



Pension Benefit Guaranty Corporation

Office of Inspector General

Audit Report

**Report on Internal Controls Related to the Audit of the
Pension Benefit Guaranty Corporation's
Fiscal Year 2016 and 2015 Financial Statements**

November 15, 2016

AUD 2017-3/FA-16-110-2

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Office of Inspector General
Pension Benefit Guaranty Corporation

November 15, 2016

TO: Thomas Reeder
Director

Patricia Kelly
Chief Financial Officer

FROM: Nina Murphy 
Assistant Inspector General for Audits

SUBJECT: Report on Internal Controls Related to the Pension Benefit Guaranty Corporation's Fiscal Years 2016 and 2015 Financial Statement Audit (AUD-2017-3/FA-16-110-2)

I am pleased to transmit the report prepared by CliftonLarsonAllen LLP resulting from their audit of the PBGC Fiscal Year 2016 and 2015 Financial Statements. The purpose of this report is to provide more detailed discussions of the specifics underlying the unqualified opinion on internal controls over financial reporting provided in the control deficiencies section of the combined Independent Auditor's Report dated November 15, 2016 (AUD-2017-2/FA-16-110-1).

The attached management response to the draft report indicates management's agreement and commitment to addressing the recommendations contained in the report and to remediating the associated significant deficiencies. The Inspector General Act requires that audit recommendations be resolved within a maximum of 6 months from report issuance. Please provide a corrective action plan and an estimated completion to the Office of Inspector General within 30 days.

November 15, 2015

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We would like to take this opportunity to express our appreciation for the overall cooperation provided during the performance of the audit.

cc: Thomas Reeder
Patricia Kelly
Alice Maroni
Cathleen Kronopolus
Ann Orr
Karen Morris
Michael Rae
Robert Scherer
Judith Starr
Theodore Winter
Marty Boehm

Report on Internal Controls Related to the
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Acronyms

ASD	Actuarial Services Division
BAPD	Benefits Administration and Payment Department
DoPT	Date of Plan Termination
ERISA	Employee Retirement Income Security Act of 1974
FOD	Financial Operations Department
FY	Fiscal Year
IPVFB	Integrated Present Value of Future Benefit
IT	Information Technology
NIST	National Institute of Science and Technology
OIG	Office of Inspector General
OMB	Office of Management and Budget
PBGC	Pension Benefit Guaranty Corporation
PPS	Premium Practitioner System
PVFB	Present Value of future Benefit
RMF	Risk Management Framework
SP	Special Publication

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Independent Auditors' Report

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Supplemental Report on Internal Control

To the Board of Directors, Management,
and the Inspector General of the
Pension Benefit Guaranty Corporation
Washington, DC

We have audited the financial statements of the Pension Benefit Guaranty Corporation (PBGC or the Corporation) as of and for the year ended September 30, 2016, and have examined management's assertion included in PBGC's Annual Report about the effectiveness of the internal control over financial reporting (including safeguarding assets) and PBGC's compliance with certain provisions of laