by compliance management and findings are presented to management. The periodic audits are based on annual compliance review and risk management assessment plans that are developed by the Compliance Department and utilizes resources from the Empower SBUs, and industry best practices, as well as guidance and prior examination results from the FINRA and the SEC. The annual program is reviewed by the CCO for final review and approval prior to implementation.

The periodic regulatory compliance reviews result in written reports issued at the completion of a project, which document (1) the scope of the compliance review, (2) results and recommendations for improvement based on an action plan, and (3) management's responses and discussion of the action to be taken to address the findings.

### *B. Regulatory Supervision*

Empower Annuity Insurance Company of America

Empower Annuity Insurance Company of America (EAICA), which is the parent company of Empower and its affiliates identified in this report, is an insurance company domiciled in the State of Colorado, and is subject to regulation by the Colorado Division of Insurance (CO DOI). EAICA is authorized to engage in the sale of life insurance, accident insurance, and annuities. It is qualified to do business in all states in the United States

(except New York), and in the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands. EAICA is also a licensed reinsurer in the state of New York. EAICA is required by the CO DOI to develop and maintain formal policies and procedures for business operations. The CO DOI periodically reviews these policies and procedures, as well as EAICA statutory financial statements, to determine their compliance with applicable laws and regulations. EAICA is required to have an annual financial statement audit performed by an independent auditor.

#### Empower Annuity Insurance Company

Empower Annuity Insurance Company (EAIC), which is a subsidiary of Empower Annuity Insurance Company of America, is an insurance company domiciled in the State of Connecticut, subject to regulation by the Connecticut Insurance Department (CID). EAIC is authorized to engage in the sale of life insurance, accident and annuities. It is qualified to do business in all states in the United States, and in the District of Columbia and Puerto Rico. EAIC is required by the CID to develop and maintain formal policies and procedures for business operations. The CID periodically reviews these policies and procedures, as well as CID's statutory financial statements, to determine their compliance with applicable laws and regulations. EAIC is required to have an annual financial statement audit performed by an independent auditor.

#### Empower Life & Annuity Insurance Company of New York

Empower Life & Annuity Insurance Company of New York (ELAINY) is an insurance company domiciled in the State of New York, and is subject to regulation by the New York Division of Financial Services (NY DFS). ELAINY is authorized to engage in the sale of life insurance, accident, and annuities. It is qualified to do business only in the state of New York, Colorado, and Illinois. ELAINY is required by the NY DFS to develop and maintain formal policies and procedures for business operations. The NY DFS periodically reviews these policies and procedures, as well as ELAINY's statutory financial statements, to determine their compliance with applicable laws and regulations. ELAINY is required to have an annual financial statement audit performed by an independent auditor.

#### Empower Financial Services, Inc.

EFSI is registered as a broker-dealer with the SEC, FINRA, all 50 states, the District of Columbia, Puerto Rico, and the US Virgin Islands. As such, EFSI is subject to periodic reviews and regulatory supervision by various federal and state regulatory agencies. As a registered broker-dealer, EFSI is required to develop and maintain formal policies and procedures, also known as "written supervisory procedures." The SEC, FINRA and the state regulatory agencies periodically perform compliance audits of EFSI. In addition, an independent auditor must perform an annual financial statement audit.

#### Empower Retirement, LLC

Empower is authorized to conduct business in all 50 states, the District of Columbia, and Guam, and is a licensed insurance Third Party Administrator (TPA) in all states that have such a requirement. Empower is required to have an annual financial statement audit performed by an independent auditor.

#### Empower Advisory Group, LLC

EAG<sup>1</sup> is a federally registered investment adviser with the SEC and submits notice filings with state securities divisions in all 50 states, the District of Columbia, the U.S. Virgin Islands and Puerto Rico, and is also authorized to do business in Guam. EAG offers investment management and advisory services primarily to plan sponsors of employer-sponsored retirement plans, such as 401(k), 403(b), and 457 plans, including government entities and their participants for which its parent company, Empower Annuity Insurance Company of America, or its affiliate, Empower is the administrative services provider. EAG also provides advisory services for account holders of the Empower Individual Retirement Account and Empower Investment Account. EAG is required to have an annual financial statement audit performed by an independent auditor. In addition to these annual audits, certain accounts managed by EAG are subject to surprise verifications by an independent public accountant each year, as required by Rule 206(4)-2 under the Investment Advisers Act of 1940, as amended.

## Empower Trust Company, LLC

Empower Trust Company, LLC (ETC) is a Colorado state chartered non-depository trust company. ETC is authorized to provide trust and custodial services to employer-sponsored retirement plans as well as individual retirement accounts (IRAs). ETC is also authorized to provide collective investment trusts to institutional investors. ETC provides quarterly reports to and is subject to periodic examinations by the Colorado Division of Banking (CO DOB). ETC is also subject to minimum capital requirements determined by the CO DOB.

## Empower Capital Management, LLC

Empower Capital Management (ECM)<sup>1</sup> is a federally registered investment adviser with the SEC. ECM manages the assets of pooled investment vehicles only and does not maintain direct custody of its clients' cash, bank accounts, or securities; however, it is deemed to have custody of clients' assets based solely on its ability to debit advisory fees. For certain accounts managed or sub-advised by ECM, including (1) Empower Trust's proprietary collective investment trust options and (2) certain products offered by Empower (which include various separate accounts or pooled investment vehicles established or sponsored by Empower and for which the contract owners are otherwise the "beneficial owners") ECM may be deemed to have custody of these assets.

### *C. Internal Audit Function*

Empower's operations are subject to periodic audits by the Internal Audit Department (IA). IA reports directly to the Audit Committee of the Board of Directors for auditing matters, and to the President and Chief Executive Officer (CEO) for administrative matters. Reports are prepared, summarizing the activities of IA, which are presented to the Audit Committee on at least a quarterly basis. The Audit Committee reports are also provided to the Chief Financial Officer and the CEO. The department is staffed with experienced financial/operational and information systems audit professionals.

An annual audit plan is developed by the department for review with the Audit Committee and senior management. Types of activities covered in the annual audit plan generally include:

- Audits - an evaluation of controls and operations in an area, a process or a system, performance of tests of controls and operations, and development of recommendations to improve procedures
- Special Projects - a limited scope review, on a consulting basis, to evaluate a specific process, contract, etc.
- System Development Projects - an evaluation and recommendation of controls during the development and implementation of a new or significantly modified information system
- Testing of internal controls over financial reporting

Audit objectives are developed and used by IA staff when conducting the procedures. Written reports are issued at the completion of a project, which document (1) the scope of the audit, (2) results and recommendations for improvement, and (3) management's responses and discussion of the action to be taken to address the audit findings. On a quarterly basis, IA obtains the status of management action plans and periodically performs follow up procedures as deemed appropriate, based on the risk of the issue.

### *D. Subservice Organizations*

Empower utilizes subservice organizations to support the processing of client transactions. In addition, Empower assesses the risks associated with these subservice organizations and has implemented various management oversight and monitoring processes to confirm that the subservice organizations continue to provide services in a controlled manner. Certain control objectives specified by Empower can be achieved only if complementary subservice organization controls assumed in the design of Empower's controls are suitably designed and operating effectively, along with the related controls at Empower. These complementary subservice organization controls are included elsewhere within Section III.

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<sup>1</sup>This outside entity, department, process or system is not part of the scope of this report. Descriptions of system and objectives for this outside entity, department, process, or system have been intentionally excluded from this report and any information provided is for informational purposes only.

Empower management performs the following evaluations for each subservice organization service auditor report that they obtain to support their business (refer to table below that identifies relevant subservice organizations):

- Documents an understanding of how the services of the subservice organization are utilized in the entity's operations.
- Based on the understanding of how the subservice organization is utilized, Empower identifies and validates that the subservice organization tests and evaluates controls appropriately that relate to the services provided by the subservice organization, including those that are applied to the transactions processed by the subservice organization.
- Exceptions are identified and evaluated by Empower to determine the impact on relevant controls and the associated risks. If exceptions or deviations are noted within the subservice organization's auditors' report an assessment will be completed to determine if control objectives are impaired.
- Complementary User Entity Controls (CUECs) are identified in the subservice organization's auditors' report. These are evaluated by Empower to determine their relevance to Empower's operations. For those CUECs that are determined to be relevant, Empower performs operating effectiveness testing on controls for the CUECs.
- Subservice organizations are identified in the subservice organization's auditors' report and evaluated by Empower to determine whether the processing performed by the carved-out subservice organizations affects assertions in the entity's financial statements and whether those assertions are significant to the entity's financial statements. If it is determined that the subservice organization is relevant, the subservice organization service auditor report will be obtained, evaluated and included within the table below.
- If the report received for the subservice organization does not cover the entirety of the Empower time period, Empower procures a bridge letter or gains additional assurance by other means through phone conversations or meetings.

External Subservice Organization	Description of Service(s) Provided
BlackLine	Empower uses BlackLine Systems to host and maintain the BlackLine reconciliation application
Broadridge Investor Communication Solutions, Inc.	Empower uses Broadridge Investor Communication Solutions, Inc for document check printing and mailing services
Amazon Web Services (AWS)	Private cloud for IaaS for limited application deployments and non-critical data backups.
Equinix	Provides data center hosting (colocation) for Empower servers and physical security
Matrix Trust Company	Externally hosted system providing trust and investment services for qualified and non-qualified DC and DB contracts.
Convergent Financial Technologies Inc (UV Cloud Application)	Empower uses UV Cloud for managing separate account assets, calculation of unit and share values, and reporting

See below for the listing of subservice organizations and the related monitoring controls applicable to each organization.

Empower uses BlackLine Systems to host and maintain the BlackLine reconciliation application. The control objectives and controls of BlackLine are excluded from Empower's description of the system. Management receives and reviews the SOC I Type II report of BlackLine on a semi-annual basis. In addition, through its daily operational activities and use of BlackLine to perform various reconciliations across departments, management of Empower monitors the services performed by BlackLine to ensure that operations and controls expected to be implemented at the subservice organization are functioning effectively. In addition, Empower is responsible for access administration related to the application for Empower associates.

Empower uses Broadridge Investor Communication Solutions, Inc. for document printing and mailing services, including statements, confirmations, regulatory notices, and prospectuses and check printing and mailing services. Management receives and reviews the SOC I Type II report on an annual basis to ensure operations and controls are operating as expected and there is no impact to the organization should there be an exception in their report.

Empower leverages Amazon Web Services (AWS) cloud computing services, specifically for IaaS (Infrastructure as a Service) and for storage of backups. AWS operates, manages, and controls the components from the host operating system and virtualization layer down to the physical security of the facilities in which the services operate. Empower has responsibility and management of the associated operating system (including updates and security patches) and the configuration of the AWS-provided security group firewall. Management receives and reviews the SOC I Type II reports of AWS on an annual basis.

Equinix is a data center facility that provides Empower colocation space with the power, cooling and physical security to host Empower's computing hardware and servers. Management receives and reviews the SOC I Type II report of Equinix on an annual basis.

Matrix Trust Company is a registered digitally enabled investment platform available for servicing Qualified & Non-Qualified DC and DB contracts offering a wide range of trust and investment services. Matrix is an externally hosted system at Matrix Trust Company. Management receives and reviews the SOC I Type II report of Matrix on an annual basis.

Empower uses UV Cloud for managing separate account assets, calculation of unit and share values, and reporting. UV Cloud is a Software as a Service (SaaS) product, developed and hosted by Convergent Financial Technologies Inc. Convergent is responsible for managing the hosting infrastructure in addition to software development. Management receives and reviews the SOC I Type II report for UV Cloud on an annual basis.

#### *Other Service Providers*

Organizations that provide services to a service organization that are not considered subservice organizations are referred to as other service providers, as Empower's controls alone are sufficient to achieve the control objectives and assertions necessary for user entity's internal control over financial reporting. Empower uses the other service providers in the table below to support the specified functions related to the control objectives in Section IV of this report.

<b>Name of Other Service Provider<sup>1</sup></b>	<b>Description of Service(s) Provided</b>
National Securities Clearing Corporation (NSCC)	Pricing, share position and dividend information as well as trade clearing and settlement
Iron Mountain	Off-site backup tape and document storage
State Street Global Exchange	Application updates/patches for the Portfolio Asset Management (PAM) application
Xerox	Xerox staffs the mail room to perform day to day operations

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<sup>1</sup>This outside entity, department, process or system is not part of the scope of this report. Descriptions of system and objectives for this outside entity, department, process, or system have been intentionally excluded from this report and any information provided is for informational purposes only.

### III. GENERAL COMPUTER CONTROLS

General computer controls establish the control environment in which computer application systems are developed, operated, and secured. Therefore, the general computer control environment will impact the effectiveness of controls within application systems. Empower's defined contribution business is processed in its recordkeeping system. The recordkeeping system is an internally developed system that utilizes relational database technology to tailor individual plans for plan sponsors. The recordkeeping system is used by internal staff as well as by plan participants using the Participant website and EIVR. The recordkeeping system is also used by plan sponsors and brokers using Plan Sponsor websites, the remote/internet electronic interface. There are two distinct recordkeeping database environments: a "production" environment that contains actual Empower participant records that is updated in real time for financial activity and a "development" environment that is used to develop and test new system functionality.

The recordkeeping system production environment sits on application servers running the UNIX operating system. One system operates as an Oracle database server and another operates as a file server that runs a scheduling system and batch processes. End users access the recordkeeping system from PCs that connect to application servers running Oracle Forms.

Plan and participant data reside on an Oracle database and is shared by applications and architectures. Business logic for web-based and EIVR applications resides in a BEA-WebLogic application server. Internet and EIVR presentation and user interface logic reside in an external layer. Maintenance and development of additional functionality for the recordkeeping system is accomplished through an application development methodology. An Oracle data dictionary is used to document the metadata. Project documentation is kept current with all development and maintenance activities. Application code is stored securely in a source management system.

SAP is the centralized software package for processing accounting and payment transactions for Empower. All payment processing, both collections and disbursements are performed within the SAP environment. Reconciliation of these transactions with the banks is also performed in SAP.

The PAM Yugo instance handles accounting for securities which are owned and managed by EAICA, subsidiaries, affiliates, Empower Funds, Empower Collective Investment Trusts for separately managed accounts. A third party (Convergent Financial Technologies Inc) software as a service (SaaS) product, UV Cloud, is used for managing separate account assets, calculation of unit and share values, and reporting. The workflow management system, OnBase, is an enterprise content management (ECM) and business process management (BPM) solution. OnBase is a Hyland product located on Empower infrastructure.

BlackLine is a secure, role-based third party hosted web application with embedded workflow capabilities used to support all aspects of the account reconciliation process. BlackLine provides an interface for performing account reconciliations that includes standardized templates, workflows for preparation, approval and review, linkage to policies and procedures, and integrated storage of supporting documentation.

Oracle Identity Manager (OIM) is a centralized governance solution that provides entitlement provisioning, deprovisioning, and access certifications for applications integrated with the platform. OIM is utilized for maintaining entitlement approvals for PAM Yugo, the recordkeeping system, and BlackLine and certifications for the recordkeeping system.

The following describes the data processing environment and general computer controls implemented at Empower:

- A. Systems Development and Maintenance
- B. Participant and Plan Sponsor Websites
- C. EIVR
- D. Computer Operations – Job Processing and Backups
- E. Logical Access Security
- F. Physical Security and Environmental Controls

## **A. SYSTEMS DEVELOPMENT AND MAINTENANCE**

**Control Objective 1:** Controls provide reasonable assurance that changes to application programs and related data management systems are documented, tested, approved, and implemented to result in the complete, accurate, and timely processing and reporting of transactions and balances.

### *Description of Control Procedures*

#### Recordkeeping System Application

New development and maintenance changes can be initiated at the request of either Operations management or the Empower team. Regardless of who initiates a change, the Empower team adheres to a set of prescribed steps during its development efforts. A Systems Development Life Cycle (SDLC) methodology has been implemented, which includes the following phases: analysis, design, build and test, quality assurance and installation. The SDLC governs the development, implementation, and maintenance of application systems. Along with the SDLC methodology, formal program change management policies and procedures exist to ensure discipline over change processes. The Empower team follows these procedures for program changes and for migrations into the production processing environment. The SDLC methodology and program change management policies and procedures ensure documentation is created throughout the development and maintenance process. Segregation of duties between end users, programmers, quality assurance, library management, and production operations and support personnel is maintained throughout the program change management and development process. Program changes must be tested by someone other than the programmer who made the change. Once the change has passed through the test cycle and appropriate approvals received, the designated team with sufficient privileges (access rights) promote the code into the production environment. Recordkeeping system changes must be approved by appropriate personnel prior to promotion to the production environment. Separate computer environments for application development and maintenance, quality assurance testing, and production processing are maintained. Programmers and quality assurance personnel are appropriately restricted from directly modifying production source and executable code.

#### SAP Application

SAP system changes could involve new systems development, change requests associated with systems enhancements, or requests for issues that arise as a result of service desk requests. System modifications to the SAP environment must go through a controlled process that includes request analysis, design, development, testing, approval, and implementation. The process involves, depending on the impact of the change, the user requesting the change and potentially multiple change teams (ABAP, Authorization, Workflow, etc.) and/or multiple functional areas (Financial Services and ITS), depending on the impact of the change. These changes are migrated into the production environment through the SAP transport process. The BASIS team has access to development and production. This access is appropriate and required for business continuity. As segregation of duties cannot be maintained, SAP changes are reviewed weekly and unusual items are investigated and resolved.

#### PAM Yugo

Change requests are documented in ServiceNow and Jira tickets. Testing and approvals are received and reviewed prior to the code being moved into production. Testing and approval sign-offs are stored within the associated ServiceNow or Jira ticket. Based upon job function, a limited number of members of the Software Configuration Management (SCM) team have the needed access to apply changes within the production or production staging environments, and these users are segregated from those with development access.

#### UV Cloud

Convergent Financial Technologies Inc (vendor) is responsible for change development and implementation, they provide a SOC 1 report which Management reviews. As part of the change process, Convergent stages changes in a test environment and Empower is responsible for performing user acceptance testing and communicating with the vendor that the change is approved for migration into the production environment.

#### Investment Trading (FundLinx and OTF)

FundLinx is an off-the-shelf application and changes to the application are supplied by the vendor. When a patch or upgrade is received, a JIRA story is created to track the change. The change is applied to a lower environment where it is subject to testing by the business and development team as applicable. After successful testing, the



change is approved for deployment by the business and development team. Once all approvals are obtained, the SCM team installs the update in the production environment.

OTF is a custom solution that Empower has access to the source code. The source code is maintained in a source code repository. When a change is requested, a JIRA story is created to track the change. The change is developed in a development environment, and then moved to a QA or UAT environment for testing where it is subject to testing by the business and development team as applicable. After successful testing, the change is approved for deployment by the business and development team. Once all approvals are obtained, the SCM team builds the code and deploys it to the production environment.

#### Workflow Management System (OnBase)

Change requests (e.g., configuration changes, upgrades, deployments, etc.) are documented in the ServiceNow tickets. Testing and approval sign-offs are stored within the appropriate ServiceNow ticket. Once tested and approval obtained, changes are implemented by the ECM team, who have the necessary knowledge and access to apply changes within the production or production staging environments. Empower does not develop changes for OnBase as these changes are developed and provided by the vendor.

#### Oracle Identity Manager (OIM)

Change requests are documented in ServiceNow tickets. Testing and approvals are received and reviewed prior to code being moved into production. Testing and approval signoffs are stored within the associated ServiceNow ticket. Based upon job function, once changes are tested and approved, changes are moved from the test environment into production. New applications being integrated into OIM are subject to an on-boarding framework, which includes design requirements and validation of the entitlements to be included in OIM, prior to implementation in the production environment.

A manual reconciliation of the source data of the target system is performed to ensure completeness and accuracy of the data in the identity management application. Any discrepancies identified are investigated and corrective action is taken.

#### Operating System and Database

All new releases of system and database software, which are developed and provided by the software vendors, as well as upgrades to computer hardware, are tested prior to implementation into the production environment by the applicable team according to formal change control procedures. Changes are tested in the test/development (DEVL or QA) environment before deployment to the production environment. If a QA environment is not available, or not required based on type of change, a back-out plan is required prior to making the changes. Approval by appropriate personnel is required prior to implementation. Logical access to promote system changes is restricted to personnel commensurate with job responsibilities, and segregation of duties in the change process is inherent given the development is handled by the software vendors. Various access and logging controls exist to address database and operating system security risks.

The recordkeeping system application runs on the UNIX operating system, hosted at AWS, and utilizes Oracle database management software referred to as Oracle FSS, which is hosted at Equinix and runs on a Linux operating system. SAP runs on the Linux operating system and DB2 Universal Database (UDB) software and is hosted at AWS. PAM Yugo run on the Windows operating system with an Oracle database management system referred to as Oracle ITS, and is hosted at AWS.

#### Exposure Check

If management identifies a deficiency in the operation of the system development and maintenance controls, a check is performed. Management determines the root cause of the deficiency and performs an analysis to determine whether the deficiency in the control could have been potentially exploited. Any deficiencies which have been exploited are investigated and corrective actions are taken to remediate the issue.

## **B. PARTICIPANT AND PLAN SPONSOR WEBSITES**

**Control Objective 2:** Controls provide reasonable assurance that plan sponsors' and participants' access to data through Empower's Participant and Plan Sponsor websites are secure and authorized.

### *Description of Control Procedures*

The Cyber Operations team in Greenwood Village has implemented firewall technologies. These firewalls only allow inbound traffic for business purposes. Other requests for entry are either denied or sent to a Web server residing in the Demilitarized Zone (DMZ). Virtual Private Network (VPN) connections are allowed through a VPN client and are required to authenticate to the access server using two-factor authentication before the connection is made.

An approval process exists to control modifications to the standard configuration settings on the firewall. Change requests are submitted through the ticketing system and approved or denied by the Cyber Operations Group based on the associated risk. Logical access to modify the firewall configuration is limited to personnel commensurate with job responsibilities. Firewall logs are reviewed by Cyber Operations on a daily basis (weekdays). Questionable items are investigated and resolved using Service Requests. A blocklist is created based on the review.

The participant website was created to allow participants access to their account via the internet. Access is granted through the use of a Social Security Number (SSN) or username and personal identification number (PIN) or password. Upon gaining access, participants are allowed to view current account balances, allocation instructions, and certain transaction history. Participants can initiate transactions to transfer money between their investment options, change allocation instructions and deferral percentages, and initiate loans or distributions based upon their plan setup.

The Plan Service Center's (PSC) plan sponsor website was developed and implemented to provide plan or PEO sponsors access to their data. In addition to providing online plan and participant inquiries, PSC can be used to request ad hoc reports and to upload or download computer files. If authorized, plan or PEO sponsors may also perform payroll processing that includes sending and validating payroll information, clearing processing rejections, and initiating automated clearing house (ACH) money transfers. The PSC also allows for the collection of compliance data and approval of participant distributions online. Access to the PSC requires a unique username and password. Plan or PEO sponsors provide approval for plan or PEO sponsor employees to obtain Plan Sponsor website access.

PartnerLink® was developed to give much of the same information available to the plan sponsors to Client Service Managers (CSM), Third Party Administrators (TPA), advisors, brokers and other sales/support staff. The service is based on the PSC website and uses the same controls and infrastructure.

Participant and Plan Sponsor websites are accessed through internet connections and require the use of a Transport Layer Security (TLS) connection to gain access. Participant and Plan Sponsor websites require a valid username and password combination to gain access to data. Participant website users are authenticated with a user ID and PIN, whose size is determined based on plan-level rules, and must be a specified minimum length. Plan Sponsor websites require that user passwords expire every 31 days, unless explicitly requested otherwise by each institution. The Participant and Plan Sponsor password/PIN is masked during input and encrypted in the database. Connections to Participant and Plan Sponsor websites will be encrypted using TLS encryption. Access to the Participant and Plan Sponsor websites are suspended for a specified time period after an explicit number of invalid access attempts. Transactions initiated through the Participant and Plan Sponsor websites are logged and included on the Participant and/or Plan Sponsor periodic statements, as appropriate. Financial transactions entered through Participant and Plan Sponsor websites are recorded in the Oracle FSS database supporting the recordkeeping system.

## C. EIVR

**Control Objective 3:** Controls provide reasonable assurance that data transmissions between Empower and participants via EIVR are authorized and secure.

### *Description of Control Procedures*

EIVR's primary caller input is speech using Directed Dialogue Menus. Touch Tone (DTMF) is used as a fallback. EIVR provides both update and inquiry transactions to allow participants to review and change their account information.

Participants can perform Allocation Changes within the EIVR. The functionality of this system is similar to the participant website. Participants are required to use a valid user ID and PIN combination before gaining access to data. EIVR passwords are required to be a plan-defined minimum number of digits. After an explicit number of invalid password attempts, participants are automatically transferred to a Customer Service Representative. Financial transactions initiated through EIVR are logged and included on the account holder's periodic statement. Transactions, such as asset allocation changes, entered through EIVR, are executed on the Oracle FSS database supporting the recordkeeping system.

## D. COMPUTER OPERATIONS – JOB PROCESSING AND BACKUPS

**Control Objective 4:** Controls provide reasonable assurance that batch jobs are processed accurately, completely, and in a timely manner and deviations, problems, or errors are identified, tracked, and resolved in an accurate, complete, and timely manner.

**Control Objective 5:** Controls provide reasonable assurance that data is backed up completely, tested on a periodic basis, and retained to enable retrieval.

### *Description of Control Procedures*

#### Recordkeeping System Application

The recordkeeping system is primarily a digital system with most processes initiated by end users using application menu options. Paper initiated transactions are controlled by independent imaging and workflow systems.

A job scheduling system is used to schedule and control reoccurring batch production processes. Logical access to modify the job schedule is reviewed by appropriate personnel on a quarterly basis to ensure access remains appropriate. Designated management authorizes access to the job scheduling system. Production Support personnel monitor messages generated from nightly processes for processing problems and abnormal job terminations daily. Processing problems are analyzed and resolved through data correction tools, reruns, or change control processes. Production Support personnel are on call 24 hours a day for processing problems that must be resolved on an urgent basis. Online restart and recovery procedures documentation exist for the handling of abnormal job terminations and processing problems.

#### SAP Application

SAP jobs are scheduled directly in SAP and through the Empower Autosys job scheduling system. The SAP Production Support Team is responsible for the scheduled jobs. Jobs with issues are configured to automatically send an email to the SAP Production Support e-mail, the ServiceNow ticketing system and page the 1<sup>st</sup> on-call mobile device for high severity incidents. Any changes to the SAP job schedule must go through the SAP Production Support change control process and can only be performed by the SAP Production Support Team.

Full or incremental backups of the SAP databases are created three times weekly and additional backups are performed ad hoc as needed.

#### Oracle Identity Manager (OIM)

OIM jobs are scheduled through the native OIM job scheduler tool and run at different frequencies throughout the day. Members of the Identity and Access Management (IAM) Engineering team are responsible for monitoring failed jobs through the use of a daily report of failed jobs. Follow-up and resolution of these failures

where teams outside of IAM are impacted, are tracked to resolution. Access review of users with the ability to modify the job scheduler is reviewed at least annually by appropriate personnel.

#### Backup Integrity

To support database recoveries, as well as business continuity efforts, production databases, critical programs, and data files are backed up seven nights a week to a solid-state drive (SSD) or AWS S3 bucket and replicated for retention and dual copy. Storage Management personnel receives daily emails from CommVault backup failures to allow them to monitor the daily recordkeeping system backup, which encompass backups maintained off premises, and SAP backups to resolve any backup processing failures according to procedures.

Personnel monitor backup processing notifications, and address any backup processing failures, as appropriate. Action taken to remediate failures are documented accordingly. Only authorized individuals may request and obtain backup tapes from the offsite vault facility or run restores for backups stored locally or from our alternate data center. The backup restore process is tested quarterly from either user-requests or as part of the quarterly test around data availability to ensure that data backups can be restored.

### **E. LOGICAL ACCESS SECURITY**

**Control Objective 6:** Controls provide reasonable assurance that access to applications, underlying databases and supporting operating systems is limited to authorized and appropriate personnel.

#### *Description of Control Procedures*

##### Recordkeeping System Application

To access the recordkeeping system and its associated data, a user must successfully authenticate through the network with their Windows user ID and password and then into the recordkeeping system with their UNIX user ID and password. Password parameters are enforced by UNIX and Windows and are as follows:

- Expire on a periodic basis
- Users locked out after a determined number of invalid login attempts
- Terminals time out after a determined time of inactivity

The recordkeeping system's security is role based, where access is grouped and assigned based on the business code and role for a particular job function. Each business code and role is assigned transactions that are controlled by an application security menu that limits the transactions a user may perform. When a transaction is requested through the application security menu, the application's security module is called to validate a user's authorization to perform the transaction before the transaction is processed.

A user is granted access to the recordkeeping system through OIM based upon proper authorization from management authorizing their access. Management will provide the IAM team the assigned business code and role needed for their job responsibilities. When a user has been terminated, their access is removed from the application automatically by OIM from a Workflow notification created by Human Resources. The recordkeeping system access is reviewed by appropriate personnel on a quarterly basis to ensure access remains appropriate.

Users gain access to Client Service Access System (CSAS) using the same role-based security as the record keeping system, requiring a user to enter their UNIX username and password. User authorization to access participants, plans, and CSAS features is additionally controlled using the recordkeeping system security information that is maintained by the recordkeeping system Security group.

##### SAP Application

To access SAP, a user must successfully authenticate through the network with their Windows user ID and password and then logon to SAP utilizing the Cybersafe Trustbroker Single Sign-on Software for SAP. Users can also logon to SAP with their unique SAP user ID and password. SAP is configured to ensure accounts have appropriate password controls.

SAP access requests must have approval from a manager in the employee's chain of command, as well as the Role Owner approval for the requested role. The manager and Role Owner approval indicates the SAP access required for the requestor's job. The SAP Security Team ensures manager and Role Owner approval is present prior to assigning the access to the employee. If manager or Role Owner approval is not present or the approval is not valid, the Security team will contact the manager for approval. If the manager or Role Owner does not approve the request, the requestor is notified, and access is not granted. The SAP Security Team is responsible for granting access to SAP. Access to special privilege accounts for UNIX, UDB, and SAP user accounts is granted to personnel commensurate with job responsibilities. Temporary FireFighter access is managed through GRC and requires approval prior to provisioning, FireFighter access activity is reviewed for abnormal activity and necessary actions taken as required.

Upon notification of termination of a user by the automated termination report, access for that user is terminated in the system. On an annual basis, there is a complete review of access to SAP. The Role Owners reviews their users and returns any remediation items to the SAP Security team. Review of certain sensitive access rights is performed on a quarterly basis to ensure access is appropriate.

#### PAM Yugo Application

To access the PAM application, a user must successfully authenticate through the network with their Windows user ID and password and then into PAM Yugo with their unique user ID and password. PAM Yugo is configured to ensure accounts have appropriate password controls.

Management approval through OIM is obtained prior to access being granted. All Investment systems user accounts are database Oracle ITS accounts. Application reviews are completed by business personnel and focus on reviewing appropriateness of business user access. Database reviews are performed by systems personnel and focus on reviewing appropriateness of system user access. Application and database reviews are performed for all in-scope Investments applications. All access changes/modifications are sent to the administrators to process.

Quarterly, appropriate personnel review and sign off on various PAM access reports. The review includes access appropriateness as well as reviewing any potential changes from the previous review.

#### Investment Trading (FundLinx and OTF)

To access FundLinx and OTF, a user must first successfully authenticate through the network with their Windows user ID and password. FundLinx requires an additional Oracle ITS database account and OTF requires membership in an LDAP group.

FundLinx and OTF are integrated with OIM and management approval for access is obtained through OIM prior to access being granted. User access is reviewed on a quarterly basis. For FundLinx, review actions are communicated to system administrators for processing, while OTF review actions are performed by OIM automatically.

#### UV Cloud

Access to UV Cloud is controlled through management of user credentials and permissions within the application or through single sign on (SSO) to the platform. The SSO configuration utilizes Empower Active Directory group membership for authorization to UV Cloud permissions and is controlled through OIM. A user must have credentials within UV Cloud or be a member of an Active Directory group which grants access to UV Cloud. Users can authenticate directly within the application or utilize SSO; SSO requires a user to successfully authenticate with their Windows user ID and password. Management approval for access is granted through OIM prior to provisioning and OIM is used to facilitate quarterly user access reviews. Upon notification of termination Management disables or removes non-SSO user accounts and SSO accounts are automatically disabled by OIM.

#### Workflow Management System (OnBase)

To access OnBase, a user must successfully authenticate through the network with their Windows User ID and password. Password complexity and history rules are enforced per security standards. A user is granted access to OnBase by a recordkeeping system security administrator based upon proper authorization from management authorizing their access. Management will provide the recordkeeping system security administrator the assigned role needed for their job responsibilities. Annually, application reviews are completed by business personnel and

focus on reviewing appropriateness of business user access. Quarterly, privileged users are reviewed for appropriateness. All access changes/modifications are sent to the administrators to process.

#### BlackLine

Appropriate approval by management is required to grant system administrator access to the BlackLine application. Quarterly, BlackLine application access is reviewed to ensure access is appropriate for system administrators. Application access reviews are performed by management and changes are sent to the OIM Engineering team for processing. Authentication mechanisms are in place to validate user credentials for access to the network and applications.

#### Oracle Identity Manager (OIM)

Appropriate approval by IAM management is required to grant administrator access to the OIM. Quarterly, OIM administrator access is reviewed to ensure access is appropriate. To access OIM, a user must successfully authenticate with their Windows user ID and password.

Quarterly, appropriate personnel review and sign off on access appropriateness for administrator entitlements.

#### Operating System and Database

Privileged access to the UNIX, Linux, and Windows operating systems, as well as the Oracle and DB2 databases is granted to personnel commensurate with job responsibilities, after receiving required approval.

When a user has been terminated, their network access is removed by OIM from a Workflow notification. Their network access is removed first and then the Workflow is passed to the Security Administrator teams to ensure access is removed from the operating system and database layers.

The UNIX, Linux, and Windows operating systems, as well as the Oracle and DB2 databases special privilege access is reviewed by appropriate personnel on a quarterly basis to ensure access remains appropriate.

#### Oversight

Management implemented a monthly quality control review over various user access controls. The review provides management oversight into the controls and an independent and proactive assessment of control design and effectiveness. Exceptions identified as part of this process are investigated and proactively remediated by management.

#### Exposure Check

Management identifies a deficiency in the operation of the logical access security controls, an exposure check is performed. Management determines the root cause of the deficiency and performs an analysis to determine whether the deficiency in the control could have been potentially exploited. Any deficiencies which have been exploited are investigated and corrective actions are taken to remediate the issue.

### **F. PHYSICAL SECURITY AND ENVIRONMENTAL CONTROLS**

**Control Objective 7:** Controls provide reasonable assurance that physical security and environmental controls are in place and access to the data center is limited to authorized and appropriate personnel.

#### *Description of Control Procedures*

Empower utilizes AWS cloud computing environments and Equinix co-location data center facilities, both sub-service providers are responsible for physical security and environmental controls of their facilities. Empower has physical access to the Equinix co-location data center facilities. The data center is monitored by CCTV and staffed on a 24-hour basis. Entry requires an authorized on-site access request and the visitor is escorted by Equinix personnel to the locked cage, this applies both for Empower employees and contractors. Empower maintains an authorized personnel list with Equinix and is required to present government-issued photo ID to obtain access. Empower submits approved additions and removals to the authorized access list, as well as submits on-site access requests, through Equinix's internal system. Empower reviews their authorized access list by appropriate personnel at least quarterly and discrepancies are noted and resolved.

## IV. DESCRIPTION OF OPERATIONS

While the types of services provided by Empower can be broadly categorized as those involving contributions, distributions, investments, and contract holder reporting, narrower definitions are necessary for operational descriptions. The controls for each of the following functions are described below:

- A. Mail/Records Control
- B. Plan Document Production
- C. Plan Implementation
- D. Mass Conversion
- E. Plan Changes (Post Implementation)
- F. Enrollments
- G. Account Changes
- H. Contributions, Common Remitter Contributions, and Loan Repayments
- I. Banking Returns
- J. Withdrawals and Distributions
- K. Loans
- L. Fees
- M. Income/Valuation
- N. New Fund Setup and Fund Changes
- O. Asset and Stock Purchases and Redemptions
- P. Compliance
- Q. Plan and Participant Statement Reporting
- R. Returned Checks
- S. Reconciliations

### A. MAIL/RECORDS CONTROL

**Control Objective 8:** Controls provide reasonable assurance that mail/records are distributed for processing in an accurate, complete, and timely manner.

#### *Description of Control Procedures*

The Mail Center opens, sorts, and scans mail into OnBase, an electronic document management system. As the documents are being scanned, OnBase encodes a date and time ribbon on the top of the incoming paper document image. The document images route to Document Management where the scanned items are indexed within OnBase for distribution to the assigned departments. Faxes come in through a fax server, which encodes a date and time ribbon on the top of the incoming fax and loads the item into OnBase for indexing as described above. The date stamp serves as an acknowledgment of the date received in the department for processing, and ensures mail items are completed in accordance with department and corporate requirements. Incoming requests, which cannot be identified as customer requests are routed to the UTL queues within OnBase to be researched by Document Management. Appropriate personnel review and clear the OnBase queue daily to ensure that scanned and faxed items are routed to the assigned departments in a timely manner. If a document cannot be identified as a customer request, it is archived within OnBase. Document Management also collects and controls documents that have been processed by business units in hardcopy format, which is referred to as back-end scanning. Processed documents are sorted, filed, and scanned by categories (permanent plan, plan legal, participant enrollments, participant changes, etc.). Specially marked bar code sheets are utilized to ensure accurate routing and filing. As the various documents are indexed, the recordkeeping system event ID numbers are automatically assigned to each item after scanning and indexing is finished. Completed items are quality checked by appropriate personnel in various departments to ensure documents are complete and legible.

Mail that includes cash contributions is logged by the Mail Center for Banking Services. See the section named "Contributions, Common Remitter Contributions, and Loan Repayments".

### B. PLAN DOCUMENT PRODUCTION

**Control Objective 9:** Controls provide reasonable assurance that the Plan Documents and Summary Plan Description (SPD) are authorized and set up accurately, completely, and in a timely manner.

### *Description of Control Procedures*

Upon request from the Implementation team, the Plan Document Team prepares non-standardized pre-approved and volume submitter plan documents for 403(b) plans, 401(a) Money Purchase, 401(a) Profit Sharing, and 401(k) plans, as well as Governmental 457(b) plans and Governmental 401(a) Money Purchase plans and Profit Sharing plans.

The Empower representative or institutional client is responsible for surveying the plan sponsor's employing organization, to determine the plan type best suited for the plan sponsor if the plan is a start-up. The Implementation analyst, Plan Document Transition analyst, or institutional client, as applicable, conducts a call to the client to confirm initial plan provisions and any changes that may need to be made.

The Implementation analyst submits a request to the Plan Document Team, who then prepares the applicable adoption agreement and SPD based on the information received. The Plan Document Team reviews the series of ancillary documents (e.g., adoption agreements, including any legislative amendments, if applicable, Basic Plan Documents, and SPDs) provided by the plan sponsor to ensure needed information is obtained for a new plan or to convert an existing plan. When a client has an existing Plan Document, the process of taking the existing plan and transferring the provisions onto the document(s) is called "mapping over" the plan. Any change suggestions or issues are noted so that the Implementation analyst or Plan Document Transition analyst can address them during a call or email with the client and/or the institutional client, as applicable. The Implementation analyst or Plan Document Transition analyst then submits a request to the Plan Document Team, who then prepares a plan document and SPD using a pre-approved or volume submitter document. The final plan document and SPD are reviewed for accuracy by an independent Plan Document Team member. Any errors or follow up questions are sent back to the preparer for resolution. Once the documents are approved by the plan sponsor, the plan sponsor must execute the Plan Document. If revisions are required while the plan is still in the implementation process (whether before or after the plan sponsor has signed the document), a request to the Plan Document Team will facilitate the changes. For start-up plans, the Plan Document must be signed by the plan sponsor or designee and returned before the acceptance of any participant contributions. For plan conversions, the Plan Document must be signed by the plan sponsor or designee and returned before the Plan is released from the blackout period. On corporate business, a Principal review and approval is required prior to the receipt of assets. This review and approval step includes documenting the receipt of a signed plan document signature page.

## **C. PLAN IMPLEMENTATION**

**Control Objective 10:** Controls provide reasonable assurance that plan implementations are authorized, and are processed in a timely manner and that key data points defined by management, including investments and investment-related services, contribution sources, fees, and requested service features are set up accurately and completely.

### *Description of Control Procedures*

The sales team initiates a new sale of various plan types to plan or PEO sponsor. The sales representative is responsible for collecting plan pipeline information that sometimes includes plan provisions and required services. This information is forwarded to Implementation Services from Sales or the PEO by submitting required implementation material for review prior to processing. Implementation Services reviews the materials for completeness and plan authorization. The plan information is entered and established in the recordkeeping system by the Implementation and Plan Rule Setup teams.

Key Data Points	Definition
Investment Array	Investment options available to the plan, including the option selected for the plan's default fund.
Managed Account Services	Advisory services as elected by the plan.
Self-Directed Brokerage Services	Outside brokerage investment platform as elected by the plan.



Key Data Points	Definition
Loan Services	Internal loan administration services as elected by partner/plan sponsor.
Asset Allocation Model	Plan ability to direct/create investment models from available investment options of the plan as elected by the plan.
Fiduciary Services	Plan sponsor service to reduce 404(c) liability by electing to use a 3(21) or 3(38) fiduciary to assist with investment option guidance or selection for plan participants as elected by the plan.
Prospectus Delivery Service	Service offered to mail/deliver prospectus information to participant's homes if elected by the plan.
Active and Frozen Money Type	Contribution sources established in the recordkeeping system for all current allowable sources and any prior source frozen to new contributions.
Primary Plan Contact	The primary plan contact as identified in the submission materials and designated as the primary contact in Contact Servicer tables in the recordkeeping system.
Authorized Signor	Authorized signors identified on the Authorized Signor Form are listed as authorized signor contacts in Contact Servicer tables in the recordkeeping system.
Participant Eligibility	For plans using calculation services with online or automatic enrollment services only: eligibility indicators established based on partner/plan sponsor provisions for any plans using online or automatic enrollment services.
Fee Structure Instructions	Setup of miscellaneous income administrative fees, and investment fees for services.
Automatic Enrollment Notice Service	For plans with the automatic enrollment service, a service to have initial and annual notices mailed to their eligible participants, if elected by the plan.
QDIA Notice Service	For plans using a Qualified Default Investment Alternative (QDIA), a service to mail initial and annual notices to their eligible participants, if elected by the plan.
Participant Fee Disclosure Notice Service	Service to mail annual participant fee disclosure notices to participants, if elected by the plan.
To Do List Service	Service to notify the plan of pending participant distribution requests through the Plan Sponsor websites and capture missing data and authorization electronically from the plan to complete distribution processing, if elected by the plan.
Vesting Service	Service to track updated vesting information provided periodically from plan sponsor to streamline the processing of distributions, if elected by the plan.

After participant-indicative data (e.g., name, SSN, and date of birth) is entered in the recordkeeping system by Implementation Services, systematic data validation is generated and data is reviewed and evaluated for completeness to ensure that essential fields in the recordkeeping system have been entered accurately and completely. Data from specific recordkeeping system fields is checked against the original data received from the plan sponsor or prior recordkeeper on a sample basis. Authorized submission materials are used to designate investment instructions for entry into the recordkeeping system. Investment-type and investment balance information, including the mappings, if applicable, is checked on a plan level, on a fund-by-fund basis, and reconciliations between the recordkeeping system and report balances for each case with transferred assets are performed by Implementation Services prior to releasing the plan. Implementation Services approves the mapping after any discrepancies are resolved. Documentation is maintained to provide evidence of the review. As a final step following blackout release, the setup of certain features is reviewed within established timeframes by Implementation Services to ensure the plans conversion is complete.

Throughout the implementation process, various milestones are tracked and monitored. This tracking system provides Implementation Services and management a tool to oversee the progress of plans in process. The outstanding items are updated as the tasks are completed and are reviewed with the plan if outstanding questions were not addressed in the installation checklist, and/or could not be answered by the CSM/representative.

#### **D. MASS CONVERSION**

**Control Objective 11:** Controls provide reasonable assurance that mass conversions are recorded and processed accurately, completely, and in a timely manner.

##### *Description of Control Procedures*

Throughout the mass conversion process, various milestones are tracked and monitored by the Project Management Office (PMO) via a playbook. This tracking system provides the Mass Conversion team and other supporting business areas, relationship manager, partner, prior recordkeeper, and management a tool to oversee the progress of the block conversion. The outstanding items are updated as the tasks are completed and are reviewed with the partner if outstanding questions were not addressed.

Conversion data can be grouped into three main categories: plan level, participant level, and investment data. Clients are provided with our suggested data layouts early in the process, and these layouts serve as a discussion tool and ultimately contribute to the final “mapping” of data from the prior recordkeeping system to ours.

The sales representative, relationship manager, the Mass Conversion team, and other business areas work with the partner and prior recordkeeper to obtain the required implementation materials, data layouts, and data files for review to create the plan, participant and investment mapping. The Mass Conversion team works with the Investment Control team to ensure all fund setup information is received prior to the setup of plans in the recordkeeping system.

Plan conversion data is typically loaded into the recordkeeping system electronically through our systems group allowing for a large number of plans to be setup quickly and with a higher degree of accuracy than found in traditional, manually entered methods. Plans are loaded using a Plan Mass Add process, which outlines how each plan field will be populated based on data from the prior recordkeeper, implementation materials, as well as system defaults. It is standard procedure to first load a few ‘test’ plans to verify the accuracy of the data and mapping prior to loading the entire plan population. Plans are setup for each Internal Revenue Service (IRS) code. Once the plans are loaded to the recordkeeping system, the Mass Conversion team, along with various functional teams, reviews all data fields to confirm data elements were mapped appropriately based on the Mass Add process. Additional test plans are loaded and checked until all teams are comfortable with the mapping approach. Plan data is typically provided electronically (via standard extracts or custom-designed extracts based on our layout), but in some cases, information must be gathered using paper forms or through a plan document review. The plan information is entered and established in the recordkeeping system by a combination of the Mass Conversion and Plan Setup teams. A secondary review is performed on plans loaded manually or via a collaborative integration process. For conversions with a limited number of plans, the Mass Add process may not be utilized as all plans may be manually setup.

The Mass Conversion team works with the systems team to produce audit scripts to determine data quality and identify any issues with the prior recordkeeper’s data files. The Mass Conversion team reviews all discrepancies as appropriate with the prior recordkeeper prior to loading information to the recordkeeping system. Participant

conversion data is loaded into the recordkeeping system via a series of menu-driven production forms that comprise "Conversion Automation." Access to conversion automation is available only to business users (typically on the Mass Conversion team) assigned to a predefined user group that has been granted security access for this process. The raw participant data is "mass loaded" and the Mass Conversion team members possess appropriate security access to make corrections to the data as necessary via the normal process, but based on the number of groups may also rely on mass edit counts and reports to determine appropriate handling. Finally, the data is moved to production en masse. Once the conversion data has been reviewed and the mapping verified and approved, it is moved into the recordkeeping system production environment when so instructed by approved users within the Mass Conversion team. By using existing production processes to move the data from conversion automation tables to the recordkeeping system production tables, final data and table requirement validations (null, not null, and constraints) are performed so that invalid data does not get added to the recordkeeping system.

Data that is manually loaded directly to production must conform to business rules, table requirements, and constraints. Year-to-date contributions, transaction history, PINs and snapshots are loaded to production as direct inserts.

An investment lineup and mapping approach is reviewed by the partner and used to designate investment instructions prior to entry into the recordkeeping system. A plan-level reconciliation by investment option is completed prior to loading balances. All variances between data provided and data loaded to the recordkeeping system is reviewed and approved prior to moving participant balances to the production environment. Once balances are loaded to the participant level, a sampling of participant-level balances is reviewed at a money type, fund, dollar, and share level. Any discrepancies are documented, reviewed, and resolved by the Mass Conversion team. The Mass Conversion team works closely with the Mutual Fund Financial Control team to ensure that all expected investments are received in the appropriate fund house accounts. Documentation is maintained to provide evidence of the review and all variances are reconciled to within normal tolerances. In most cases, shares for in-kind transfers are not completely transferred/received until after the actual conversion.

Once all data has been loaded into the recordkeeping system, a "Go No Go" call is held with Conversion Team Leadership to determine when plans should be opened for activity. Once verbal approval from the partner is received over the phone, an email is sent to all parties confirming the date and time the plans were opened for activity.

## **E. PLAN CHANGES (POST IMPLEMENTATION)**

**Control Objective 12:** Controls provide reasonable assurance that plan changes, including Discretionary Plan Amendments and modification, are valid and processed in an accurate, complete, and timely manner.

### *Description of Control Procedures*

#### Plan Amendments and modification

The plan or PEO sponsor may decide to change the provisions of the plan (this is a "discretionary amendment") or a change in law affecting qualified retirement plans may require the document to be updated (this is a "mandatory amendment").

In order for a plan or PEO sponsor to change a provision in their plan document, a plan amendment must be executed. Plan amendments must be authorized by the plan and must be in writing or via email. For plans utilizing a professional employer organization (PEO), authorization validation by Empower is not required. The final results of the plan amendment are sent to PEO sponsor for review. These requests are routed to Client Services, who sends the request and supporting documentation to the Plan Document Team in a Service Request. In certain circumstances, the plan amendment may be adopted after the end of the plan year or may be retroactive to a specified date. It is important to note that the plan must also be amended for required legislative and regulatory changes. Plans for which we do not provide plan document services, these requests are routed to Client Services, who then opens a Service Request to notify the assigned area(s) of the update(s) required and ensure requested changes are valid. These changes are reviewed by appropriate personnel after the changes have been implemented in the recordkeeping system by assigned area or the Plan Change team to ensure changes were implemented accurately.

When the law is changed and a mandatory amendment is required, a certain period of time is allowed for the plan to be formally amended. This time period is referred to as the "remedial amendment period." However,

certain new laws may require compliance according to their effective dates and by government regulations, even if the plan has not yet been formally amended. An interim amendment may be adopted at the sponsor-level model amendment, for which language is provided by the IRS and/or the document provider.

If the SPD is altered by the amendment or the change constitutes a material modification, a Summary of Material Modification (SMM) may be prepared, or a new SPD will be prepared. The SMM or SPD, along with the plan amendment, is completed within established turnaround standards. The SMM or SPD must be furnished to participants and beneficiaries by the plan sponsor no later than 210 days after the plan year in which the plan change is adopted.

Both the plan amendment and the SPD or SMM are quality checked by a member of the Plan Document Team prior to mailing to the plan sponsor or the institutional client. If revisions are required, a request to the Plan Document Team will facilitate the changes. Once signature pages are received, the Plan Document Team coordinates moving a copy of the plan document and SPD/SMM to the Plan Sponsor websites (if permitted) and submits a request to change plan-level information in the recordkeeping system.

Management performs a monthly review of plan amendments and modifications to ensure plan amendments and modifications are processed completely.

#### Non-Amendment Modifications

Some plan modifications do not require an amendment because the changes are not related to plan document provisions. Examples of such changes impacting plan-level recordkeeping and website display information include plan contact updates, investment option changes, online enrollment settings, deferral processing settings, eligibility tracking, loan administration settings, and certain plan statement features. These requests are routed to Client Services, who then opens a Service Request to notify the assigned area(s) of the update(s) required and ensure requested changes are valid. Non-amendment changes are reviewed by appropriate personnel after the changes have been implemented in the recordkeeping system by assigned area or the Plan Change team to ensure changes were implemented accurately. Controls for automatic enrollment changes have been defined by processes for ensuring accuracy of changes are in place.

Controls to confirm that requests received are complete and updates to the recordkeeping system have been made accurately and timely include:

- Non-amendment changes are reviewed by Client Services/Plan Change to ensure requested changes are from a valid source and implemented accurately and timely within the recordkeeping system, by the Plan Change team or assigned area.
- Payroll Services reviews Automatic Enrollment, including the Automatic Enrollment Notice, to ensure the system is setup accurately.

## **F. ENROLLMENTS**

**Control Objective 13:** Controls provide reasonable assurance that participant data received is recorded in the recordkeeping system and processed in an accurate, complete, and timely manner, and that participant enrollments are valid and authorized.

#### *Description of Control Procedures*

For plans that utilize paper forms for enrollment, forms are scanned into OnBase and routed to Document Management for indexing and routing through the Workflow system to the assigned Operations Department unit for processing. The forms contain such information as name and address of the participant, level of contribution, and an election of investments to which contributions will be allocated. Information on the forms is then entered into the recordkeeping system by the Operations Department. Enrollments are accurately processed in the system in accordance with plan provisions and authorized participant instructions received in good order. Edit checks (e.g., dates in date fields, format, and validity of SSNs) are implemented in the recordkeeping system to prevent certain data entry errors while entering and modifying participant data. If plans mass-add participants based on prior recordkeeper files, validity checks within the recordkeeping system are completed. One record for each participant is entered and associated with the group account previously established during contract installation. Establishing a unique participant record for each enrollee is critical to maintaining financial activity. Each record will be updated as contributions are received, distributions or changes are requested, and account values are updated. Participant-designated allocations between investment options must equal 100% or the

allocation input will be rejected by the recordkeeping system. A verification notice is automatically sent to the participant to confirm the completeness and accuracy of the information entered into the recordkeeping system. If there is missing information, the Participant Administration Review unit sends a fax, letter, or electronic notice to the appropriate party. Empower offers a Common Remitter Service. A contribution remittance form, for Common Remitter, acts as an enrollment form for Common Remitter plans. The form lists vendors for the participant to select by percentage much like investment fund options on an enrollment form.

Enrollments are reviewed by another team member for accuracy and appropriate authorization. After the review is completed, the associated item is automatically cleared from the Workflow queue. Workflow queues detailing pending enrollments are reviewed by management on a weekly basis to ensure completeness of enrollment processing. In addition, management performs a monthly review over processing of enrollments to ensure accurate, complete, and timely processing.

Empower uses a mass-add process for recordkeeping services that are taken over from a previous provider. The mass-add process adds basic data for individual participants using data from the prior recordkeeper that is uploaded to the recordkeeping system. Employees can also be enrolled through the Plan Sponsor websites.

The plan sponsor typically sets fund defaults for payrolls and existing assets in the event of incomplete allocation information. If certain services are elected by the plan, PINs are issued to participants for performing subsequent transfers and allocation changes using EIVR or the participant website.

The online enrollment and deferral change process enables the participant to elect to participate in the plan by selecting the percentage of pay they would like to defer and setting their investment elections through the automated EIVR or the participant website.

#### EAG Enrollments

A plan sponsor may adopt Advisory Services by signing a contract that allows the service to be implemented on the account. The initial request is received through Plan Implementation for new plans or Client Services for existing plans. Appropriate EAG personnel perform a monthly random quality control (QC) for accuracy and completeness of the new Voluntary Enrollment ("Opt-In") EAG plans released from Implementation by completing an EAG Advisory Services Checklist. Further, appropriate EAG personnel performs a quality control (QC) checklist for new Automatic Enrollment ("Opt-Out") EAG plans completed from the previous month to ensure the accuracy and completeness processing.

Once the service is implemented, a plan participant can elect the level of service that suits their needs. This can be accomplished online, by phone, in person, or via a paper enrollment form. Participants enrolling into managed accounts via Participant Web are required to electronically authorize the enrollment. The Investor Services Center requires participants to provide their valid SSN, provide the individual ID number assigned by the recordkeeping system, or follow alternative verification procedures before enrolling participants into managed accounts. EAG performs a random sample of managed account enrollment phone calls to ensure that the participants are authenticated, the data input is accurate, and the participant is enrolled into the service. Audits are completed by the end of the following month. Any exceptions are noted, and the date of the correction is documented. For Opt-In enrollments received via the managed account Enrollment form (i.e., election form) it is reviewed by EAG personnel for authorization (i.e., participant signature) prior to enrolling. The election form is received in the EAG workflow queue for processing. On a weekly basis, EAG personnel review the workflow queue to identify open items from the previous week and research and resolve identified items. Further, after processing, appropriate EAG.

EAG personnel perform a monthly random sample of Managed Account enrollments received through the workflow system. For Opt-In enrollments received via a Reply Card, the enrollments are processed by Financial Engines, an independent financial expert (IFE) (see Section V, III for additional information). Requests to opt-out of the managed account services are processed via the Education Center or the Participant Web.

## **G. ACCOUNT CHANGES**

**Control Objective 14:** Controls provide reasonable assurance that participant-initiated transfers, changes in investment allocations, and other account changes are authorized and processed accurately, completely, and in a timely manner.

### *Description of Control Procedures*

Once a participant record has been established, changes are periodically requested. Such changes include:

Type of Change	Paper Request	Customer Service Representative	EIVR	Web
<b>Enrollment</b>	Yes	Yes (if plan allows)	No	Yes
<b>Change of participant name</b>	Yes	No	No	No
<b>Change of participant address</b>	Yes	Yes (if plan allows)	No	Yes (if plan allows)
<b>Change of beneficiary</b>	Yes	No	No	Yes
<b>Change common remitter vendor elections</b>	Yes	Yes	No	Yes
<b>Investment allocation of contributions and deferral amounts</b>	Yes	Yes	Yes	Yes
<b>Transfer of account balance among investment options</b>	Yes	Yes	Yes	Yes
<b>Loan initiation</b>	Yes	Yes	Yes	Yes

Note: Verifications are sent to account holders for all changes, except for those initiated on the Web.

#### Paper Request

A participant can mail, fax, or upload electronically a change request directly to Empower. The request is scanned into OnBase and routed to Document Management for indexing and routing to the assigned Operations Department unit for processing. The request is processed using the imaged request. A confirmation notice is generated and mailed to the participant based on plan sponsor requirements. Financial transactions received "in good order" are processed in accordance with the standard established for Empower or the Institutional Partner/Plan Sponsor. If there is missing information, the Participant Administration Review unit sends a fax, letter, or electronic notice to the appropriate party. Other controls to confirm accuracy and quality include:

- Paper form requests are reviewed by another team member for accuracy and appropriate authorization.
- Workflow queues, detailing pending account changes, are reviewed by management on a weekly basis to ensure completeness of account change processing.
- Edit checks (e.g., dates in date fields, format, and validity of SSNs) are implemented in the recordkeeping system to prevent certain data entry errors while entering and modifying participant data.
- Management performs a monthly review of account changes to ensure account changes are authorized and processed accurately and completely.

## Participant Website and EIVR

Through the use of EIVR or via the Participant website, participants can change their investment allocations. Participants are granted access to the participant website by entering their user ID and a confidential password. Participants can gain access to EIVR by entering their SSN and a confidential PIN, or by requesting that a temporary PIN be sent to a delivery channel on file. Transfers are initiated on the date of request (i.e., requests received prior to the NYSE market close are initiated that day, or the next business day if the request is received after the NYSE market close). A confirmation notice is generated and mailed to the requesting participant, based on plan setup. Edit checks (e.g., numeric in dollar fields, dates in date fields, format, and validity of SSNs) are implemented in the recordkeeping system to prevent certain data entry errors, while entering and modifying participant data (see "Participant, Plan Sponsor websites" and "EIVR" sections above for controls related to the participant website and EIVR).

## Call Monitoring<sup>2</sup>

Account changes may be accepted via Customer Service Representatives on a recorded line (based on plan rules). Name changes require participant submission of acceptable documentation, and Customer Service representatives cannot accept those requests. Beneficiary changes are not accepted via Customer Service Representatives, but they can provide a beneficiary form to the participant. A monthly service call audit over a sample of participant-initiated changes performed in CSAS based on calls received by Customer Service Representatives is performed by management to ensure that changes made in CSAS are authorized and performed accurately.

Requests for correction require appropriate instruction and/or documentation to support the need for corrective processing and are completed, reviewed, and approved, if applicable. A service request queue is reviewed daily by the Resolution team to ensure completeness of corrections.

## **H. CONTRIBUTIONS, COMMON REMITTER CONTRIBUTIONS, AND LOAN REPAYMENTS**

**Control Objective 15:** Controls provide reasonable assurance that contributions, common remitter contributions, and loan repayments are authorized and processed accurately, completely, and in a timely manner.

### *Description of Control Procedures*

Contributions/loan repayments are submitted by the plan sponsors or participants and may include remittance information identifying the participants for whom the contributions/loan repayments are being remitted. Remittance information can be submitted by plan sponsors in various ways, including hard copy or electronic transmission, which includes Participant and Plan Sponsor websites and mass-add/update files.

Common Remitter contributions are submitted by plan sponsors. The contributions are applied like any other contribution report to a Common Remitter plan. The recordkeeping system reads the participants' vendor selections. Once Common Remitter contributions are allocated, the recordkeeping system uses the RIA/TPA processing logic to create vendor files (electronic or paper) funded with a wire or check to forward onto the appropriate vendor(s). An Empower plan associated with the Common Remitter plan can be an option. A file is generated for the associated Empower plan and is loaded into the recordkeeping system. Cash Operations are responsible for clearing any rejections, which are also on the participant suspense reports.

Contributions, Common Remitter contributions, and loan repayments can be received as follows:

**Lockbox** - Plan sponsors and participants send remittances to the assigned lockbox at a specified bank. The bank deposits remittances and sends supporting documentation (a deposit slip, remittance information, and copies of remittances which include the deposit date). For non-automated bank accounts Upfront Cash identifies remittances within a deposit by group number before entering each into the recordkeeping system under the corresponding bank code, deposit total and batch source code, creating a batch. The receipt date defaults to current day (or the following business day to account for financial holidays). The deposit total must reconcile to individual remittances entered for the batch to commit. Once processed, a master event is created for the batch

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<sup>2</sup> Excludes transactions processed by user entity call centers.

total along with individual events for each remittance. A copy of the batch summary is attached to remittances and forwarded to Document Management for imaging.

Auto Lockbox - In addition, a specific bank(s) may transmit electronic data and image files containing integrated receivables multiple times daily. The electronic data and image files interface and integrate into our current workflow processes. Cash events are automatically created in the recordkeeping system as a result of this automation.

Direct Mail - If checks are sent by regular or express mail to the Empower Corporate Home Office address, mail services opens the mail and scans copies of the live checks and supporting documentation into OnBase for processing by Upfront Cash. Authorized Banking Services receives live checks from the mailroom for remote deposit. Upfront cash identifies which group account each check is associated with and batches the remittances accordingly for building cash in the recordkeeping system. The same procedures for building these batches are followed as described in the lockbox process. Once all the checks have been identified and built, a report is sent from OnBase to Banking Services with deposit instructions by bank account.

Plan Sponsor websites - Plan Sponsor websites provide an electronic interface allowing the plan sponsor and other authorized parties to transmit participants' contributions and loan repayments via a secured Internet connection to the recordkeeping system. A plan sponsor completes transmission of the participants' contributions and loan repayments, and approves the initiation of an ACH. The recordkeeping system interfaces and reports the net contribution/Common Remitter Contribution/loan repayment information to SAP. SAP then sends an electronic ACH transaction to debit the plan sponsor's bank account for the total of contributions/loan repayments and remittances received during the daily processing cycle. Within the normal ACH processing cycles (usually two business days) after the plan sponsor transmits and approves their file via the Plan Sponsor website, the funds are debited from the plan sponsor's bank account.

Plan Sponsor website remittances that cannot be completed due to missing banking information are routed to the Payroll Services Team for research and resolution. Any Notices of Change or bank reconciliation returns received back from the ACH system used by the banks are processed automatically, or are automated via Workflow to the Payroll Services Team for research and resolution.

Contribution data is also sent via electronic submission from plan payroll departments or payroll vendors. Upon receipt, payroll data is run against internally developed programs to edit the validity of the information. The Money-In Team's validation process includes balancing contribution totals both by source and in aggregate, and control totals submitted by the clients for their payroll file.

Wire or (Non-Plan Sponsor website) ACH Transfer - A plan remitter may either wire or initiate an ACH transfer directly to the assigned bank account. Accounting Services receives a listing of such transactions daily for reconciliation purposes. For non-automated bank accounts, Upfront Cash accesses bank websites and prints incoming wire/ACH reports from each of the banks throughout each business day following the same procedure for the recordkeeping system entry as described above in the Lockbox section. Wires/ACHs are forwarded to Document Management/Cash Operations for further processing.

A participant can make loan repayments via ACH debit from their personal bank account if the plan sponsor offers this option. Payments are credited based on the date the ACH debit is complete prior to NYSE market close. For loan payments made via ACH, there is a recordkeeping system job that reverses any loan payment ACH returns. Reversal rejections are manually cleared by Resolution.

The recorded date of a contribution is the date that both the funds are received, and the corresponding allocation report has been received in good order prior to NYSE market close. After Upfront Cash personnel have entered the remittances received from various sources into the recordkeeping system, the information is forwarded to the assigned Money-In team for allocation to participants. Money-in reviews the supporting documentation for completeness and processed in the recordkeeping system accurately and timely. If an "out of balance" condition is created when contributions/loan repayments are processed, and the difference is equal to or less than 5%, the difference is temporarily placed in "plan suspense." If the difference is greater than 5%, the entire contribution/loan repayment amount is placed in "plan suspense." Plan suspense is cleared through reports and communication (both verbal and written) between the plan sponsor or TPA and the Money-In team. Contributions received without a valid investment option allocation are held in a Participant Suspense account, if a plan sponsor approved default does not exist.



Requests for correction requires appropriate instruction and/or documentation to support the need for corrective processing and are completed, reviewed, and approved, if applicable. A service request queue is reviewed daily by the Resolution team to ensure completeness of corrections.

In addition to those controls described above, controls around contributions and loan repayments are maintained through the following procedures:

- Outstanding money-in transactions or receivables are reviewed daily via outstanding recordkeeping system events and exceptions are investigated and resolved.
- A review of bank reconciliations is performed for each bank account to ensure the balances per the ledger are reconciled to the bank statement and the general ledger account balance is properly accounted for under each basis of accounting.
- The Reconciliation Team performs incoming cash suspense reconciliations on a monthly basis and resolves discrepancies. Aged items over predetermined thresholds are reviewed by management.
- Management performs a monthly review over processing money-in transactions for accuracy and timeliness of processing.

## **I. BANKING RETURNS**

**Control Objective 16:** Controls provide reasonable assurance that plan sponsor ACH banking returns are investigated in a timely manner for accurate and complete resolution.

### *Description of Control Procedures*

Plan sponsor ACH banking returns through the SAP System are transmitted from the banks to the Empower accounting system, and are systematically directed to SAP for research and resolution. If the item is returned for any reason (e.g., insufficient funds, invalid account number, account closed), the item is routed via the SAP system for management approval and reprocessing via the ACH system. Plan sponsors may request that Empower retap bank accounts for returned items.

Reasons for returns have been established, and corresponding return codes are used to identify these reasons. Service Requests are opened for each return and are assigned to Client Services or the Plan ACH Returns team. If the resolution requires a bank change, the Plan Sponsor corrects the banking information online via the Plan Service Center website or a ticket is opened by the Plan ACH Returns team to User Provisioning & Security with direction from the Plan Sponsor. A retap is then initiated through SAP. Resolutions of banking returns can include retapping a Plan Sponsor's bank account or the plan may initiate a wire transaction to cover the return. The resolution steps are documented in the Service Requests, and the tickets are closed after resolution is complete (e.g., successful bank account retaps or wire transfers are initiated). For bank retaps, the cash transaction is reprocessed via the ACH system by a Plan ACH Returns representative and approved by management or a peer member of the team. Upon notification of a return, a funding resolution must be met within a pre-established timeline. If not closed within the required time frame, a request for an extension may be submitted to management for approval. Extended returns are then completed within the time frame requested. In situations where a resolution has not been reached within the pre-established deadline and an extension is not requested, contributions are reversed from the affected participant accounts. Reconciliations are performed to ensure that the banking returns are researched and resolved in a timely manner.

## **J WITHDRAWALS AND DISTRIBUTIONS<sup>3</sup>**

**Control Objective 17:** Controls provide reasonable assurance that withdrawal and distribution requests are valid and processed in an accurate, complete, and timely manner.

### *Description of Control Procedures*

Withdrawals and distributions can be made from a participant's account for reasons specific to each IRS code and plan provisions. These are normally initiated by a participant or beneficiary by preparing a plan specific

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<sup>3</sup> Distributions may include redemption fees, loans, taxes, penalties, other fees and forfeitures.

distribution request form and submitting it with supporting documentation (i.e., death certificate and court order) to their plan sponsor or directly to Empower. Requests for withdrawals are received and authorized by appropriate parties, and reviewed for completeness prior to processing in the recordkeeping system.

Excess deferrals, excess contributions, involuntary cash outs, and contract termination distributions are requested directly by the plan sponsor, rather than the participant or beneficiary, and are sent in through written request rather than through standard distribution request forms.

Incoming withdrawal and distribution requests are scanned into OnBase for indexing and release into workflow queues for Participant Transactions. The receipt date and time is automatically encoded on the distribution request form, and the recordkeeping system event ID is systematically created to support the processing of the distribution request. If the distribution request form is received by Empower in good order; the distribution is processed in accordance with the standard established for Empower or the Institutional Partner/Plan Sponsor.

A Specialist processes a participant distribution request, and a second team member may perform a quality control (QC) review over distribution transactions for accurate processing. The level of quality checking is based on the specific dollar limits by employee job level, approved by management. Amounts greater than a certain dollar limit require approval by management. Quality and production statistics are documented in reports that are reviewed weekly and monthly.

The recordkeeping system calculates federal and state tax withholding amounts based on the input tax reason code, calculates fees based on the input transaction disbursement code, forfeited amounts based on data in the recordkeeping system or written information provided by the plan sponsor, and the net amount to be disbursed. The net disbursement amount and payee name and address are reviewed and verified by the individual processing the transaction. State and federal withholding reconciliations are performed daily and monthly by appropriate personnel in the Financial Control Tax Team ("FinTax") and reviewed by management to ensure the accuracy and completeness of tax reportable distributions. The recordkeeping system automatically generates the accounting entries and individual statement entries after transactions have been processed. The recordkeeping system performs edit checks to confirm completeness and accuracy of information (e.g., group account numbers, SSNs, and "reason and method" of disbursement).

Withdrawal and distribution processing generates a check or a wire/ACH request, which is created overnight through the recordkeeping system batch process after the withdrawal or disbursement is in complete status. Checks are printed through an SAP process and printed at Broadridge, including Special handling checks that require overnight or express delivery. When a special request for a "rush check" or wire/ACH is made, Financial Control and Accounting Services work together to produce a rush check, wire, or ACH. Rush checks, wires, ACHs, and stop pay reissues are captured by the accounting system after being processed in the recordkeeping system. If a manual input has been created, approval steps are performed by appropriate personnel based on predetermined dollar thresholds.

If information is missing or the form is incomplete, the request is sent via the workflow system to the Operations Support Services team. The Operations Support Services team obtains any missing information and serves as a central location for questions regarding incomplete transaction requests. The Operations Support Services team requests the information through fax, letter, electronic notice, or phone call. The request is then noted as incomplete on the workflow system. The incomplete item is held in a holding queue for 90 days. If the incomplete information is returned, the pieces are combined in the workflow system and routed back to Participant Transactions for processing. After 90 days, the recordkeeping system event and workflow work item are automatically cancelled.

Requests for correction requires appropriate instruction and/or documentation to support the need for corrective processing and are completed, reviewed, and approved, if applicable. A service request queue is reviewed daily by the Resolution team to ensure completeness of corrections.

Additional controls are maintained as described below.

- Automated authorization limits are placed on approving check requests, as applicable. Specific limits are set based on employee job levels, approved by management.
- The recordkeeping system calculates the amount of proceeds for withdrawal transactions. If applicable, an appropriate approver reviews the transaction for accuracy per department standards.

- The recordkeeping system prevents withdrawals greater than funds available.
- A review of bank reconciliations is performed for each bank account to ensure the balances per the ledger are reconciled to the bank statement and the general ledger account balance is properly accounted for under each basis of accounting.
- Management performs a monthly review of disbursements for proper authorization, accuracy, and timeliness of processing.
- Disbursements pending authorization are monitored to ensure timely processing.
- Disbursement Batch Error reports are run daily to identify withdrawals that did not process overnight. Any unprocessed withdrawals are researched and resolved by personnel.
- The Reconciliation Team performs outgoing cash suspense reconciliations on a monthly basis and resolves discrepancies. Aged items over predetermined thresholds are reviewed by management.

## K. LOANS

**Control Objective 18:** Controls provide reasonable assurance that delinquent loans are identified completely and timely, and defaulted in accordance with regulatory provisions.

### *Description of Control Procedures*

A participant may take a loan out against their retirement plan depending on IRS Code and plan rules. The Loan Department administers loans specifically for 401(a), 401(k), 403(b), and 457 plans. The participant can initiate a loan through the plan sponsor and submit an application directly to Empower through EIVR or on the participant website. If spousal consent is required, the loan application or promissory note must also contain the spouse's signature prior to authorization by the Loan Department. Loan processing controls are addressed in the "J. Withdrawals and Distributions" section above.

Loans are considered in default when all loan payments due are not paid by the end of the plans cure period. At least once per quarter the Default Process is systematically generated. This process identifies unpaid assessments through the plan specified cure period and automatically generates a letter to the participant stating that their loan is in default. The letter also specifies the steps required to cure the default. The Default Process also identifies defaulted loans for tax form production and notification is mailed to the participant. The tax information is uploaded into the tax system, which automatically generates the required participant tax form.

## L. FEES

**Control Objective 19:** Controls provide reasonable assurance that valid requests for new fee setups, changes, corrections, terminations, and reversals are processed in the recordkeeping system in an accurate, complete, and timely manner.

### *Description of Control Procedures*

Empower receives income ("fees") from the fund houses that assets are invested in or by charging the plan/participants for services. Fees are charged to the participant's account (by taking the fee amount from their fund assets) or billed charges to a group/plan for these administrative fees. Fees charged to participants may be shared with the group or another third party or kept by Empower, depending on the contract.

Fees are run periodically in the recordkeeping system (i.e., weekly, monthly, quarterly, semi-annually, or annually), depending on the contract and may be set up with either a maximum or minimum dollar amount per assessment period. For new groups, an exemption period (typically measured in months or quarters) may be used, thus allowing the new participants a grace period before assessing fees. A batch job runs on a nightly basis to post fee activities in the recordkeeping system. If the fee is not billed, the amount will trade that same night. New fees, fee structure changes, and fee termination requests are peer quality control reviewed before the new fee, change, or termination is scheduled to occur to ensure fees are accurately reflected in the record keeping system. The Batch Error Report is reviewed for fees rejected by the system, which are researched and resolved, as appropriate. The Recoveries Waiting to Bill Report is reviewed for fees that have been run but were

not yet included on an invoice, which are researched and resolved, as appropriate. The Group Account Recovery Report (GARR) report is reviewed monthly for pre-determined fee rule combinations to identify anomalies and outliers, which are researched and resolved, as appropriate. The fees are assessed as either a "percent" or a "flat" fee. A percent fee calculates the administrative fee by multiplying group forfeiture, participant assets, or both combined by the basis/rate, whereas the flat fee is a flat, per head charge or a flat plan-level amount. Annual fees may be prorated for new participants, based upon the date they start contributing to the plan. Modifications (i.e., changes, corrections, terminations) to fee frequency, rate, etc. are reviewed by Fee/Billing team personnel to confirm that the request comes from a valid source. Requests for modifications to fees are reviewed by Fee/Billing team personnel for accuracy and validity before changes are made in the recordkeeping system. Reversals or corrections are reviewed by Fee/Billing team personnel to confirm that the request comes from a valid source and potential gain/loss over directed thresholds have preapproval through the incident committee. Requests received for reversal of fees are reviewed by Fee/Billing team personnel for accuracy before reversing the fees. An independent team member verifies the accuracy of the requests for modifications to fees and reversals submitted by Fee/Billing team personnel after the requests run in the recordkeeping system.

## **M. INCOME/VALUATION**

**Control Objective 20:** Controls provide reasonable assurance that investment income, corporate actions, and participant account values are calculated, processed, and recorded in an accurate, complete, and timely manner.

### *Description of Control Procedures*

All rates credited to participant-guaranteed accounts are reviewed by a second party at the standard level. Rates identified as missing at the group level are researched and resolved accordingly. The value of each participant account is updated daily. Changes in account values come from the following sources:

- Interest
- Dividends/Capital Gains
- Share Values
- Unit Values

Interest - Interest is credited to participant-guaranteed accounts based on the rate communicated to the plan sponsor; rates are generally adjusted for pools of money on a quarterly basis. Logical access to the recordkeeping system is reviewed at least annually by management. The rates may not be modified once they have been entered for each quarter.

Dividends/Capital Gains - A mutual fund periodic dividend and capital gain schedule is maintained by the Investment Control Department. Periodic and Daily rates are obtained from fund houses, reviewed, and then loaded into the recordkeeping system, UV Cloud and FUNDLinx via Open Trading Framework (OTF) – Variable Asset Administration (VAA2) based on the declarations received from the fund houses. Periodic rates loaded from VAA2 are compared to rates provided by NSCC when applicable. Periodic dividends and capital gain distributions are automatically reinvested in the applicable fund on the payable date, for any participants who held the investment on the record date. The daily accrual distribution is posted to accounts overnight on the payable date. Fund house reinvested dividend shares are reconciled back to the recordkeeping system, and UV Cloud utilizing the FUNDLinx system.

Share Values - Mutual fund share prices are obtained from NSCC, fax, email, Fund House Direct file transmission, or by contacting the mutual fund company directly. Share values are reviewed by appropriate personnel in the Investment Control Department prior to authorizing upload of the information into the recordkeeping system, UV Cloud) and FUNDLinx via VAA2.

Unit Values - Unitized account values are updated based upon the change in net asset values of the underlying mutual fund investments, dividends, capital gain distributions, and expense charges. Unit values are calculated and reviewed by appropriate personnel within the Investment Control Department, prior to authorizing upload information into the recordkeeping system for account valuation. Access to the unit value screens is restricted to authorized personnel who perform unit value calculations.

Accumulated units are reconciled by the Investment Control Department daily. The Breakage Report identifies discrepancies between the market value to net assets, which are researched and resolved based on established thresholds. Unit value variance reports compare the underlying share price percentage change to the unit value

percentage change from one day to the next, are systematically generated, and reviewed by the Investment Control Department. Discrepancies, based on established thresholds, are researched and resolved timely. Investment Control reviews the UV Cloud Tolerance Report for any significant discrepancies between the comparisons of the change in share price (taking into consideration income and expense) to the change in Market Unit Value (MUV) and resolves any material issues before finalizing.

## **N. NEW FUND SETUP AND FUND CHANGES**

**Control Objective 21:** Controls provide reasonable assurance that new funds and changes to funds are authorized and established in an accurate, complete, and timely manner.

### *Description of Control Procedures*

The Fund Setup and Mapping team receives notification for new fund setup and fund changes from:

- Plan Implementation - Plan Implementation submits a Service Request notifying the Fund Setup and Mapping team a new group's array of funds.
- Plan Conversions - Plan Conversions submits a Service Request notifying the Fund Setup and Mapping team the new group's array of funds.
- Plan Change - The Plan Change team submits a Service Request notifying the Fund Setup and Mapping team of the new group's array of funds.
- Client Service Manager (CSM) - A CSM submits a Service Request notifying the Fund Setup and Mapping team of fund changes for an existing group.
- Other sources - Mutual Fund Companies, specifically for Registered Mutual Funds as it relates to Corporate Actions. Empower Products ("Products"), specifically for new Empower Future Funds Wrapped ("Wrapped Funds") and Empower General Account ("General Account Funds").

Once a notification is received by the Fund Setup and Mapping team, a Specialist reviews the recordkeeping system and the request to determine if a New Fund Setup is required.

The Fund Change team receives notification for Fund Changes for all areas above, excluding Registered Mutual Funds as it relates to Corporate Actions, which are handled by the Fund Setup and Mapping team.

### New Fund Setup

- *Registered Mutual Funds* - The Fund Setup and Mapping team utilizes a checklist along with information from Morningstar to set up the fund on the recordkeeping system.
- *Collective Trusts and other Custom Funds* - The Fund Setup and Mapping team utilizes a checklist along with information from the fund company to set up the fund in the recordkeeping system.
- *Wrapped Funds and General Account Funds* - The Fund Setup and Mapping team utilizes a checklist along with information from GW Products to set up the fund on the recordkeeping system.

A peer review of the New Fund Setup in the recordkeeping system is then completed and evidenced with the Fund Setup and Mapping team member's initials. New Fund Setup supporting documentation for Registered Mutual Funds, Collective Trusts, Wrapped, General Account, and Custom Fund New Fund Setup is retained electronically.

### Fund Changes

#### *Registered Mutual Funds, Collective Trusts and Custom Funds -*

- For a fund change(s)/elimination(s), the Products team notifies the Fund Setup and Mapping team via a Service Request.

- Once the Service Request is received, the Fund Setup and Mapping team analyst creates a file for the plan(s) and schedules the fund change(s)/fund elimination(s) to take place on the recordkeeping system for the effective date.
- The analyst utilizes a checklist along with data from the recordkeeping system to set up the fund change(s)/elimination(s) process.
- For fund changes/elimination(s), the Fund Setup and Mapping team is responsible for processing the transfer of assets from the old fund to the new fund.
- For fund mergers, once notification is received, the Fund Setup and Mapping analyst creates a fund change packet. For the plans and schedules, the fund eliminations to take place on the recordkeeping system for the effective date.
- The Fund Setup and Mapping analyst utilize a checklist along with data from the recordkeeping system to set up the fund change(s)/elimination(s) process.
- For fund changes/elimination(s), the Fund Setup and Mapping analyst is responsible for processing the transfer of assets from the old fund to the new fund.

#### *Wrapped Funds –*

- If a fund's merger, as notified by the Fund Company, is associated with a Wrapped Fund, the Fund Setup and Mapping analyst will process the fund name changes in the recordkeeping system or process the fund elimination for the effective date requested.
- The Fund Setup and Mapping analyst creates a file for the plan(s) associated with the fund elimination and schedules the fund change to take place on the recordkeeping system for the effective date requested.
- If a name change is required, the Fund Setup and Mapping analyst creates a file for the fund name change and manually processes the name change on the recordkeeping system for the effective date requested.

A review of the fund changes in the recordkeeping system is then completed and evidenced with the Fund Setup and Mapping team member's initials. Fund change and merger supporting documentation is retained electronically.

## **O. ASSET AND STOCK PURCHASES AND REDEMPTIONS**

**Control Objective 22:** Controls provide reasonable assurance that asset and employer stock purchase and redemption transactions are traded and recorded in an accurate, complete, and timely manner.

#### *Description of Control Procedures*

As events which cause purchases or redemptions to occur (contributions, distributions, and transfers), they are summarized in total by investment option, based upon investment allocations contained in participant records in the recordkeeping system. Participant events occurring prior to a pre-designated time each day are considered effective on that date; events occurring subsequent to that pre-designated time that day are considered effective the next business day. The recordkeeping system loads trades into an investment table at the group level, investment option for Net Asset Value products (unwrapped) and the separate account investment option; expense level for (wrapped) which are processed through OTF and loaded into the FUNDLinx system. FUNDLinx summarizes trade data to prepare purchase requests and wire transfer requests to affect the purchase or redemption of mutual fund share and employer stock transactions. Investment Control reconciles the recordkeeping system activity file to the FUNDLinx Trade Load on a daily basis to ensure trades were executed and any discrepancies, based on established thresholds, are researched and resolved. FUNDLinx maintains transaction history and position information at the group level for each plan investment option for unwrapped and the separate account investment option for wrapped. The FUNDLinx system prepares daily trade tickets and trade files for purchases and redemptions. Trade tickets and trade files are produced and transmitted to the fund houses, the NSCC or the broker for execution. Trade tickets prepared by FUNDLinx are time stamped and settled within fund company policy. Purchase or redemption requests are faxed, phoned, or electronically

transmitted to fund managers and wires of funds are sent to or received from the mutual fund companies. Investment Control reconciles suspense accounts relating to trading activity on a daily basis, and reconciling items are identified, documented, aged, and resolved. Suspense accounts related to trading activity are reviewed by management monthly. Transaction confirmations are sent from the mutual fund companies and the broker to the Investment Department daily. Controls to confirm quality and accuracy include:

- A reconciliation is performed between the number of trades received from the recordkeeping system and the number of trades loaded into FUNDLinx on a daily basis to ensure trades were executed and any discrepancies are researched and resolved.
- Wire transfers to fund houses are reviewed and agreed to trading system amounts. Wire transfer requests and transmissions are reviewed and approved online. Employer stock redemption wire instructions greater than zero are approved by two authorized signers. Purchase wires are sent systematically.
- Investment Control reviews and approves holdings reconciliations between fund houses, FUNDLinx, the recordkeeping system/UV Cloud and verifies if any items outside the tolerance limits have sufficiently detailed comments, including corrective actions initiated.
- Investment cash-clearing bank accounts are reconciled daily by Investment Control. Discrepancies are researched and resolved.
- Investment Control reconciles suspense accounts relating to trading activity on a daily basis, and reconciling items are identified, documented, aged, and resolved.

An Externally Trusteed ("External Trustee") plan-sponsor is one that has chosen a trustee other than Empower Trust Company to serve as both Trustee and Custodian or sub-custodian of their assets. The use of an External Trustee requires unique setup requirements, file transmissions, reconciliations, and reports to ensure all processing is handled timely and accurately. For client's that use an External Trustee, a trade file is delivered to the External Trustee on a daily basis, which provides the External Trustee details on the net trades and position placed for each investment.

- Clearing accounts are reconciled between the recordkeeping system and the External Trustee statement on a daily basis, and reconciling items are identified, documented, aged, and resolved.
- Investment Control performs a daily reconciliation of the unit and/or share positions between the recordkeeping system, external trustee, and fund house as applicable. Discrepancies, based on established thresholds, are researched and resolved.

## **P. COMPLIANCE**

**Control Objective 23:** Controls provide reasonable assurance that needed discrimination tests are completed accurately, completely, and in a timely manner.

**Control Objective 24:** Controls provide reasonable assurance that IRS Form 5500 is completed accurately, completely, and in a timely manner.

### *Description of Control Procedures*

#### Year-End Testing

Where services are contracted, a request is made to the employer prior to the plan year-end to obtain census data and/or their census data is extracted from the recordkeeping system. A census data request is submitted to each employer for certain 401(k), 401(a) Money Purchase, 401(a) Profit Sharing, and 403(b) Plans via posting to the Plan Sponsor website. Compliance requests census data, ownership information, and a questionnaire to be completed in order to finalize the necessary nondiscriminatory testing, depending on the plan type.

The census data is validated upon submission to the Plan Sponsor website. Once the testing process begins, a more thorough review of the census data is completed to confirm that the requested data falls within the parameters of the plan document.

If follow-up needs to be done with the employer, a letter or email is generated asking for the missing data, or data clarification, as needed. Follow-up will continue until data is "final" (see next paragraph). In each piece of correspondence, the employers are notified of the risks associated with not having the needed tests performed in a timely manner.

Once the census data, questionnaire, and ownership information is updated on the Plan Sponsor website, the census data is imported into the compliance testing software, Actuarial Systems Corporation, to determine the results and needed corrective measures in case any of the tests fail, or if any of the contribution limits have been exceeded. When the census data received is in good order it is tested in a timely manner, and results are reviewed by a peer and/or management before mailing to the employer. For plans other than Safe Harbor plans that send in their census data within one month following their plan year-end, the testing should be completed within 2 ½ months following their plan year-end, to avoid 10% excise tax, if refunds are applicable. For Safe Harbor plans and plans that send in their census data after one month following their plan year-end, the testing must be completed prior to the plans next plan year-end. Once the review is completed and any concerns have been addressed, the results will be sent to the client and/or a member of the Compliance Team for review. Once reviewed and approved by Compliance Team, the employer is contacted with the results in writing via the Plan Sponsor website and summarized in an email.

If the plan fails testing, corrective forms are provided to the employer along with instructions as to the corrective actions required by the employer, if applicable. The employer authorizes the needed refund by approving the refunds via the Compliance To Do List or by written approval. The excess type and amount are processed in the recordkeeping system, and a check is processed and sent to the participant, along with an explanation letter. Upon completion of testing, the necessary tests and documents are stored electronically in the employer's account file. For passing plans, upon completion of testing, the necessary tests and documents are stored electronically in the employer's account file, reported via the Plan Sponsor website, and communicated via email. The management team reviews the status reports on a weekly basis to ensure that the compliance testing is being reviewed and completed within a timely manner to meet applicable deadlines.

#### Preparation of IRS Form 5500

The IRS requires a Form 5500 to be filed for retirement plans subject to Employee Retirement Income Security Act. Compliance provides a year-end information request letter to each employer requesting specific information in order to complete the Form 5500 and required schedules. This request is made prior to the end of the plan year for which the Form 5500 is to be prepared. Compliance receives specific information from the online year-end questionnaire, census, and Audit Report/Financial Statement, if required to complete the Form 5500 and required schedules from each plan sponsor. The information is reviewed for completeness and accuracy. The Form 5500 and required schedules are completed on FT William software within government-imposed deadlines, based on the information received from the plan sponsor. A Form 5500 checklist is prepared and the Form 5500 and required schedules are completed and reviewed by appropriate personnel prior to posting to the Plan Sponsor website. The management team reviews the status reports on a weekly basis to ensure that the 5500 filings are being reviewed and completed within a timely manner to meet applicable deadlines.

### **Q. PLAN AND PARTICIPANT STATEMENT REPORTING**

**Control Objective 25:** Controls provide reasonable assurance that the quarterly participant statements and plan summaries are complete, accurate, and sent to address/email of record timely following each calendar quarter-end.

#### *Description of Control Procedures*

Statements are generated quarterly for those participants with a balance and/or activity during the reporting period. Prior to generating, participant statements are audited on a test basis; once audited, an approval for generation is provided to the Business Statement Team members. System controls built in the statement generation process ensure that the data on the statement is accurate through a variety of methods that if incorrect cause the statement to be rejected. Rejected participant statements are sent to the System Statement Team along with the associated rejection codes, and are investigated by System Statement Team members for resolution.

Quarterly plan summaries are produced as a consolidation of quarterly participant statements, and to summarize plan information not directly related to any one participant account (i.e., forfeiture and unallocated remittances). Participant and Plan statements/summaries are generated from the same data selection criteria, and the system



requires that the summation of participant amounts must equal the plan totals. Plan summaries, which do not meet these system controls, are rejected and investigated by System Statement Team members.

The recordkeeping system has additional system controls built in to only generate participant statements and plan summaries after all rejections have been resolved. After printing participant statements and plan summaries, the statements and summaries are sent within the date contractually agreed upon, after quarter end. The mailing date is logged for tracking purposes.

## **R. RETURNED CHECKS**

**Control Objective 26:** Controls provide reasonable assurance that returned checks are investigated and processed in an accurate, complete, and timely manner.

### *Description of Control Procedures*

Returned checks are processed within established timeframes from the date received. An address vendor lookup is conducted on checks greater than \$5,000.00 that have been returned as undeliverable. If the search is successful, an address change is made, and the check is reissued and mailed to the new address. Any existing mail hold dates are removed. If the address vendor lookup is unsuccessful, a mail hold date is placed on the participant's account within established timeframes.

Often times, the returned check has already been stop paid and reissued. If this is the case, the file is noted in the workflow system. If the check is returned as a result of a processing error, the distribution is reversed and reprocessed with the correct information. If there is a need to change the original distribution (i.e., change in address, amount, etc.), it is reviewed and authorized by someone other than the processor, or completed in accordance with existing systematic guidelines. The recordkeeping system requires online authorization by a second party for withdrawal transactions (if applicable), based on specific dollar limits approved by management based on employee job level, approved by management.

## **S. RECONCILIATIONS**

**Control Objective 27:** Controls provide reasonable assurance that cash and security positions are reconciled between Empower and the depositories in an accurate, complete, and timely manner.

### *Description of Control Procedures*

The controls listed below provide assurance that cash and security positions are reconciled between Empower and the depositories:

- A review of bank reconciliations is performed for each bank account to ensure the balances per the ledger are reconciled to the bank statement and the general ledger account balance is properly accounted for under each basis of accounting.
- A reconciliation is performed between the number of trades received from the recordkeeping system and the number of trades loaded into FUNDLinx on a daily basis to ensure trades were executed, and any discrepancies are researched and resolved.
- Suspense accounts related to trading activity are reconciled between the recordkeeping trade source and the settlement source on a daily basis, and reconciling items are identified, documented, aged, and resolved.
- Investment Control performs a daily reconciliation of the share positions between FUNDLinx, the recordkeeping system/PAM/UV Cloud, and the fund houses. Discrepancies, based on established thresholds, are researched and resolved.
- Investment cash-clearing bank accounts are reconciled daily by Investment Control. Discrepancies are researched and resolved.
- Clearing accounts are reconciled between the recordkeeping system and the External Trustee statement on a daily basis, and reconciling items are identified, documented, aged, and resolved.

- Investment Control performs a daily reconciliation of the unit and/or share positions between the recordkeeping system, external trustee, and fund house as applicable. Discrepancies, based on established thresholds, are researched and resolved.

## V. DESCRIPTION OF COMPLEMENTARY USER ENTITY CONTROLS

Empower's controls were designed with the assumption that certain controls would be implemented by user entities, specifically plan sponsors. The application of such controls by a plan sponsor is necessary to achieve certain control objectives identified in this report. In addition, there may be control objectives and related controls that are not identified in this report that would be applicable for the processing of transactions for client accounts.

This section describes additional controls that the plan sponsor should have in operation, as applicable to their contracted services, to complement the controls at Empower and the plan sponsor's auditors should consider whether the following controls have been implemented and operating effectively.

Complementary User Entity Control Considerations		Related Control Objective(s)
1	The plan or PEO sponsor is responsible for access to the Plan Sponsor website accounts and for providing passwords only to authorized personnel.	Control Objective 2 – Participant and Plan Sponsor Websites
2	The plan sponsor is responsible for regular review of their access to the Plan Service Center (PSC) and providing timely notification to Empower of any access changes.	Control Objective 2 – Participant and Plan Sponsor Websites
3	The plan or PEO sponsor is responsible for maintaining plan documents, if applicable.	Control Objective 9 – Plan Document Production Control Objective 10 – Plan Implementation
4	The plan or PEO sponsor is responsible for notifying Empower of any amendments to plan documents for plan changes.	Control Objective 12 – Plan Changes (Post Implementation)
5	The plan sponsor is responsible for providing accurate employee eligibility data.	Control Objective 10 – Plan Implementation Control Objective 13 – Enrollments
6	The plan sponsor is responsible for authorizing changes in the fund line up prior to investment processing in the recordkeeping system.	Control Objective 10 – Plan Implementation Control Objective 12 – Plan Changes (Post Implementation) Control Objective 21 – New Fund Setup and Fund Changes
7	The plan sponsor is responsible for reviewing management reports and/or confirmation notices (e.g., enrollments, account changes, disbursements, statements, plan summaries, other plan/participant data etc.) and communicating any discrepancies in writing within a timely manner.	Control Objective 10 – Plan Implementations Control Objective 13 – Enrollments Control Objective 14 – Account Changes Control Objective 15 – Contributions, Common Remitter Contributions, and Loan Repayments Control Objective 17 – Withdrawals & Distributions Control Objective 25 – Plan and Participant Statement Reporting
8	The plan or PEO sponsor is responsible for providing information (e.g., employee/payroll files, including adjustments) timely that is accurate, complete, properly authorized, if	Control Objective 4 – Job Processing Control Objective 10 – Plan Implementation Control Objective 13 – Enrollments

	applicable, and in accordance with plan guidelines.	Control Objective 15 – Contributions, Common Remitter Contributions, and Loan Repayments
9	The plan sponsor is responsible for monitoring contribution limits, as applicable.	Control Objective 15 – Contributions, Common Remitter Contributions, and Loan Repayments
10	If applicable, disbursement requests are authorized by the appropriate party and in compliance with the plan provisions.	Control Objective 17 – Withdrawals & Distributions
11	The plan sponsor is responsible for providing written instruction regarding the application of forfeitures.	Control Objective 10 – Plan Implementation

The list of complementary user entity controls presented above does not represent a comprehensive set of the controls that should be implemented by the plan sponsor as other controls may be required.

## VI. COMPLEMENTARY SUBSERVICE ORGANIZATION CONTROLS

Empower's controls related to the defined contribution system cover only a portion of overall internal control for each user entity of Empower. It is not feasible for the control objectives related to the defined contribution services to be achieved solely by Empower. Therefore, each user entity's internal control over financial reporting must be evaluated in conjunction with Empower's controls and the related tests and results described in Section IV of this report, taking into account the related complementary subservice organization controls expected to be implemented at the subservice organization as described below.

Complementary Subservice Organization Controls		Related Control Objective(s)
BlackLine		
1	BlackLine is responsible for maintaining logical security controls to restrict BlackLine's employees' access to the application to authorized appropriate personnel.	Control Objective 6 – Logical Access Security
2	BlackLine is responsible for maintaining physical security controls to restrict access to BlackLine's data center and servers related to the management of Empower data on BlackLine.	Control Objective 7 – Physical Security and Environmental Controls
3	BlackLine is responsible for change management controls related to system changes.	Control Objective 1 – Systems Development and Maintenance

<b>Complementary Subservice Organization Controls</b>		<b>Related Control Objective(s)</b>
<b>Broadridge Investor Communication Solutions, Inc.</b>		
4	Broadridge is responsible for maintaining controls over document printing and mailing services, including statements, confirmations, regulatory notices, and prospectus delivery and check printing and mailing services.	Control Objective 17 – Withdrawals and Distributions  Control Objective 25 – Plan and Participant Statement Reporting
<b>Amazon Web Services (AWS)</b>		
5	AWS is responsible for maintaining controls over cloud computing, specifically for IaaS (Infrastructure as a Service) for storage and backups.	Control Objective 7 - Physical security and environmental controls
<b>Equinix</b>		
6	Equinix is responsible for maintaining controls over physical security and environmental controls of the data center.	Control Objective 7 - Physical security and environmental controls
<b>Matrix Trust Company</b>		
7	Matrix is a registered digitally enabled investment platform available for servicing Qualified & Non-Qualified DC and DB contracts offering a wide range of trust and investment services. Matrix is an externally hosted system at Matrix Trust Company.	Control Objective 10 – Plan Implementation  Control Objective 22 -Asset and Stock Purchase and Redemptions  Control Objective 27 - Reconciliations
<b>Convergent Financial Technologies Inc (UV Cloud Application)</b>		
8	Convergent Financial Technologies Inc is responsible for hosting the UV Cloud Application which manages separate account assets, calculation of unit and share values, and reporting.	Control Objective 20 – Income/Valuation  Control Objective 21 – New Fund Setup and Fund Changes  Control Objective 22 – Asset and Stock Purchases and Redemptions  Control Objective 27 - Reconciliations

## **VII. CONTROL OBJECTIVES AND RELATED CONTROLS PROVIDED BY EMPOWER**

Control objectives and related controls provided by Empower are included in Section IV to eliminate the redundancy that would result from listing them in this section and repeating them in Section IV. Although the control objectives and related controls are included in Section IV, they are, nevertheless, an integral part of Empower's description of controls.

# Section IV: Management of Empower's Description of Its Control Objectives and Related Controls, and Independent Service Auditor's Description of Tests of Controls and Results



# Section IV:

## Management of Empower's Description of Its Control Objectives and Related Controls, and Independent Service Auditor's Description of Tests of Controls and Results

### Description of Testing Procedures Performed

Deloitte & Touche LLP (Deloitte & Touche) performed a variety of tests relating to the controls listed in this section throughout the period from October 1, 2022 through September 30, 2023. Our tests of controls were performed on controls as they existed during the period of October 1, 2022 through September 30, 2023 and were applied to those controls relating to control objectives specified by Empower.

In determining the nature, timing, and extent of tests, we considered (a) the nature and frequency of the controls being tested, (b) the types of available evidential matter, (c) the assessed level of control risk, (d) the expected effectiveness of the test, and (e) our understanding of the control environment.

In addition to the tests listed below, ascertained through multiple inquiries with management and the control owner that each control activity listed below operated as described throughout the period. Tests performed are described below:

Test	Description
<b>Corroborative Inquiry</b>	Conducted detailed interviews with relevant personnel to obtain evidence that the control was in operation during the report period and is accompanied by other procedures noted below that are necessary to corroborate the information derived from the inquiry.
<b>Observation</b>	Observed the performance of the control during the report period to evidence application of the specific control activity.
<b>Examination of documentation/Inspection</b>	If the performance of the control is documented, inspected documents and reports indicating performance of the control.
<b>Reperformance of monitoring activities or manual controls</b>	Obtained documents used in the monitoring activity or manual control activity and independently reperfomed the procedures. Compared any exception items identified with those identified by the responsible control owner.
<b>Reperformance of programmed processing</b>	Input test data, manually calculated expected results, and compared actual results of processing to expectations.

### Reliability of Information Produced by the Service Organization

We performed procedures to evaluate whether the information provided by the service organization, which includes (a) information in response to ad hoc requests from the service auditor (e.g., population lists), and (b) information used in the execution of a control (e.g., exception reports or transaction reconciliations), was sufficiently reliable for our purposes by obtaining evidence about the accuracy and completeness of such information and evaluating whether the information was sufficiently precise and detailed for our purposes.

Our procedures to evaluate whether this information was sufficiently reliable included obtaining evidence regarding the accuracy and completeness included procedures to address (a) the accuracy and completeness of

source data, and (b) the creation and modification of applicable report logic and parameters. While these procedures were not specifically called out in the test procedures listed in this section, they were completed as a component of our testing to support the evaluation of whether or not the information is sufficiently precise and detailed for purposes of fully testing the controls identified by the Service Organization.

### **Reporting on Results of Testing**

The concept of materiality is not applied when reporting the results of control tests because Deloitte & Touche LLP does not have the ability to determine whether an exception will be relevant to a particular user entity. Consequently, Deloitte & Touche LLP reports all exceptions.

# Control Objectives, Related Controls, and Tests of Operating Effectiveness

The control objectives and related controls are provided by Empower. The description of the testing procedures and the results of the testing performed are provided by Deloitte & Touche LLP as the independent service auditor.

**Objective 1 - Systems Development and Maintenance:** Controls provide reasonable assurance that changes to application programs and related data management systems are documented, tested, approved, and implemented to result in the complete, accurate, and timely processing and reporting of transactions and balances.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
1.1	Changes to systems are tested and approved by appropriate personnel prior to promotion to the production environment.	<p>Inspected supporting documentation for a sample of application modifications, database changes, and operating system changes performed during the examination period, and ascertained that the selected changes were tested, if applicable, in a QA environment prior to promotion to the production environment.</p> <p>For OIM, UDB, FundLinx, and UV Cloud: Inquired with management and inspected change listings to ascertain that there were no new changes during the examination period for OIM, UDB, and UV Cloud; thus no testing was performed.</p>	<p>OIM, UDB, FundLinx and UV Cloud: Non-occurrence.</p> <p>No exceptions noted for all other in-scope systems.</p>

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
1.2	The ability to promote code to production is restricted systematically from the ability to develop code. Only authorized individuals promote code to production.	<p>Inspected a list of users with the ability to promote changes to production for each in-scope system during the examination period, and ascertained individuals with the ability to make changes is restricted to systematic roles which commensurate with job responsibilities. Please refer to Objective 6 – Logical Security for more details on testing related to logical access.</p> <p>Inspected a list of users with the ability to develop changes for the recordkeeping system, OTF VAA2 and SAP during the examination period, and ascertained that none of these individuals have the ability to promote changes to the production environments by confirming their systematic roles differ, and evidencing that segregation of duties is maintained within the system development and maintenance processes for these systems.</p> <p>Inquired with appropriate personnel and ascertained that segregation of duties in the BlackLine, FundLinx, Pam Yugo, OnBase, Oracle FSS, Oracle ITS, UDB, UNIX, UV Cloud, and Windows change processes is inherent given the development is handled by the vendors for these systems.</p>	No exceptions noted
1.3	Where systematic segregation of duties cannot be enforced, all changed code components/modules in production are reviewed by appropriate personnel to ensure changes were appropriately approved.	Inspected a sample of weeks during the examination period, and ascertained that SAP transport logs were reviewed and questionable items were investigated and resolved.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
1.4	A manual reconciliation of the source data of the target system is performed to ensure completeness and accuracy of the data in the identity management application. Any discrepancies identified are investigated and corrective action is taken.	Inspected a sample of reconciliations of the source data of the target system to ensure completeness and accuracy of the data in the identity access management system. Inspected that for any discrepancies identified corrective action was taken by the company.	No exceptions noted
1.5	Prior to an application being onboard into the production OIM environment, IAM Engineering evaluates the application roles and performs testing, as needed, to ensure roles and connections are set-up as expected. The Logical Access Committee reviews and approves the go-live package prior to implementation into production.	Inspected a sample of applications onboarded into the OIM environment to ascertain that IAM engineering evaluated the application roles and performed testing to ensure roles and connections are set-up as expected. Additionally, inspected the go-live documentation to ensure that the Logical Access Committee reviewed and approved the go-live prior to implementation into production.	No exceptions noted

**Objective 2 – Participant and Plan Sponsor Websites:** Controls provide reasonable assurance that plan sponsors’ and participants’ access to data through Empower’s Participant and Plan Sponsor websites are secure and authorized.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
2.1	Security Operations has implemented firewall technology and access is limited to personnel commensurate with job responsibilities.	<p>Inspected the systematic access configurations of the firewalls during the examination period, and ascertained that Empower has firewalls in place and administrative access on the firewalls was limited to personnel commensurate with job responsibilities. Further, noted that the system configuration is subject to change management testing at Control Activity 4 within this section.</p> <p>Inspected a system-generated listing of the names and titles of users who had access to the firewalls during the examination period and ascertained that access was granted to personnel commensurate with job responsibilities.</p>	No exceptions noted
2.2	VPN connections are allowed through a VPN Client and are required to authenticate to the access server using two-factor authentication before the connection is made.	Inspected the automated VPN connection through a System VPN Client with management during the examination period, and ascertained that users were required to authenticate to the access server using two-factor authentication before VPN connections were made. Further, noted that the system configuration is subject to change management testing at Control Activity 4 within this section.	No exceptions noted
2.3	Firewall configuration change requests are submitted through the ticketing system, and evaluated and approved by the Security Operations group.	Inspected supporting documentation for a sample of firewall configuration changes during the examination period, and ascertained that the selected changes were submitted through the ticketing system, and evaluated and approved by the Security Operations group prior to implementation.	No exceptions noted
2.4	The Participant and Plan Sponsor websites utilize TLS connections (i.e., secure encrypted connections) to communicate with end users over the Internet.	Inspected the Participant and Plan Sponsor websites systematic website configuration during the examination period, and ascertained that TLS connections were implemented on the websites to communicate with end user over the internet. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
2.5	Participant and Plan Sponsor websites require a valid ID and password/PIN combination to gain access to data. After an explicit value of invalid attempts, the ID is locked for specified time period.	Inspected the Participant and Plan Sponsor systematic website configuration during the examination period, and ascertained that a valid ID and password/PIN combination was systematically required to gain access to data, and that users were automatically locked out for a specified time period after an explicit value of unsuccessful logon attempts. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted
2.6	Participant and Plan Sponsor websites require a minimum length for passwords.	Inspected the Participant and Plan Sponsor systematic website configuration during the examination period, and ascertained that passwords were required to be of a minimum length. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted
2.7	Passwords on the Participant and Plan Sponsor websites are masked during input and are encrypted when stored in the database.	Inspected the Participant and Plan Sponsor systematic website configuration on the associated Oracle database during the examination period, and ascertained that the passwords were masked during input and were stored and encrypted in the database. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted
2.8	Plan Sponsor websites requires user passwords to expire every 31 days, unless requested otherwise by each institution.	<p>Inspected the Participant and Plan Sponsor systematic website configuration during the examination period, and ascertained that the site's default configuration of passwords expiration is 31 days. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.</p> <p>Inspected supporting documentation for a sample of new Participant and Plan Sponsor users added during the examination period, and ascertained users had the default password profile, which is set to expire every 31 days.</p>	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
2.9	Connections to Participant and Plan Sponsor websites will be encrypted using TLS encryption.	Inspected the Participant and Plan Sponsor systematic website configuration during the examination period, and ascertained that connections to Participant and Plan Sponsor websites are encrypted using TLS encryption. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted
2.10	Plan sponsors are required to provide approval for plan sponsor administrators to obtain Plan Sponsor access.	Inspected supporting documentation for a sample of plan sponsor administrators whose website access was granted during the examination period, and ascertained that access was authorized in writing by the plan sponsor.	No exceptions noted



**Objective 3 – EIVR:** Controls provide reasonable assurance that data transmissions between Empower and participants via the EIVR are authorized and secure.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
3.1	Participants are required to use a valid user ID and PIN combination before gaining access to data.	Observed, on multiple occasions during the examination period, a valid user ID and PIN combination was required to access EIVR. Also ascertained that a valid user ID/invalid PIN combination and an invalid user ID/valid PIN combination were denied access to the system.	No exceptions noted
3.2	EIVR passwords are required to be a minimum length.	Observed, on multiple occasions during the examination period, that the system restricted a password that is less than the required minimum length.	No exceptions noted
3.3	After an explicit value of invalid password attempts, participants are automatically transferred to a Customer Service Representative.	Observed, on multiple occasions during the examination period, that after an explicit value of unsuccessful attempts the caller was directed to a Customer Service Representative.	No exceptions noted
3.4	Transactions in the EIVR system are automatically executed via a connectivity mechanism in the Oracle database supporting the recordkeeping system.	Inspected EIVR configuration during the examination period, and ascertained that the transactions were executed via a connectivity mechanism in the Oracle database underlying the recordkeeping system.	No exceptions noted

**Objective 4 – Computer Operations – Job Processing:** Controls provide reasonable assurance that batch jobs are processed accurately, completely, and in a timely manner and deviations, problems, or errors are identified, tracked, and resolved in an accurate, complete, and timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
4.1	A job scheduling system is used to schedule and control reoccurring batch production processes, and appropriate personnel resolve processing errors as needed.	<p>Inspected the recordkeeping system job scheduler, the OIM job scheduler and the SAP job scheduler during the examination period, and ascertained that automated job scheduling systems were utilized to schedule and control reoccurring batch production processes.</p> <p>Inspected supporting documentation for a sample of processing failures during the examination period, and ascertained that the failures were monitored and resolved by appropriate personnel within a timely manner.</p>	No exceptions noted
4.2	Access to the job scheduler is limited to appropriate individuals.	Inspected a system generated list of users with access to the recordkeeping system, OIM, and SAP job schedulers, and ascertained that the scheduler is limited to appropriate individuals.	No exceptions noted
4.3	Production Support personnel are on call 24 hours per day for resolving processing problems.	<p>Inspected a job failure during the examination period, and ascertained that the Production Support on call personnel were automatically paged and emailed upon failure, and a ticket was automatically generated.</p> <p>Inspected the Production Support On-call Schedules for the recordkeeping and the SAP Production Support On-call List, on multiple occasions during the examination period, and ascertained that Production Support personnel are available 24 hours per day to resolve processing problems.</p>	No exceptions noted

**Objective 5 – Computer Operations - Backups:** Controls provide reasonable assurance that data is backed up completely, tested on a periodic basis, and retained to enable retrieval.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
5.1	Personnel monitor backup processing notifications, and address any backup processing failures, as appropriate. Action taken to remediate failures are documented accordingly.	Inspected backup processing reports for a sample of days during the examination period, and ascertained that personnel monitored backup processing notifications and addressed any back up failures, as appropriate. Further ascertained, any action taken to remediated failures were documented accordingly.	No exceptions noted
5.2	The backup process is tested quarterly to confirm that data backups can be restored.	Inspected restoration results for a sample of quarters during the examination period, and ascertained that backup media was tested for restorability and was successful.	No exceptions noted

**Objective 6 – Logical Access Security:** Controls provide reasonable assurance that access to applications, underlying databases and supporting operating systems is limited to authorized and appropriate personnel.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
6.1	Prior to authorized personnel granting access to applications, databases, or operating systems, approval is obtained from the user's management.	Inspected supporting documentation for a sample of users granted access to the applications, underlying databases and supporting operating systems during the examination period, and ascertained that user's access was authorized by management prior to granting access.	No exceptions noted
6.2	Access rights of terminated users are disabled upon notification from the Human Resources Department.	Inspected supporting documentation for a sample of employees that were terminated during the examination period, and ascertained that user's access rights were disabled upon notification from the Human Resources Department.	No exceptions noted
6.3	Special privilege access is granted with appropriate management approval and congruent with a user's job responsibilities.	<p>Inspected system-generated lists of provisioned users with special privilege access to the applications, underlying databases and supporting operating systems during the examination period, and ascertained access was granted with appropriate management approval and is congruent with the user's job responsibilities.</p> <p>For UDB: Inquired with management and inspected user provisioning listings to ascertain that there were no new special privileged users during the examination period for UDB thus no testing was performed.</p>	<p>UDB: Non-occurrence.</p> <p>No exceptions noted for all other in-scope systems.</p>
6.4	Authentication mechanisms are in place to validate user credentials for access to the network and applications.	Inspected the system security configurations during the examination period, and ascertained that authentication mechanisms are in place to validate user credentials for access to the network, operating systems, databases, and applications.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
6.5	Appropriate individuals review users with general and special privilege or sensitive account access periodically. Account access is modified, as necessary.	Inspected a sample of user access reviews during the examination period, and ascertained that general and special privilege or sensitive accounts were reviewed periodically by appropriate personnel, and account access was modified as necessary.	<p>Oracle ITS Database</p> <p>Exception Noted.</p> <p>For one of two quarters (Q2), access was not modified as requested per the review. Q3 was later performed, with all access removed timely.</p> <p>No exceptions noted for all other in-scope systems.</p>
6.6	As needed, appropriate personnel review FireFighter ID activity logs for abnormal activity and necessary actions are taken as required.	Inspected supporting documentation for a sample months for SAP, and ascertained that special privilege account use is logged and reviewed by appropriate personnel, and any abnormal activity is investigated and documented accordingly.	No exceptions noted.
6.7	BlackLine password parameters are configured to require a minimum length, expiration and complexity	Inspected the BlackLine password parameters during the examination period, and ascertained that the system password parameters were configured to require a minimum length, expiration and complexity.	No exceptions noted
6.8	Network is architected to segment web-facing applications from the internal network.	Inspected the network architecture diagram during the examination period, and ascertained that the network is architected to segment web-facing applications from the internal network.	No exceptions noted
6.9	Untimely removal of network access upon termination is reviewed quarterly for exposure and monitored by IT for inappropriate activity based on risk.	Inspected a sample of quarterly untimely access termination reviews to ascertain that for users with untimely removal of network access management reviewed each user for inappropriate activity based on risk. Further, ascertained that management took appropriate action based on review results.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
6.10	Management performs a Quality Control review over selected ITGCs upon completion to assess if associated controls are operating as designed and to provide improvement recommendations, if applicable.	Inspected a sample of Quality Control reviews during the examination period, and ascertained that management performed a quality control review over the selected GITCs to monitor that associated controls are operating as designed. Further ascertained that improvement recommendations were provided as applicable.	No exceptions noted
6.11	Parameters are entered to execute the user access reviews. An independent review of the parameters is performed to ensure completeness and accuracy of the data selected.	Inspected a sample of independent reviews of parameters used to execute the user access reviews, and ascertained that the parameters validated the completeness and accuracy of the user access review executed.	No exceptions noted
6.12	A manual reconciliation of the source data of the target system is performed to ensure completeness and accuracy of the data in the identity management application. Any discrepancies identified are investigated and corrective action is taken.	Inspected a sample of reconciliations of the source data of the target system to ensure completeness and accuracy of the data in the identity access management system. Inspected that for any discrepancies identified corrective action was taken by the company.	No exceptions noted
6.13	UV Cloud password parameters are configured to require a minimum length, expiration and complexity.	Inspected the system security configurations for UV Cloud during the examination period, and ascertained that password parameters are configured to require a minimum length, expiration, and complexity.	No exceptions noted
6.14	Special privilege passwords are changed periodically and when someone with knowledge of the password changes job responsibilities or is terminated.	Inspected supporting documentation for a sample of special privileged password changes during the examination period and ascertained that special privileged passwords are changed periodically and when someone with knowledge of the password changes job responsibilities or is terminated.	No exceptions noted

**Objective 7 – Physical Security and Environmental Controls:** Controls provide reasonable assurance that physical security and environmental controls are in place and access to the data center is limited to authorized and appropriate personnel.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
7.1	Access for Empower employees and contractors must be authorized, with access start and end dates specified in alignment to complete the required work. As necessary, if additional time is required to complete the work, a new access request must be submitted.	Inspected the access request form for a sample of Empower and non-Empower personnel during the examination period, and ascertained that their access was approved with an access start and end date.	No exceptions noted
7.2	Access to the data center is restricted to authorized employees & contractors. Access to the data center is reviewed by appropriate personnel at least quarterly and discrepancies are noted and resolved.	Inspected data center access reviews for a sample of quarters during the examination period, and ascertained that user access permissions were reviewed for appropriateness by management, and discrepancies were researched and resolved.	No exceptions noted

**Objective 8 – Mail/Records Control:** Controls provide reasonable assurance that mail/records are distributed for processing in an accurate, complete, and timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
8.1	The Mail Center opens, sorts, and scans mail into OnBase. OnBase and fax servers encode a date and time ribbon to the incoming document.	Observed, on multiple occasions during the examination period, the incoming mail process and ascertained that mail was opened, sorted, and scanned into OnBase for processing. Further, noted that OnBase and fax servers automatically date/time stamped the documents.	No exceptions noted
8.2	The recordkeeping system event ID numbers are automatically assigned to documents that are scanned, which are reviewed and indexed in OnBase by appropriate personnel to ensure all items received are routed within the workflow system. The scanned documents are reviewed for completeness (i.e., name, SSN, plan number, form type, etc.) and legibility by the reviewer during processing.	Observed, on multiple occasions during the examination period, the review of scanned documents for completeness (i.e., name, SSN, plan number, form type, etc.) and legibility using OnBase.  Inspected the recordkeeping system systematic configuration during the examination period, and ascertained that event ID numbers were automatically assigned by recordkeeping system. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted
8.3	Incoming requests, which cannot be identified as customer requests are routed to the UTL queues within OnBase to be researched by Document Management. Appropriate personnel review and clear the OnBase queue daily to ensure that scanned and faxed items are routed to the assigned departments in a timely manner. If a document cannot be identified as a customer request, it is archived within OnBase.	Observed, during the examination period, a Document Management representative review incoming requests, which were unidentifiable items that were routed to the UTL queues. Observed that once the items were received in good order, they were routed to Document Management for indexing. Further, observed documents that were not able to be resolved were archived within OnBase.  Inspected supporting documentation for a sample of items distributed to UTL queues during the examination period, and ascertained that the selected items were appropriately researched and resolved, and indexed or archived, if not in good order by the UTL team.  Inspected queue clearing review emails for a sample of days during the examination period, and ascertained that the OnBase queue was reviewed and items were assigned to departments in a timely manner.	No exceptions noted



Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
8.4	A reconciliation is performed between OnBase and recordkeeping system to ensure non-automated receivables received are processed timely. Discrepancies are researched and resolved.	<p>Observed during the examination period, Up-Front Cash Team process checks in the recordkeeping system and reconcile the check count received by Banking Services to the check count received by Mail Services and processed in the recordkeeping system.</p> <p>Inspected the Up-Front Cash reconciliation for a sample of days during the testing period and ascertained that the number of checks received by Banking Services agreed to the number of checks received by Mail Services and processed in the recordkeeping system and any discrepancies were investigated and resolved in a timely manner.</p>	No exceptions noted

**Objective 9 – Plan Document Production:** Controls provide reasonable assurance that the Plan Documents and SPD are authorized and set up accurately, completely, and in a timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
9.1	For plan conversions, the Plan Document Team reviews the series of ancillary documents (i.e., adoption agreements, Basic Plan Documents and SPDs) provided by the plan sponsor to ensure needed information is obtained to convert an existing plan. For start-up plans, the Plan Document Team reviews plan provisions from appropriate parties to ensure needed information is obtained to set-up the plan document.	Observed, during the examination period, a Plan Document Team representative review the series of ancillary documents to ascertain that needed information was obtained to set-up a new plan or convert an existing plan.  Inspected the plan documentation for a sample of start-up plans executed during the examination period, and ascertained that the final plan document was reviewed by a Plan Document Team member independent from the preparer within a timely manner of receiving all required information from the plan, and that any errors were sent back to the preparer and resolved prior to finalizing the review.	No exceptions noted
9.2	The final plan document and SPD are reviewed by a Plan Document Team member in a timely manner who did not prepare the plan document and SPD for accuracy. Any errors are sent back to the preparer for resolution.	Observed, during the examination period, a Plan Document Team representative review a plan document in a timely manner for accuracy, and observed that errors identified were researched and resolved.  Inspected the plan documentation for a sample of new plans and plan conversions executed during the examination period, and ascertained that the final plan document was reviewed by a Plan Document Team member independent from the preparer within a timely manner of receiving all required information from the plan, and that any errors were sent back to the preparer and resolved prior to finalizing the review.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
9.3	For startup plans, the Plan Document must be signed by the plan sponsor or designee and returned before the acceptance of any participant contributions. For plan conversions, the Plan Document must be signed by the plan sponsor or designee and returned before the Plan is released from blackout.	Inspected Plan Documents for a sample of startup plans and conversions processed during the examination period, and ascertained that, for startup plans, the signed Plan Document was received prior to applying contributions; and, for plan conversions, that the signed Plan Document was received prior to releasing the Plan from blackout.	No exceptions noted
9.4	Management receives and reviews a daily audit report that shows all outstanding plan document items, with corresponding due dates to ensure timely completion. Past due items are reviewed for appropriate action.	<p>Observed, during the examination period, a Plan Document Team Manager receive and review the plan document audit report for past due or delinquent items and that any issues were noted and escalated to the responsible analyst for appropriate action.</p> <p>Inspected the daily plan document audit report for a sample of days during the examination period, and ascertained that past due items or items in danger of becoming past due were reviewed and appropriate action was taken in a timely manner.</p>	No exceptions noted

**Objective 10 – Plan Implementation:** Controls provide reasonable assurance that plan implementations are authorized, and are processed in a timely manner and that key data points defined by management, including investments and investment-related services, contribution sources, fees, and requested service features are set up accurately and completely.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
10.1	For conversions and startup plans, plan setup is reviewed for appropriate authorization against client agreement. Discrepancies are assigned to an Implementation Services team member and are resolved.	Observed, during the examination period, an Implementation Services representative review plan installation steps against client agreements and set up authorization, and noted that discrepancies were resolved prior to set up in the recordkeeping system.  Inspected for conversions and startup plans that Checklists/recordkeeping system Set up Forms for a sample of implementations during the examination period, and ascertained that plan setup is reviewed in a timely manner against client agreements and authorization by Implementation Services, and discrepancies were resolved prior to setting up the plan in the recordkeeping system.	No exceptions noted
10.2	For conversions and startup plans, plan setup information entered into the recordkeeping system is reviewed for completeness and accuracy by Implementation services. Discrepancies are researched and resolved.	Inspected for conversions and startup plans, that the setup on the recordkeeping system against partner submission and set up documents for a sample of plan implementations during the examination period, and ascertained that the installation requests were reviewed by Implementation Services and that discrepancies were communicated to Implementation Services and resolved.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
10.3	Reports related to participant data are reviewed by the Participant Data Load (PDL) team member to ensure that essential fields are entered accurately and completely. Data from specific recordkeeping system conversion automation staging tables is checked against the original source data received from the client, partner and/or prior record-keeper on a sample basis. Any discrepancies are returned to the analyst who loaded the participant date.	Inspected supporting documentation for a sample of plan implementations during the examination period, and ascertained that reports related to participant indicative data were reviewed by a PDL team member on a sample basis and checked the staging data against the original source data received from the client, partner, and/or prior record-keeper to ensure essential fields in the recordkeeping system were approved for accuracy once discrepancies were resolved.	No exceptions noted
10.4	Once the recordkeeping system set up is complete, investment type, including the mappings, is checked and approved by Implementation Services on a plan level basis, against the data provided by the client partner, advisor, or prior recordkeeper. Discrepancies are researched and resolved.	<p>Observed, during the examination period, an Implementation Services representative independently check investment type, mapping, and investment balance information against the data provided by the prior recordkeeper, and approve the mapping after all discrepancies were resolved.</p> <p>Inspected supporting documentation for a sample of plan implementations during the examination period, and ascertained that investment type/mapping information was reviewed by an Implementation Services team member against the data provided by the client partner, advisor, or prior record keeper and was approved for accuracy once discrepancies were resolved.</p>	No exceptions noted
10.5	A quality control review is performed for accuracy and completeness for setup in the recordkeeping system and within an established timeframe. Identified discrepancies are researched and resolved by Implementation Services.	Inspected the quality control review documents for a sample of plan setups within the recordkeeping system during the examination period, and ascertained that the plan setups were reviewed for accuracy and completeness after setup in the recordkeeping system within an established timeframe, any identified discrepancies were resolved by Implementation Services.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
10.6	On a weekly basis Implementation Services monitors the Blackout QA SLA report to ensure established timeliness standards are met for plan conversions. Discrepancies are researched and resolved.	Inspected a sample of Blackout QA SLA reports during the examination period and ascertained that Implementation Services monitors the report to ensure established timeliness standards are met and any discrepancies were researched and resolved in a timely manner.	No exceptions noted
10.7	Implementation Services reviews the setup of the Investment Array in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that the Investment Array was setup accurately based on authorized implementation documents.	No exceptions noted
10.8	Implementation Services reviews the setup of the Managed Account Services in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that Managed Account Services were setup accurately based on authorized implementation documents.	No exceptions noted
10.9	Implementation Services reviews authorized implementation documents to ensure appropriate communication and Service Request tickets were opened to complete the Self-Directed Brokerage setup.	Inspected a sample of plan Implementation Service reviews during the examination period and ascertained that Self-Directed Brokerage tickets were opened to complete the Self-Directed Brokerage setup. Also ascertained that Implementation Service reviews authorized implementation documents for appropriate communication.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
10.10	The Self-Directed Brokerage team reviews the setup of the Self-Directed Brokerage Services in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected a sample of Self-Directed Brokerage setups during the examination period, and ascertained that the Self-Directed brokerage setup was reviewed for accuracy based on authorized implementation documents against the recordkeeping system and any discrepancies were researched and resolved in a timely manner.	No exceptions noted
10.11	Implementation Services review the setup of the non-advisor established asset allocation models in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining Implementation Services review of non-advisor established asset allocation models and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that non-advisor established asset allocation models were setup accurately based on authorized implementation documents.	No exceptions noted
10.12	Implementation Services reviews the setup of Fiduciary Services in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that Fiduciary Services were setup accurately based on authorized implementation documents.	No exceptions noted
10.13	Implementation Services reviews the setup of Prospectus Delivery Services in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that Prospectus Delivery Services were setup accurately based on authorized implementation documents.	No exceptions noted
10.14	Implementation Services reviews the setup of the Primary Plan Contact in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that Primary Plan Contacts were setup accurately based on authorized implementation documents.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
10.15	Implementation Services reviews the setup of Authorized Signor(s) in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that Authorized Signors were setup accurately based on authorized implementation documents.	No exceptions noted
10.16	Implementation Services reviews the setup of participant eligibility in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that the participant eligibility was setup accurately based on authorized implementation documents.	No exceptions noted
10.17	Implementation Services reviews the Fee Disclosure at the plan and participant level against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that Fee Disclosures at the plan and participant level were setup completely based on authorized implementation documents.	No exceptions noted
10.18	Implementation Services reviews the setup of Automatic Enrollment Notice in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that Automatic Enrollment Notice Services were setup accurately based on authorized implementation documents.	No exceptions noted
10.19	Payroll Services reviews automatic enrollment, including the Automatic Enrollment Notice, to ensure the system is setup accurately within established timeliness thresholds.	Inspected a sample of Automatic Enrollment Notice setups during the examination period, and ascertained that the Automatic Enrollment Notice were reviewed by Payroll Services for accuracy of setup within established timeliness thresholds.	No exceptions noted



Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
10.20	Implementation Services reviews the setup of QDIA Notice Services in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that QDIA Notice Services were setup accurately based on authorized implementation documents.	No exceptions noted
10.21	Implementation Services reviews the setup of To Do List Service in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that To Do List Services were setup accurately based on authorized implementation documents.	No exceptions noted
10.22	Implementation Services reviews the setup of Vesting Provisions in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that Vesting Provisions were setup accurately based on authorized implementation documents.	No exceptions noted
10.23	Implementation Services reviews the setup of Compliance Services in the recordkeeping system against authorized implementation documents. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period, and ascertained that Compliance Services were setup accurately based on authorized implementation documents.	No exceptions noted
10.24	Implementation Services provides instruction for the setup of Deferral Recordkeeping and Plan Match rules for plans using the Empower Experience. Discrepancies are researched and resolved.	Inspected the stated control activity by obtaining the authorized implementation documents and applicable recordkeeping system screenshots for a sample of plan implementations during the examination period that utilize the Empower Experience, and ascertained that the Deferral Recordkeeping and Plan Match rules were setup accurately based on authorized implementation documents.	No exceptions noted

**Objective 11 – Mass Conversion:** Controls provide reasonable assurance that mass conversions are recorded and processed accurately, completely, and in a timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
11.1	Playbooks/project plans are developed, as applicable, to ensure appropriate governance and oversight. These are monitored to ensure tasks are completed in a timely manner. Any issues/delays are researched and resolved with applicable parties.	Inspected a sample of the project management office play book and ascertained that they monitored tasks are completed in a timely manner and that any identified issues/delays are researched and resolved.	No exceptions noted.
11.2	Implementation materials, data layouts, and data files are reviewed with the prior recordkeeper, and then creates the plan, participant, and investment mappings. The mappings are reviewed prior to the conversion.	Inspected a sample of the review performed by the Mass conversion and investment control teams. Ascertained that the team reviewed the data layouts, data files and created the plan, participant and investment mappings prior to the conversion date.	No exceptions noted.
11.3	Data from the heritage recordkeeping systems and investment systems is loaded into the staging database. The number of records loaded from source files are validated against what was loaded in the staging database to ensure the data transformation is completed successfully.	Inspected a sample the review performed by the Centralized Team and Data Migration Investments Team. Ascertained that the number of records loaded from the source file matches the load into the staging database. Further ascertained that the teams validated the data transformation was completed successfully.	No exceptions noted.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
11.4	For plans loaded using the Plan Mass Add process, as applicable, prior to loading plan data in the record keeping system, the data is reviewed for accuracy. Plans are established by IRS code/product, and all data fields for the plans are reviewed to ensure proper mapping. Discrepancies are researched and resolved before other plans are loaded. Once setup is complete for all plans, a sample of data fields are quality reviewed. For plans loaded manually or via a collaborative integration process, a review is performed after setup is complete.	Inspected a sample plans using Mass add and loaded Manually and ascertained that the data fields were reviewed for accuracy and completeness after setup is complete. Any discrepancies identified are researched and resolved before other plans are loaded.	No exceptions noted.
11.5	Pre and post production participant control reports are reviewed to identify data quality/issues and ensure accurate mapping to the recordkeeping system. Data from specific recordkeeping system conversion automation staging tables is checked against the original source data received from the client, partner and/or prior recordkeeper on a sample basis. Any discrepancies are reviewed and resolved.	Inspected a sample of pre and post production participant control reports and ascertained that they were reviewed by a Mass Conversion team member to identify data quality issues. Further ascertained that data from the original recording keeping system is compared against staging tables on a sample basis. Any discrepancies are reviewed and resolved by the Mass Conversion team prior to the conversion date.	No exceptions noted.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
11.6	A plan level reconciliation by investment option is completed, reviewed, and approved prior to loading balances. Once balances are loaded to the participant level, a sample is reviewed at a money type, fund, dollar, and share level. Any discrepancies are documented, reviewed, and resolved by the Mass Conversion team.	Inspected a sample of plan level reconciliations by investment options and ascertained that they were reviewed by the Mass Conversion team prior to loading balances. Further ascertained that once balances are loaded, a sample is reviewed by money type, fund and dollar. Any discrepancies are documented, reviewed and resolved by the Mass Conversion team.	No exceptions noted.
11.7	A final call is held to determine if plans can be opened for activity (Go, No-Go Decision). Once verbal approval has been received, an email is sent to all parties confirming the date and time the plans were opened for activity.	Inspected a sample of the final go/no-go decision for approval and ascertained that an email confirming the approval, date and time was sent to all parties prior to conversion.	No exceptions noted.

**Objective 12 – Plan Changes (Post Implementation):** Controls provide reasonable assurance that plan changes, including Discretionary Plan Amendments and Modifications, are valid and processed in an accurate, complete, and timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
12.1	Plan amendment requests are reviewed for Authorized Signor's authorization prior to processing.	Inspected a sample of plan amendments processed during the examination period, and ascertained that an Authorized Signor authorized the plan provisions prior to processing.	No exceptions noted
12.2	The completed amendment is reviewed by the Plan Document Team for accuracy, completeness, and timeliness prior to mailing to the plan sponsor.	Observed, during the examination period, a Plan Document Team representative review a completed amendment for accuracy, completeness, and timeliness prior to mailing to the plan sponsor.  Inspected a sample of plan amendments processed during the examination period, and ascertained that the amendments were reviewed for accuracy, completeness, and timeliness by the Plan Document Team prior to mailing the documents to the plan sponsor.	No exceptions noted
12.3	An independent quality control review is performed over plan amendments and modifications to evaluate that the plan amendments and modifications are processed accurately and completely. Any discrepancies identified are corrected and improvement recommendations are provided, if applicable.	Inspected plan amendment and modification reviews for a sample of months during the examination period, and ascertained that management reviewed plan amendments and modifications for accuracy and completeness of processing.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
12.4	Non-amendment change requests are reviewed by Client Services/Plan Change to ensure requested changes are from a valid source and implemented accurately and timely within the recordkeeping system by the Plan Change team or assigned area.	Inspected a sample of non-amendment change requests during the examination period, and ascertained that the non-amendment changes were from a valid source, implemented accurately/timely within the recordkeeping system and reviewed by the Client Services/Plan Change team or assigned area.	No exceptions noted
12.5	A service request queue is reviewed daily by the Plan Change team, to ensure the completeness of plan changes.	Observed, during the examination period, Plan Change Team review the Service Request queue related to plan changes to monitor the progress of plan changes to completion.	No exceptions noted
12.6	Management receives and reviews a daily audit report that shows all outstanding plan amendment items, with corresponding due dates to ensure timely completion. Past due items are reviewed for appropriate action.	Observed, during the examination period, a Plan Document Team Manager receive and review the plan document audit report for past due or delinquent items, and observed that no items were past due.  Inspected the daily plan document audit report for a sample of days during the examination period, and ascertained that past due items or items in danger of becoming past due were reviewed and appropriate action was taken.	No exceptions noted
12.7	Payroll Services reviews automatic enrollment, including the Automatic Enrollment Notice, to ensure the system is setup accurately within established timeliness thresholds.	Inspected a sample of Automatic Enrollment Notice changes during the examination period, and ascertained that the Automatic Enrollment Notice was reviewed by Payroll Services for accuracy of setup within established timeliness thresholds.	No exceptions noted

**Objective 13 – Enrollments:** Controls provide reasonable assurance that participant data received is recorded in the recordkeeping system and processed in an accurate, complete, and timely manner, and that participant enrollments are valid and authorized.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
13.1	Participant designated allocations between investment options must equal 100% or the allocation input will be rejected by the recordkeeping system.	Observed the recordkeeping system systematic configuration on multiple occasions during the examination period, and ascertained that the recordkeeping system would not process an allocation that did not equal 100%. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted
13.2	A confirmation notice is generated and mailed to the participant based on plan sponsor requirements.	Observed, during the examination period, the recordkeeping system generate and send a confirmation notice, after enrollment processing, based on plan sponsor requirements. Further, noted that the access to make changes to notification settings is logical security testing at Control Objective 1 – System Development and Maintenance.	No exceptions noted
13.3	Edit checks (e.g., dates in date fields, format, and validity of SSNs) are implemented in the recordkeeping system to prevent certain data entry errors while entering and modifying participant data.	Observed the recordkeeping system systematic edit checks during the examination period, and ascertained that the recordkeeping system did not process transactions with certain data entry errors. Further, noted that the system edit checks are subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted
13.4	Enrollments are processed in the system in accordance with plan provisions and appropriately authorized participant instructions received in good order.	Observed, during the examination period, an Operations Department representative review an enrollment request for proper authorization prior to processing in the recordkeeping system in accordance with plan provisions.  Inspected a sample of enrollment requests processed during the examination period, and ascertained that the enrollment requests were authorized prior to processing in the recordkeeping system in accordance with plan provisions.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
13.5	Enrollment requests are reviewed by another team member for accuracy and appropriate authorization.	<p>Observed during the examination period, members of the Operations Department review a sample of enrollment requests for accuracy and appropriate authorization that were processed by different team members.</p> <p>Inspected the systematic configuration on multiple occasions during the examination period, and noted that OnBase is configured to send enrollment requests to the quality control (QC) queue for review based on specified routing percentages. Further, noted the access to change system configurations is subject to testing at Objective 6 – Logical Security.</p>	No exceptions noted
13.6	Workflow queues detailing pending enrollments are reviewed by management on a weekly basis to help ensure completeness of enrollment processing.	Inspected Workflow queue reviews for a sample of weeks during the examination period, and ascertained that management reviewed pending enrollments to help ensure completeness of enrollment processing.	No exceptions noted
13.7	An independent quality control review is performed over processing of enrollments to evaluate accurate, complete, and timely processing. Any discrepancies identified are corrected and improvement recommendations are provided, if applicable.	Inspected enrollment reviews for a sample of months during the examination period, and ascertained that management performed the reviews for accuracy, timeliness, and completeness, and identified exceptions were resolved.	No exceptions noted



Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
13.8	Appropriate EAG personnel perform a monthly random sample quality control checklist of the new Opt-In EAG plans from the previous month for accuracy and completeness (EAG Enrollments).	<p>Observed, during the examination period, an EAG representative review a randomly selected Opt-In contract for accuracy and completeness, and noted that identified discrepancies were resolved.</p> <p>Inspected the Quality Control Review Packet for a sample of months during the examination period, and ascertained that the EAG Advisory Services Checklist Opt-In Form was completed for a sample of plans within the subsequent month to ensure accuracy and completeness of Opt-In contacts. Identified errors were subsequently researched and resolved.</p>	No exceptions noted
13.9	Appropriate EAG personnel perform a monthly random sample quality control checklist of the new Opt-Out EAG plans from the previous month for accuracy and completeness (EAG Enrollments).	<p>Observed, during the examination period, an EAG representative review a randomly selected Opt-out contract for accuracy and completeness of contract set up and timeliness of enrollment strike notifications, and noted that discrepancies were resolved.</p> <p>Inspected the quality control checklist for a sample of months during the examination period, and ascertained that a monthly random sample of new Opt-Out EAG plan contracts completed from the previous month was reviewed for accuracy and completeness of Opt-Out enrollment processing and timeliness of communications.</p>	No exceptions noted
13.10	Participants enrolling into managed accounts via Participant Web are required to electronically authorize the enrollment. Appropriate EAG Personnel will verify the process is working as expected (EAG Enrollments).	Inspected the systematic authorization configuration related to enrollments within Participant Web during the examination period, and ascertained that participants enrolling into managed accounts via Participant Web are required to electronically authorize the enrollment. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
13.11	On a monthly basis, appropriate EAG personnel review a sample of calls received by the Retirement Solutions Group to confirm that the managed accounts enrollments are authorized and processed accurately (EAG Enrollments).	Inspected call audit summaries for a sample of months during the examination period, and ascertained that a sample of calls related to managed accounts enrollments received by the Retirement Solutions Group were reviewed by appropriate EAG personnel for authorization and accuracy.	No exceptions noted
13.12	The EAG workflow queue is reviewed by EAG personnel on a weekly basis to help ensure completeness of EAG enrollment processing.	Observed, during the examination period, an EAG representative review the EAG workflow system and address all open items older than a week.  Inspected the EAG workflow queue review documentation for a sample of weeks during the examination period, and ascertained that the queue was reviewed to ensure completeness of EAG enrollment processing.	No exceptions noted
13.13	Appropriate EAG personnel perform a monthly random sample of Managed Account enrollments to ensure accuracy and authorization. The quality control review is completed by the end of the following month and any exceptions are sent to the responsible party for resolution in a timely manner (EAG Enrollments).	Observed, during the examination period, an EAG representative review an EAG Managed Account enrollment form received through the workflow system for authorization and accuracy and observed that discrepancies were resolved in a timely manner.  Inspected the Monthly Workflow quality control (QC) reports for a sample of months during the examination period, and ascertained that a sample of Managed Account enrollment forms were reviewed for authorization and accuracy and that exceptions were resolved in a timely manner.	No exceptions noted

**Objective 14 – Account Changes:** Controls provide reasonable assurance that participant-initiated transfers, changes in investment allocations, and other account changes are authorized and processed accurately, completely, and in a timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
14.1	Participant/plan-initiated change requests must be authorized by the participant/plan prior to processing within a timely manner.	<p>Observed, during the examination period, a Participant Administration representative ascertain that a paper form change request was authorized by the participant/plan.</p> <p>Inspected a sample of participant-initiated changes received via paper form during the examination period, and ascertained that the selected changes were authorized by the participant/plan and processed in a timely manner.</p> <p>Observed, during the examination period, that a valid user ID and PIN combination was required to access EIVR. Also, ascertained that a valid user ID/invalid PIN combination and an invalid user ID/valid PIN combination were denied access to the system.</p> <p>Inspected the Participant and Plan Sponsor website systematic configuration during the examination period, and ascertained that a valid ID and password/PIN combination was systematically required to access the websites, and that users were automatically locked out for a specified time period after an explicit value of unsuccessful logon attempts.</p>	No exceptions noted
14.2	Participant account change form requests are reviewed by another team member for accuracy and appropriate authorization.	<p>Observed during the examination period, a team member review a sample of paper form requests, for accuracy and appropriate authorization.</p> <p>Inspected the systematic configuration on multiple occasions during the examination period, and noted that OnBase is configured to assign paper form requests to the quality control (QC) queue for review of accuracy and authorization based on specified routing percentages. Further, noted the access to change system configurations is subject to testing at Control Objective 1 – Systems Development and Maintenance.</p>	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
14.3	A monthly service call audit over a sample of participant-initiated transactions performed in the recordkeeping system based on calls received by Customer Service Representatives is performed by management to ensure that transactions processed in the recordkeeping system are authorized and performed accurately. <sup>5</sup>	Inspected a sample of service call audits during the examination period, and ascertained that participant-initiated transactions were audited monthly by management for transactions processed by Customer Service Representatives in the recordkeeping system for authorization and accuracy.	No exceptions noted
14.4	Edit checks (e.g., dates in date fields, format, and validity of SSNs) are implemented in the recordkeeping system to prevent certain data entry errors while entering and modifying participant data.	Observed the recordkeeping system systematic edit checks on multiple occasions during the examination period, and ascertained that the recordkeeping system did not process transactions with certain data entry errors. Further, noted that the system edit checks are subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted
14.5	Participant designated allocations between investment options must equal 100% or the allocation input will be rejected by the recordkeeping system.	Observed the recordkeeping system systematic configuration on multiple occasions during the examination period, and ascertained that the recordkeeping system would not process an allocation that did not equal 100%. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted
14.6	Workflow queues detailing pending account changes are reviewed by management on a weekly basis to ensure completeness of account change processing.	Inspected Workflow queue reviews for a sample of weeks during the examination period, and ascertained that management reviewed pending account changes to ensure completeness of account change processing.	No exceptions noted

<sup>5</sup> This control tests only transactions performed within the Empower call center. Plans that process transactions through their call center during that time period were not included.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
14.7	An independent quality control review is performed over account changes to evaluate that account changes are authorized and processed accurately and completely. Any discrepancies identified are corrected and improvement recommendations are provided, if applicable.	Inspected account change reviews for a sample of months during the examination period, and ascertained that management performed a review over processed account changes for accuracy, completeness, and authorization.	No exceptions noted
14.8	Request for correction requires appropriate instruction and/or documentation to support the need for corrective processing and are completed, reviewed, and approved, if applicable.	Inspected a sample of corrections during the examination period, and ascertained that the selected corrections were completed as requested, reviewed, and approved, if applicable.	No exceptions noted
14.9	A service request queue is reviewed daily by the Resolution team to ensure completeness of corrections.	<p>Observed, during the examination period, the Resolution team review the service request queue related to plan changes to monitor the progress of plan changes to completion.</p> <p>Inspected a system screenshot as of the end of the testing period and ascertained that all items in the resolution queue were within timeliness standards or assigned to appropriate resolution personnel for resolution.</p>	No exceptions noted

**Objective 15 – Contributions, Common Remitter Contributions, and Loan Repayments:** Controls provide reasonable assurance that contributions, common remitter contributions, and loan repayments are authorized and processed accurately, completely, and in a timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
15.1	The entries in recordkeeping system from non-automated receivables are balanced daily to bank deposit totals using daily reports run from the recordkeeping system.	<p>Observed, during the examination period, Up-Front Cash members receive cash receipt documentation for lockbox accounts from the bank, and reconcile the totals to the deposit slip.</p> <p>Observed the recordkeeping system systematic configurations during the examination period, and ascertained that the recordkeeping system would not process a batch remittance that did not equal the sum of the individual's remittance notices built in the recordkeeping system. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.</p> <p>Inspected the reconciliation documentation for a sample of days during the examination period and ascertained that entries in the recordkeeping system were reconciled to the bank deposit totals, and that discrepancies were researched and resolved.</p>	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
15.2	A plan remitter may either wire or initiate an ACH transfer directly to the assigned bank account. Bank incoming wires and ACH reports are reviewed daily. Using these reports, Upfront Cash enters the contribution information, for non-automated bank accounts, into the recordkeeping system based on NYSE market close.	<p>Observed, during the examination period, review bank incoming wires and ACH report throughout the day and use the reports to build each wire/ACH batches in the recordkeeping system for non-automated bank accounts based on NYSE market close. Also, observed a separate team member review the batches for accuracy and completeness.</p> <p>Inspected daily wire/ACH completeness checklists for a sample of days during the testing period, and ascertained that management reviewed and signed-off to make sure that all wire/ACH reports are processed.</p> <p>Inspected the contribution information and recordkeeping system for a sample of contributions processed during the examination period, and ascertained that the contribution information for non-automated bank accounts was entered into the recordkeeping system based on NYSE market close.</p>	No exceptions noted
15.3	On a daily basis, the Money-In team(s) monitor incoming bank transmissions Success/Failure notifications for the Automated Lockbox process to ensure issues are addressed and escalated timely.	Inspected the lockbox transmission success/ failure emails for a sample of days during the testing period, and ascertained that the Money-In team researched and resolved any failed transmissions.	No exceptions noted
15.4	Money-In requests are reviewed to supporting documentation for completeness and routed for review in accordance with department standards and reviewed for accuracy and timeliness.	Inspected a sample of Money-In transactions requests processed during the examination period, and ascertained that requests were reviewed against supporting document for completeness and the transactions were routed for review in accordance with department standards and are reviewed for accuracy and timeliness.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
15.5	Outstanding Money-In transactions or receivables are reviewed daily via outstanding recordkeeping system events and exceptions are investigated and resolved.	Inspected outstanding Money-In transaction and receivable reviews for a sample of days during the examination period, and ascertained that the review was completed and that exceptions, if any, were investigated and resolved.	No exceptions noted
15.6	An independent quality control review is performed over processing of contributions and loan repayments to evaluate accuracy and timeliness of processing. Any discrepancies identified are corrected and improvement recommendations are provided, if applicable.	Inspected contribution and loan repayment management reviews for a sample of months during the examination period, and ascertained that management reviewed a sample of contributions and loan repayments to ensure accuracy and timeliness of processing.	No exceptions noted
15.7	A review of bank reconciliations is performed for each bank account to ensure the balances per the ledger are reconciled to the bank statement and the general ledger account balance is properly accounted for.	<p>Observed, during the examination period, a Banking Services representative reconcile bank accounts to the general ledger and that non-reconciling items were investigated and resolved.</p> <p>Inspected bank reconciliations for a sample of accounts and months during the examination period, and ascertained that the bank account reconciliations were performed monthly and non-reconciling items were researched and resolved within 90 days.</p>	No exceptions noted
15.8	The Reconciliation Team performs incoming cash suspense reconciliations on a monthly basis and resolves discrepancies. Aged items over predetermined thresholds are reviewed by management.	<p>Observed, during the examination period, a Reconciliation Team representative perform the incoming cash suspense reconciliation, and noted that discrepancies were investigated and resolved and items over predetermined thresholds were reviewed by management.</p> <p>Inspected suspense reconciliations for a sample of months during the examination period, and ascertained that incoming cash suspense account reconciliations were performed and aged items over predetermined thresholds were reviewed by management.</p>	No exceptions noted



Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
15.9	Request for correction requires appropriate instruction and/or documentation to support the need for corrective processing and are completed, reviewed, and approved, if applicable.	Inspected a sample of corrections during the examination period, and ascertained that the selected corrections were completed as requested, reviewed, and approved, if applicable.	No exceptions noted
15.10	A service request queue is reviewed daily by the Resolution team to ensure completeness of corrections.	<p>Observed, during the examination period, the Resolution team review the service request queue related to plan changes to monitor the progress of plan changes to completion.</p> <p>Inspected a system screenshot as of the end of the testing period and ascertained that all items in the resolution queue were within timeliness standards or assigned to appropriate resolution personnel for resolution.</p>	No exceptions noted

**Objective 16 – Banking Returns:** Controls provide reasonable assurance that plan sponsor ACH banking returns are investigated in a timely manner for accurate and complete resolution.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
16.1	Plan Sponsor ACH banking returns are resolved by the Plan ACH Returns team or the responsible processing area within five business days of notification of the return or within an extended time period with appropriate approval. If resolution is not met, contribution is reversed.	Inspected a sample of Plan Sponsor ACH banking returns processed during the examination period, and ascertained that the selected returns were resolved by the Plan ACH Returns team or the responsible processing area within five business days of notification of the return. For items not resolved within 5 business days, ascertained that a processing extension was approved by a Manager or above and that the return was resolved within the approved period.	No exceptions noted
16.2	Banking return resolution must be approved by appropriate personnel prior to resolution processing.	Observed, during the examination period, a Plan ACH Returns representative obtains the approval for a banking return. Noted that approval was received by appropriate personnel prior to processing the resolution.  Inspected a sample of plan sponsor ACH banking returns during the examination period, and ascertained that the selected ACH banking returns' resolutions were approved by appropriate personnel prior to processing.	No exceptions noted
16.3	A review of bank reconciliations is performed for each bank account to ensure the balances per the ledger are reconciled to the bank statement and the general ledger account balance is properly accounted for under each basis of accounting.	Observed, during the examination period, a Banking Services representative reconcile bank accounts to the general ledger, and noted that non-reconciling items were investigated and resolved.  Inspected bank reconciliations for a sample of accounts and months during the examination period, and ascertained that the bank account reconciliations were performed monthly and non-reconciling items were researched and resolved within 90 days.	No exceptions noted

**Objective 17 – Withdrawals and Distributions:** Controls provide reasonable assurance that withdrawal and distribution requests are valid and processed in an accurate, complete, and timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
17.1	Requests for withdrawals are received and authorized by appropriate parties, and reviewed for completeness prior to processing in the recordkeeping system.	Inspected a sample of withdrawals processed during the examination period, and ascertained that the withdrawal requests were authorized and reviewed for completeness prior to processing in the recordkeeping system.	No exceptions noted
17.2	The recordkeeping system calculates the amount of proceeds for withdrawal transactions. If applicable, an appropriate approver reviews the transaction for accuracy per department standards.	<p>Observed the recordkeeping system systematic configuration on multiple occasions during the examination period, and ascertained that the recordkeeping system automatically calculated the amount of proceeds for the withdrawal. Observed that for plans without full service vesting, the recordkeeping system prompted the user for forfeiture information based on the written authorization for disbursements. Ascertained that the field was automatically populated for a plan with full service vesting. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.</p> <p>Inspected distribution summary packets for a sample of distributions processed during the examination period, and ascertained that each selected distribution was quality checked and authorized by another team member if the disbursement amount was greater than the approved limit set by management based on employee’s job level.</p>	No exceptions noted
17.3	The recordkeeping system prevents withdrawals greater than funds available.	Observed the recordkeeping system systematic configuration during the examination period, and ascertained that the recordkeeping system parameters did not allow the withdrawal transactions to be completed if the request was greater than the funds available. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
17.4	For rush checks and wires processed outside of the record keeping system and directly within SAP, required approval steps are performed by appropriate personnel, based on predetermined dollar thresholds.	Inspected a sample of manual rush checks, wires, and ACH distributions that were processed outside the record keeping system and directly within SAP during the examination period, and ascertained that appropriate approval was obtained based on dollar thresholds.	No exceptions noted
17.5	The recordkeeping system requires online authorization by a second party for withdrawal transactions (if applicable), based on specific dollar limits approved by management based on employee job level, approved by management.	<p>Inspected the recordkeeping system systematic configuration during the examination period, and ascertained that the recordkeeping system systematically required online authorization by a second party for processing withdrawal transactions based on specific dollar limits approved by management based on employee job level. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.</p> <p>Inspected the listing of authorization limits and associated job titles for employees authorized to process withdrawals during the examination period, and ascertained that the withdrawals were authorized by an employee with appropriate approval limits based on employee job responsibilities.</p> <p>Inspected supporting documentation for a sample of withdrawals processed during the examination period, and ascertained that each selected withdrawal was quality checked and authorized by another team member if the amount was greater than the approved limit set by management based on employee's job level.</p>	No exceptions noted
17.6	Edit checks (e.g., dates in date fields, format, and validity of SSNs) are implemented in the recordkeeping system to prevent certain data entry errors while entering and modifying participant data.	Observed the recordkeeping system systematic edit checks during the examination period, and ascertained that the recordkeeping system did not process transactions with certain data entry errors. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
17.7	Disbursements pending authorization are monitored to ensure timely processing.	Observed, during the examination period, an Operations Manager monitor the Disbursement Pending Authorization Report for one week, and ascertained all items on the report were addressed and resolved within the week.  Inspected the Disbursements Pending Authorization Reports Review for a sample of weeks throughout the testing period, and ascertained that management reviewed pending disbursements for completeness and timeliness of processing.	No exceptions noted
17.8	Disbursement Batch Error reports are run daily to identify withdrawals that did not process overnight. Any unprocessed withdrawals are researched and resolved by personnel.	Inspected the Disbursement Batch Error reports for a sample of days during the testing period, and ascertained that unprocessed withdrawals were researched and resolved within the established timeframe.	No exceptions noted
17.9	State and federal withholding reconciliations are performed daily and monthly by appropriate personnel in FinTax and reviewed by management to ensure the accuracy and completeness of tax reportable distributions.	Inspected the state and federal withholding reconciliations for a sample of days and months during the examination period, and ascertained that the reconciliations were performed, reviewed, and differences were researched and resolved.	No exceptions noted
17.10	An independent quality control review is performed over disbursements to evaluate authorization, accuracy, and timeliness of processing. Any discrepancies identified are corrected and improvement recommendations are provided, if applicable.	Inspected disbursement reviews for a sample of months during the examination period, and ascertained that management performed the reviews for the selected months to ensure completeness, accuracy, authorization, and timeliness of disbursement processing.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
17.11	A review of bank reconciliations is performed for each bank account to ensure the balances per the ledger are reconciled to the bank statement and the general ledger account balance is properly accounted for under each basis of accounting.	<p>Observed, during the examination period, a Banking Service representative reconcile bank accounts to the general ledger, and noted that discrepancies were investigated and resolved within 90 days.</p> <p>Inspected bank reconciliations for a sample of accounts and months during the examination period, and ascertained that the bank account reconciliations were performed monthly and discrepancies were researched and resolved within 90 days.</p>	No exceptions noted
17.12	The Reconciliation Team performs outgoing cash suspense reconciliations on a monthly basis and resolves discrepancies. Aged items over predetermined thresholds are reviewed by management.	<p>Observed, during the examination period, a Reconciliation Team representative perform the outgoing cash suspense reconciliation, and noted that discrepancies were investigated and resolved and items over predetermined thresholds were reviewed by management.</p> <p>Inspected suspense reconciliations for a sample of months during the examination period, and ascertained that the outgoing cash suspense account reconciliations were performed and aged items over predetermined thresholds were reviewed by management.</p>	No exceptions noted
17.13	A system control exists in the recordkeeping system that prevents entering loans from exceeding \$50,000 or 50% of the vested account balance.	Observed the recordkeeping system systematic configuration during the examination period, and ascertained that loan transactions entered for more than \$50,000 or greater than 50% of the vested account balances were automatically rejected within the recordkeeping system. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.	No exceptions noted
17.14	Request for correction requires appropriate instruction and/or documentation to support the need for corrective processing and are completed, reviewed and approved, if applicable.	Inspected a sample of corrections during the examination period, and ascertained that the selected corrections were completed as requested, reviewed, and approved, if applicable.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
17.15	A service request queue is reviewed daily by the Resolution team to ensure completeness of corrections.	<p>Observed, during the examination period, the Resolution team review the Service Request queue related to plan changes to monitor the progress of plan changes to completion.</p> <p>Inspected a system screenshot as of the end of the testing period and ascertained that all items in the resolution queue were within timeliness standards or assigned to appropriate resolution personnel for resolution.</p>	No exceptions noted

**Objective 18 – Loans:** Controls provide reasonable assurance that delinquent loans are identified completely and timely, and defaulted in accordance with regulatory provisions.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
18.1	A systems batch job is scheduled to identify unpaid assessments based on plan loan default thresholds. If applicable, tax forms and default notification letters are produced and mailed to participants.	<p>Inspected regulatory provisions during the examination period, and ascertained that delinquent loans were processed in accordance with regulatory provisions.</p> <p>Inspected the automated job scheduler during the examination period, and ascertained that a batch job is scheduled to automatically generate a letter to the participant stating that the loan is in default. Further, ascertained that batch processing failures were resolved by Production Support personnel.</p> <p>Inspected copies of generated letters for a sample of defaulted loans processed during the examination period, and ascertained letters, including tax forms and default notification letters, were mailed to participants, which specified the date payment was required to bring the account current, and subsequently when the loan was in default.</p>	No exceptions noted



**Objective 19 – Fees:** Controls provide reasonable assurance that valid requests for new fee setups, changes, corrections, terminations, and reversals are processed in the recordkeeping system in an accurate, complete, and timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
19.1	An independent quality control review is performed over new fees, changes, or terminations to evaluate that the fees are appropriately reflected in the recordkeeping system. Any discrepancies identified are corrected and improvement recommendations are provided, if applicable.	Inspected a sample of fee setups, fee structure changes, or fee terminations during the examination period, and ascertained that requests to add new fees, changes, corrections, and terminations to fees were reviewed by an independent quality control reviewer for accuracy by a Fee/Billing Coordinator/Analyst prior to adding the fee or making the changes to the plan in record keeping system.	No exceptions noted
19.2	The Batch Error Report is reviewed for fees rejected by the system, which are researched and resolved, as appropriate.	Inspected Batch Error Reports for a sample of days during the examination period, and ascertained that the daily batch error reports were reviewed by a Fee/Billing Coordinator/Analyst and unprocessed fees were researched and resolved.	No exceptions noted
19.3	The Recoveries Waiting to Bill Report is reviewed for invoicing errors, including anomalies and outliers, which are researched and resolved, as appropriate.	Inspected the Recoveries Waiting to Bill Report for a sample of weeks during the examination period, and ascertained that the selected Recoveries Waiting to Bill Report were reviewed by a Fee/Billing Coordinator/Analyst and bills not yet generated were researched and resolved.	No exceptions noted
19.4	The Group Account Recovery Report (GARR) is reviewed for pre-determined fee rule combinations to identify anomalies and outliers, which are researched and resolved, as appropriate.	Inspected Group Account Recovery Reports for a sample of weeks during the examination period. For a subselection of fee rule anomalies/outliers, ascertained the items were reviewed by a Fee/Billing Coordinator/Specialist and researched and resolved, as appropriate.	No exceptions noted

**Objective 20 – Income/Valuation:** Controls provide reasonable assurance that investment income, corporate actions, and participant account values are calculated, processed, and recorded in an accurate, complete, and timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
20.1	All rates credited to participant guaranteed accounts are reviewed by a second party at the standard level. Rates identified as missing at the group level are researched and resolved accordingly.	Inspected rate checklists for a sample rates during the examination period, and ascertained that a second party reviewed all interest rates that were entered into the recordkeeping system at the standard level and a sample of rates at the group level, and rates identified as missing at the group level were researched and resolved.	No exceptions noted
20.2	The Investment Control Department reviews the VAA2 price comparison screen for any discrepancies between the two price sources and resolves any issues before finalizing.	<p>Observed an Investment Control Department representative review recorded share prices received prior to authorizing the upload of information into recordkeeping system, and VAA2.</p> <p>Inspected VAA2 for a sample of days during the examination period, and ascertained that the share prices of mutual funds were reviewed, and discrepancies were researched and resolved in a timely manner by the Investment Control Department.</p>	No exceptions noted
20.3	For Wrapped accounts, the Investment Control Department reviews the UV Cloud Tolerance Report for any significant discrepancies between the comparisons of the change in share price (taking into consideration income & expenses) to the change in MUV and resolves any material issues before finalizing.	<p>Observed, during the examination period, an Investment Control representative obtain the Unit Value Variance report/UV Cloud Tolerance Report and review the underlying share price percentage change to the unit value percentage change from one day to the next and noted that differences over established thresholds were researched and resolved timely.</p> <p>Inspected Unit Value Variance report/UV Cloud Tolerance Report and daily checklists for a sample of days during the examination period, and ascertained that the underlying share price percentage change to the unit value percentage change from one day to the next were reviewed and variances over established thresholds were researched and resolved timely by the Investment Control Department.</p>	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
20.4	A mutual fund periodic dividend and capital gain schedule is maintained by the Investment Control Department. Periodic dividends and capital gain rates, once received, are reviewed for accuracy and compared to the periodic dividend schedule for completeness. Periodic dividends and capital gain rates, once reviewed and approved, are loaded into OTF_VAA2 and then published to UV Cloud, FUNDLinx, and the recordkeeping system.	<p>Observed, during the examination period, an Investment Control Department representative obtain rates from the fund house, review the rates for accuracy and compare to the periodic dividend schedule or rates provided by VMS, and load mutual fund periodic dividend and capital gain rates into the recordkeeping system, PAM/UV Cloud, and FUNDLinx, via OTF VAA2. Identified discrepancies were researched and resolved.</p> <p>Inspected the periodic rate comparison for a sample of days during the examination period and ascertained that the dividends and capital gains loaded to the recordkeeping system, PAM/PFI/UV Cloud, and FUNDLinx via VAA2 were compared to the period dividend schedule or rates provided by VMS for completeness and that discrepancies were researched and resolved.</p>	No exceptions noted
20.5	Daily accrual rates are received, reviewed and recorded by the Investment Control Department. Daily accrual rates are reviewed prior to the upload of rates into VAA2. Rates in VAA2 are then loaded into the recordkeeping system, UV Cloud, and FUNDLinx. Discrepancies are researched and resolved.	<p>Observed, during the examination period, an Investment Control Department representative review recorded daily accrual rates prior to the upload of rates into VAA2 where they are loaded into recordkeeping system, UV Cloud, and FUNDLinx.</p> <p>Inspected the daily checklists for a sample of days during the examination period, and ascertained that the daily accrual rates were reviewed, and discrepancies were researched and resolved in a timely manner.</p>	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
20.6	The Investment Control Department reconciles reinvested dividend and capital gain shares from the fund house back to the recordkeeping system/UV Cloud. Discrepancies, based on established thresholds, are researched and resolved.	<p>Observed, during the examination period, an Investment Control Department representative reconcile reinvested dividend and capital gain shares between the fund house and recordkeeping system/UV Cloud, and noted that discrepancies above established thresholds were researched and resolved.</p> <p>Inspected the Investment Control Department reconciliations for a sample of dividends and capital gains during the examination period, and ascertained that the reconciliations between the fund house reinvested shares and the recordkeeping system/UV Cloud system were completed. Noted that discrepancies greater than the established thresholds were researched and resolved.</p>	No exceptions noted
20.7	The Investment Control Department reviews the UV Cloud Breakage Report for any significant discrepancies between the Market Value compared to net assets and resolves any issues.	<p>Observed, during the examination period, an Investment Control Department representative review the UV Cloud Breakage Report comparing between the Market Value to net assets.</p> <p>Inspected a sample of UV Cloud Breakage Reports during the examination period and ascertained the Investment Control Department representative reviews for any significant discrepancies between the Market Value compared to net assets and resolved any issues.</p>	No exceptions noted

**Objective 21 – New Fund Setup and Fund Changes:** Controls provide reasonable assurance that new funds and changes to funds are authorized and established in an accurate, complete, and timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
21.1	The Fund Setup and Mapping team receives notification of a new fund setup from a CSM, Plan Change, Plan Implementation, the Mutual Fund Company (Corporate Actions), or GW Products, and then uses a checklist along with fund data obtained from the requestor or Morningstar to set up the funds within the established timeliness standards. New fund setups are reviewed prior to the effective date of the fund for the plan(s) by a Fund Setup and Mapping employee who did not set up the fund.	<p>Observed, during the examination period, the fund setup and review process with a Products representative, and ascertained that new mutual funds were set up in the recordkeeping system using a checklist along with fund data from the requestor/Morningstar and were reviewed by a separate Products employee in a timely manner.</p> <p>Inspected the new fund packets for a sample of new mutual fund setups to the recordkeeping system during the examination period, and ascertained that the new fund details were authorized and established in a complete and accurate manner, based on the fund checklist and fund data obtained from the requestor or Morningstar, and that the new fund setups were completed and reviewed prior to the effective date of the fund for the plan(s) by a Fund Setup and Mapping employee who did not perform the setup.</p>	No exceptions noted
21.2	The Fund Setup and Mapping team receives notification Corporate Actions (fund company driven events, specifically mergers, liquidations, cusip and/or ticker changes) and then uses a checklist along with data obtained from the requestor or the recordkeeping system to process the change within the established timeliness standards. Fund changes are reviewed in a timely manner by Fund Setup and Mapping employee who did not perform the change.	<p>Inspected the fund change documentation for a sample of fund company driven events processed during the examination period, and ascertained that the fund company driven event change was authorized and independently reviewed for accuracy by a Fund Setup and Mapping employee who did not perform the change.</p> <p>Inspected the fund change documentation for a sample of fund company driven event changes processed during the examination period, and ascertained that the fund change was established within predetermined timeliness standards.</p>	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
21.3	The Fund Setup and Mapping team receives notification of fund changes from a CSM, Plan Change, Plan Implementation, and GW Products, and then uses a checklist along with data obtained from the requestor or the recordkeeping system to process the change within the established timeliness standards. Fund changes are reviewed in a timely manner by a Fund Setup and Mapping employee who did not perform the change.	<p>Inspected the fund change documentation for a sample of fund changes processed during the examination period, and ascertained that the fund change was authorized and independently reviewed for accuracy by a Fund Setup and Mapping employee who did not perform the change.</p> <p>Inspected the fund change documentation for a sample of fund changes processed during the examination period, and ascertained that the fund change was established within predetermined timeliness standards.</p>	No exceptions noted
21.4	The Investment Control Department reviews and approves holdings reconciliations between fund houses, FUNDLinx, recordkeeping system, and UV Cloud and verifies if any items outside the tolerance limits have sufficiently detailed comments including any corrective actions initiated.	<p>Observed, during the examination period, an Investment Department representative reconcile share positions between FUNDLinx, the recordkeeping system/UV Cloud, and the fund houses, and research and resolve discrepancies greater than the established thresholds.</p> <p>Inspected the share reconciliations for a sample of days during the examination period, and ascertained that the reconciliations of share positions between FUNDLinx system, the recordkeeping system/UV Cloud and the fund houses were completed, and noted that discrepancies greater than the established thresholds were resolved.</p>	No exceptions noted

**Objective 22 – Asset and Stock Purchases and Redemptions:** Controls provide reasonable assurance that asset and employer stock purchase and redemption transactions are traded and recorded in an accurate, complete, and timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
22.1	A reconciliation is performed between the number of trades received from the recordkeeping system and the number of trades loaded into FUNDLinx on a daily basis to ensure trades were executed, and any discrepancies are researched and resolved.	Inspected the reconciliation for a sample of days during the examination period and ascertained that the number of trades received from the recordkeeping system and the number of trades loaded into FUNDLinx was reconciled and that any discrepancies were researched and resolved.	No exceptions noted
22.2	Trade tickets prepared by FUNDLinx are time stamped and settled according to the security type settlement requirements.	Inspected trade tickets prepared by FUNDLinx for a sample of days during the examination period, and ascertained that the trade tickets were produced, time-stamped, and settled according to the security type settlement requirements.	No exceptions noted
22.3	Suspense accounts related to trading activity are reconciled between the recordkeeping trade source and the settlement source on a daily basis, and reconciling items are identified, documented, aged, and resolved.	Inspected the suspense account reconciliation for a sample of days during the examination period, and ascertained that trading activity was reconciled between the recordkeeping trade source and the settlement trade source and that reconciling items were identified, documented, aged, and resolved.	No exceptions noted
22.4	Suspense accounts related to trading activity are reviewed by management monthly to ensure complete and accurate processing of suspense items.	Inspected suspense account reviews for a sample of months during the examination period, and ascertained that the suspense accounts related to trading activity were reviewed by management to ensure complete and accurate processing of suspense items.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
22.5	The Investment Control Department reviews and approves holdings reconciliations between fund houses, FUNDLinx, and recordkeeping system/UV Cloud and verifies if any items outside the tolerance limits have sufficiently detailed comments including any corrective actions initiated.	<p>Observed, during the examination period, an Investment Department representative reconcile share positions between FUNDLinx, the recordkeeping system /UV Cloud, and the fund houses/bank custodian, and research and resolve discrepancies greater than the established thresholds.</p> <p>Inspected the share position reconciliations for a sample of days during the examination period, and ascertained that the reconciliations of share positions between the fund house/bank custodian, FUNDLinx, and the recordkeeping system /UV Cloud were completed, and noted that discrepancies greater than the established thresholds were resolved by Investment Control.</p>	No exceptions noted
22.6	Investment cash-clearing bank accounts are reconciled daily by Investment Control. Discrepancies are researched and resolved.	Inspected investment cash-clearing reconciliations for a sample of days during the examination period, and ascertained that reconciliations were completed and discrepancies were researched and resolved by Investment Control.	No exceptions noted
22.7	Clearing accounts are reconciled between the recordkeeping system and the External Trustee statement on a daily basis, and reconciling items are identified, documented, aged, and resolved.	Inspected investment cash-clearing reconciliations for a sample of days and External Trustees during the examination period, and ascertained that reconciliations were completed and discrepancies were documented, aged, and resolved.	No exceptions noted
22.8	Investment Control performs a daily reconciliation of the unit and/or share positions between the recordkeeping system, external trustee, and fund house as applicable. Discrepancies, based on established thresholds, are researched and resolved.	Inspected the share position reconciliations for a sample of days during the examination period, and ascertained that the reconciliations of share positions between the recordkeeping system, external trustee, and fund house as applicable were completed, and noted that discrepancies greater than the established thresholds were researched and resolved by Investment Control.	No exceptions noted



**Objective 23 – Compliance:** Controls provide reasonable assurance that needed discrimination tests are completed accurately, completely, and in a timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
23.1	The Compliance Department obtains census data from each employer requiring discrimination tests. Compliance personnel review the census data for good order.	<p>Observed during the examination period, a Compliance representative review the census data obtained from the employer for good order.</p> <p>Inspected supporting documentation for a sample of active plans requiring discrimination tests during the examination period, and ascertained that the data supplied by the employer was reviewed by compliance personnel for good order.</p>	No exceptions noted
23.2	The census data received in good order is tested in a timely manner and results are reviewed by a peer and/or management before mailing to the employer. For plans other than Safe Harbor plans that send in their census data by the end of the month following the plan year-end, the testing should be completed within 2 ½ months, to avoid the 10% excise tax, if applicable. For Safe Harbor plans and plans that send in their census data after 31 days following their plan year end, the testing must be completed prior to the plans next plan year end.	<p>Observed during the examination period, a Compliance representative review the test results prior to mailing the information to the employer and noted that all issues were resolved prior to mailing to the employer.</p> <p>Inspected supporting documentation for a sample of plans requiring discrimination testing during the examination period, and ascertained that the testing results were reviewed by a peer or by management before they were mailed to the employer.</p> <p>Inspected supporting documentation for a sample of plans requiring discrimination testing during the examination period, and ascertained that the non-Safe Harbor plans that sent in their census data prior to the 31-day deadline were sent to the employer within the deadline of 2 ½ months from the plan year end, to avoid the excise tax, if applicable. Also ascertained that Safe Harbor plans or plans that sent in their census data after the 31-day deadline were sent to the employer within the deadline of the plan's next plan year end.</p>	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
23.3	If the plan fails testing, corrective forms are provided to the employer along with instructions as to the corrective actions required by the employer, as applicable.	Inspected supporting documentation for a sample of plans that failed year end testing during the examination period, and ascertained that corrective forms were provided to the employer along with instructions as to the corrective actions required by the employer, as applicable.	No exceptions noted
23.4	The management team reviews the status reports on a monthly basis to ensure that the compliance testing is being reviewed and completed within a timely manner to meet applicable deadlines.	<p>Observed, during the examination period, a Compliance Manager review the monthly compliance testing report for items approaching their deadline, and ascertained that identified items were addressed by management to ensure timeliness of compliance testing.</p> <p>Inspected supporting documentation for a sample of months, and ascertained that a review of the completion of compliance services review was performed as evidenced by management sign off.</p>	No exceptions noted

**Objective 24 – Compliance:** Controls provide reasonable assurance that IRS Form 5500 is completed accurately, completely, and in a timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
24.1	The Compliance Department receives specific information to complete Form 5500 and required schedules from each plan sponsor. The information is reviewed for good order.	Inspected supporting documentation for a sample of plans requiring the preparation of a Form 5500, and ascertained that the Compliance Department reviewed submitted plan documentation and information for good order.	No exceptions noted
24.2	The Form 5500 and required schedules are completed by the government imposed deadlines based on the timely information received in good order from the plan sponsor. For Schedule-H filings, a Form 5500 checklist is prepared, and the information is reviewed by management or a peer prior to mailing. For 5500-SF filings, a checklist is prepared to review uploaded information against plan provided information prior to mailing.	<p>Observed, during the examination period, a Compliance representative reviews the Form 5500 and applicable information prior to mailing to the employer.</p> <p>Inspected supporting documentation for a sample of plans requiring the preparation of Form 5500, and ascertained that the checklists were prepared, and the Form 5500 information was reviewed by a peer or management prior to mailing. If the filing was for a Form 5500 – SF filing, ascertained that the uploaded information was reviewed by the preparer of the checklist to against plan provided information prior to mailing.</p> <p>Inspected supporting documentation for a sample of plans requiring the preparation of Form 5500, and ascertained that the Form 5500 and required schedules were completed by the government imposed deadlines based on the timely information received in good order from the plan sponsor.</p>	No exceptions noted
24.3	The management team reviews the status reports on a monthly basis to ensure that the 5500 filings are being reviewed and completed within a timely manner to meet applicable deadlines.	<p>Observed, during the examination period, a Compliance Manager review the monthly 5500 Filing report for items approaching their deadline and ascertained that identified items were addressed by management to ensure timeliness of 5500 filings.</p> <p>Inspected supporting documentation for a sample of months, and ascertained that a review of the completion of compliance services review was performed as evidenced by management sign off.</p>	No exceptions noted

**Objective 25 – Plan and Participant Statement Reporting:** Controls provide reasonable assurance that the quarterly participant statements and plan summaries are complete, accurate, and sent timely following each calendar quarter-end.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
25.1	Prior to generating, participant statements are audited on a test basis; once audited, an approval for generation is provided to the Business Statement Team members.	Inspected the statement release approval documentation for a sample of plans during the examination period, and ascertained that the selected plans' participant statements were audited on a test basis and statements were approved for release (processing) prior to being generated by the Business Statement Team.	No exceptions noted
25.2	System controls built into the participant statement and plan summary generation process ensure that the data on the statement is accurate. Rejected participant statements are sent to the Systems Statement Team, along with associated rejection codes and are investigated by Systems Statement Team members for resolution. Participant statements and plan summaries are generated after all rejections are resolved.	<p>Inspected the systematic configuration during the examination period, and ascertained that an Autosys batch job is scheduled to run nightly and send an email, along with the corresponding rejection codes, notifying the Statements team of any rejections requiring resolution.</p> <p>Observed the recordkeeping system systematic configuration during the examination period, and ascertained that the recordkeeping system is configured to reject plan and participant statements based on rejection codes. Further, noted that the system configurations are subject to change management testing at Objective 1 – Systems Development and Maintenance.</p> <p>Inspected Rejected Statements Reports for a sample of days/plans during the examination period, and ascertained that rejected participant statements were corrected prior to distribution.</p>	No exceptions noted
25.3	After printing participant statements and plan summaries, the statements and summaries are sent within the date contractually agreed upon, after quarter end. The mailing date is logged for tracking purposes.	Inspected the recordkeeping system screens and associated supporting documentation for a selection of plans during the examination period, and ascertained that the receipt and mailing dates were logged and that statements within those plans were sent completely and within 15 business days, or the date contractually agreed upon, after quarter end. Further ascertained that the mailing date for summaries provided electronically is automatically logged in the tracking system.	No exceptions noted

**Objective 26 – Returned Checks:** Controls provide reasonable assurance that returned checks are investigated and processed in an accurate, complete, and timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
26.1	Returned checks are delivered to the Corporate Mail Room, date stamped, voided, imaged, and destroyed. Imaged items are sent to OnBase where they are indexed into the Workflow system.	<p>Observed, during the examination period, Mail Room representatives receive returned checks in the Corporate Mail Room, and date stamp, void, image, and prepare the returned checks for destruction. Observed a review of imaged items in OnBase and noted that the items scanned were included in OnBase and legible and indexed into the Workflow system.</p> <p>Inspected supporting documentation for a sample of returned checks, and ascertained that checks received were voided.</p> <p>Inspected documentation for a sample of quarters, and ascertained that a third party document management company destroyed date stamped, voided, and imaged items sent for destruction.</p>	No exceptions noted
26.2	Returned checks greater than \$5k are reviewed and processed according to internal requirements, including vendor address searches and mail holds, as applicable. Checks that are reissued and require a change to the original distribution (i.e., change in address, amount, etc.) are, if applicable, reviewed and authorized in accordance with existing systematic guidelines.	<p>Inspected supporting documentation for a sample of returned checks, and ascertained that returned checks are reviewed and processed according to internal requirements, including vendor address searches and mail holds, as applicable.</p> <p>Inspected supporting documentation for a sample of returned checks, and ascertained that checks that were reissued and required a change to the original distribution were, if applicable, reviewed and authorized by someone other than the processor, or completed in accordance with existing systematic guidelines.</p>	No exceptions noted
26.3	A weekly review of the workflow queue for returned checks are monitored by management for complete and timely processing.	Inspected the weekly review of the workflow queue relating to returned checks for a sample of weeks during the examination period, and ascertained returned checks were monitored by management for complete and timely processing.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
26.4	An independent quality control review is performed over Returned Checks to evaluate accurate, complete, and timely processing. Any discrepancies identified are corrected and improvement recommendations are provided, if applicable.	Inspected returned check reviews for a sample of months during the examination period, and ascertained that management reviewed returned checks for accurate, complete, and timely processing.	No exceptions noted
26.5	The recordkeeping system requires online authorization by a second party for withdrawal transactions (if applicable), based on specific dollar limits by employee job level, approved by management.	<p>Inspected the recordkeeping system systematic configuration during the examination period, and ascertained that the recordkeeping system systematically required online authorization by a second party for processing withdrawal transactions based on specific dollar limits approved by management based on employee job level. Further, noted that the system configuration is subject to change management testing at Objective 1 – Systems Development and Maintenance.</p> <p>Inspected the listing of authorization limits and associated job titles for employees authorized to process withdrawals during the examination period, and ascertained that withdrawals were authorized by an employee with appropriate approval limits based on employee job responsibilities.</p> <p>Inspected supporting documentation for a sample of withdrawals processed during the examination period, and ascertained that each selected withdrawal was quality checked and authorized by another team member if the amount was greater than the approved limit set by management based on employee's job level.</p>	No exceptions noted

**Objective 27 – Reconciliations:** Controls provide reasonable assurance that cash and security positions are reconciled between Empower and the depositories in an accurate, complete, and timely manner.

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
27.1	A review of bank reconciliations is performed for each bank account to ensure the balances per the ledger are reconciled to the bank statement and the general ledger account balance is properly accounted for under each basis of accounting.	Observed, during the examination period, a Banking Services representative reconcile bank accounts to the general ledger and that discrepancies were researched and resolved within 90 days.  Inspected bank reconciliations for a sample of accounts and months during the examination period, and ascertained that the bank account reconciliations were performed monthly and discrepancies were researched and resolved within 90 days.	No exceptions noted
27.2	A reconciliation is performed between the number of trades received from the recordkeeping system and the number of trades loaded into FUNDLinx on a daily basis to ensure trades were executed and any discrepancies are researched and resolved.	Inspected the reconciliation for a sample of days during the examination period and ascertained that the number of trades received from the recordkeeping system and the number of trades loaded into FUNDLinx was reconciled and that any discrepancies were researched and resolved.	No exceptions noted
27.3	Suspense accounts related to trading activity are reconciled between the recordkeeping trade source and the settlement source on a daily basis, and reconciling items are identified, documented, aged, and resolved.	Inspected the suspense account reconciliation for a sample of days during the examination period, and ascertained that trading activity was reconciled between the recordkeeping trade source and the settlement trade source and that reconciling items were identified, documented, aged, and resolved.	No exceptions noted

Control Title	Control Activity	Tests Performed by Deloitte & Touche LLP	Results of Tests Performed by Deloitte & Touche LLP
27.4	The Investment Control Department reviews and approves holdings reconciliations between fund houses, FUNDLinx, and recordkeeping system/UV Cloud and verifies if any items outside the tolerance limits have sufficiently detailed comments including any corrective actions initiated.	Inspected the share position reconciliations for a sample of days during the examination period (which included employer stock purchases and redemption for the period), and ascertained that the reconciliations of share positions between the fund house, FUNDLinx, and the recordkeeping system /UV Cloud were completed by the Investment Control Department, and noted that discrepancies, based on tolerance limits, were researched and resolved.	No exceptions noted
27.5	Investment cash-clearing bank accounts are reconciled daily by Investment Control. Discrepancies are researched and resolved.	Inspected investment cash-clearing reconciliations for a sample of days during the examination period (which included employer stock purchases and redemption for the period), and ascertained that reconciliations were completed and discrepancies were researched and resolved.	No exceptions noted
27.6	Clearing accounts are reconciled between the recordkeeping system and the External Trustee statement on a daily basis, and reconciling items are identified, documented, aged, and resolved.	Inspected investment cash-clearing reconciliations for a sample of days and External Trustees during the examination period, and ascertained that reconciliations were completed and discrepancies were documented, aged, and resolved.	No exceptions noted
27.7	Investment Control performs a daily unit and/or share reconciliation of the share positions between FUNDLinx, the recordkeeping system, the External Trustee and fund house as applicable. Discrepancies, based on established thresholds, are researched and resolved.	Inspected the share position reconciliations for a sample of days during the examination period, and ascertained that the reconciliations of share positions between the fund house/bank custodian and the recordkeeping system were completed, and noted that discrepancies greater than the established thresholds were researched and resolved by Investment Control.	No exceptions noted



Section V:  
Other Information  
Provided by  
Management of Empower

# Section V: Other Information Provided by Management of Empower

The information included in Section V is presented by Empower to provide additional information to user entities and is not a part of Empower’s description of controls. The information in Section V has not been subjected to the procedures applied in the examination of the aforementioned description of Empower’s controls related to its defined contribution plan recordkeeping services and related general computer controls and, accordingly, Deloitte & Touche LLP expresses no opinion on the descriptions contained within Section V. Note that, as with all information included in Section V of this report, the following information should be used for informational purposes only.

## I. Management’s response to exceptions noted:

**Control Objective 6:** Controls provide reasonable assurance that access to applications, underlying databases and supporting operating systems is limited to authorized and appropriate personnel.

Control Number	Control Activity	Exception Noted	Management Response
6.5	Appropriate individuals review users with general and special privilege or sensitive account access periodically. Account access is modified, as necessary.	<p>Oracle ITS Database</p> <p>Exception Noted</p> <p>For one of two quarters (Q2), access was not modified as requested per the review. Q3 was later performed, with all access removed timely.</p> <p>No exceptions noted for all other in-scope systems.</p>	For Q2, the Oracle ITS database non-privileged user access review was completed and the revocation request for two users were not processed timely. Management performed an analysis of the two users and determined the users did not have update access to the data, are current associates who transitioned roles and are appropriate to view the data stored within the Oracle ITS database.

## II. Disaster Recovery and Business Resumption Plans

### Overview

Empower has established and maintains a Business Continuity Program (the “BC Program”) to ensure that business products and services are available to customers in a timely fashion, even in the unlikely event of a major business interruption. The BC Program requires employees at all levels, including senior management, to commit to Empower’s goals in order to develop and maintain the necessary business recovery capabilities.

The BC Program incorporates business impact analyses and contingency planning at multiple levels, incident management guidelines, emergency notification, and disaster declaration processes. Various components of the BC Program are exercised on a regular basis using scenario-based exercises, coordinated by the Director of Enterprise Resiliency, who reports up to the Chief Information Security Officer. Empower includes in its BC Program social distancing strategies to ensure a consistent and clearly articulated approach in the event of a pandemic and includes plans to address unplanned market closures.

### Business Resumption Strategy

Empower’s priority in the event of a disaster is to safely evacuate employees from the affected area(s). In the event its headquarters should suffer a severe business interruption, Empower’s business restoration strategy consists of the following:

- Empower will assemble its executive management team, its designated business continuity response team, information technology teams, or any combination of those groups as appropriate to the situation. Empower utilizes an automated notification system provided by a third-party service provider to initiate communications and facilitate conference calls and/or in-person meetings. Incident response personnel will assess the extent of the disruption, declare a disaster if necessary, and provide direction regarding the restoration of essential business functions.
- If a disaster is declared, mission-critical business functions will be restored first, while other functional areas will be restored as resources become available. Empower Retirement identifies its mission-critical business functions through annual business impact analyses (BIAs) and requires functional areas to maintain Business Continuance Plans (BCP’s) that set forth detailed recovery procedures.
- Upon a disaster declaration, Empower restores critical support services, both centralized and decentralized, such as computer operations (all platforms), telephony and LAN/WAN networks.

### Business Resumption Plan

Empower has developed precautionary measures in its daily business operations, pre-positioned, dedicated recovery facilities, and prepared recovery plans to resume critical business functions should an office or data center become unavailable for normal business. Each action plan specifies the emergency steps to be taken in the event of a major business interruption and provides detailed information regarding critical business functions, recovery/restoration procedures, crisis communications, personnel, equipment, forms, supplies, and other support items. Action plans are also maintained to address such events as an unplanned market closure.

Data Center Backup Power Program. Computer systems are protected from power failures with a secondary power supply, generators and uninterruptable power supplies (UPS). This system allows Empower to maintain the continuity and integrity of its computer and communications operations.

Data Backup and Retention. Information Technology Storage personnel ensure backups of systems and data occur reliably on a schedule that meets the most aggressive business requirements for that data. Two copies of the backups are replicated off-site to two geographically distinct data centers. Backups are sent off-site daily and are encrypted. Backups have various retention policies dependent upon business requirements for that data.

Disaster Recovery (DR). Empower maintains geographically diverse, out of region, systems recovery capabilities. Recovery systems are in place for Empower’s critical production systems, data and infrastructure. These systems are connected via Wide Area Network (WAN) to the production locations with redundant circuits. Data replication is ongoing using various technologies to meet the recovery point defined by the applicable business function. Additional WAN circuits connect the DR locations and the Alternate Work Centers

(see below), providing Empower with connectivity to compute platforms. Should the primary systems become inaccessible, production will be redirected to the recovery systems.

Workforce Recovery. Empower provides workforce recovery through a combination of strategies, including tele-commuting, and geographic distribution of staff. Empower has offices distributed throughout the country where staff perform certain critical functions daily. In addition to the distributed workforce, Empower has deployed a secure, robust tele-working/work from home strategy to provide secure access, flexibility and rapid recovery with capacity to support 100% of our staff.

### **Social Distancing and Pandemic Planning**

Empower addresses pandemic planning and social distancing as a component of its BC Program. In planning for a pandemic event, Empower assumes its systems will be available, but access to its facilities and/or workforce may be impacted. At the earliest stages of an actual or potential pandemic, Empower may increase its cleaning and sanitation measures, especially of high-touch areas. In addition, Empower will increase employee communications about the pandemic, especially to address hygiene issues similar to those referenced by the CDC and other public health agencies.

Empower has secure tele-working capabilities to enable all staff to work from home during a pandemic. Empower also has action plans in place that may be activated at various levels of employee absenteeism and/or severity of the pandemic. Depending on the situation, Empower may invoke any combination of the following response measures: travel restrictions, social distancing, encouraging sick employees to stay home, teleconferencing for meetings, shift work or alternative work arrangements, or modification of leave policies.

### **III. Empower Advisory Group**

*Information described below related to the Empower Advisory Group (EAG) is being provided for informational purposes only and is not within the scope of this report.*

#### *Additional Information*

##### *Advisory Services*

This product is a suite of services that includes a non-discretionary online investment advice, and a discretionary-managed account service. Advisory Services are offered by EAG and EAG's relationship with its subadvisors is structured pursuant to U.S. Department Labor Advisory Opinion 2001-09A, which speaks to an independent financial expert (IFE) who provides investment methodology. Two IFEs (Morningstar Investment Management LLC and Financial Engines Advisors L.L.C.) provide the advice for the services that EAG deploys on the recordkeeping system.

Advisory Services are delivered through two advice engines provided by the IFEs that produce alternative asset allocations for the participants that are personalized, quality, and consistent, regardless of which point of access is used.

Participants that elect to use the non-discretionary online investment advice are provided with information on how they might improve their likelihood of meeting their retirement income needs such as savings rate change proposals and alternative asset allocations. The participant chooses whether to implement the proposals and is responsible for monitoring his/her own account. This service is provided at no additional cost to the participant.

Participants that elect to use the discretionary-managed account service are provided with information on how they might improve their likelihood of meeting their retirement income needs such as savings rate change proposals and alternative asset allocations. The service will monitor and rebalance the participant's account as lifestyle and circumstances change. The participant receives periodic updates regarding the managed account service. There is an asset-based fee for this service.

The participant will agree to the fee and terms of service prior to enrolling.

EAG utilizes the recordkeeper to collect advisory service fees from participant accounts on a regular basis. The fees are described to the participant in the Terms of Service or Terms & Conditions and Supplement. The fee is explicit, assessed quarterly or monthly depending on the plan sponsor agreement, and a participant can view the fee online or via the quarterly recordkeeping statement.

## **IV. Hybrid Plans**

*Information described below related to the Hybrid Plans is being provided for informational purposes only and is not within the scope of this report.*

There are a limited number of plans that have both a daily and a balance forward-valued component. These plans are referred to as Hybrid Plans. The balance forward component can be valued annually, semi-annually, quarterly, or monthly.

During the last week of the month, Empower will review the Hybrid Plan list to determine which plans will need an earnings update for that month-end statement run. Empower will place disbursement and statement holds on all plans needing an earnings update.

Trust statements for each group are obtained either from a website or hardcopy depending on which partner plan is involved.

To begin the valuation, Empower will print the recordkeeping system Generic ("GENR") report for the appropriate reporting period.

The next step is to calculate the gain or loss, and post it to the recordkeeping system. The ending value on the recordkeeping system must match the trust statements and all transactions verified as matching the recordkeeping system other than the G/L. Fees are posted to the recordkeeping system separately for all partners. All calculations are peer reviewed before submitting a Service Request for update to the recordkeeping system.

The next step is to enter the calculated G/L and fees (if applicable) into the recordkeeping system Asset Reallocation Reports (ARRT) to prorate the G/L and fees across all active participants as of the ending report date.

The Financial Operations Reconciliation team will transmit the prorated earnings and fees on an attachment in the service request to the appropriate departments. After the departments have posted the earnings allocation, there is confirmation of the updated balance for the month end date after the earnings and fee service requests are processed and completed. The updated balanced in the reconciliation is part of the quality control.

Once the values are updated Empower will remove the distribution and statement holds, so processing may continue.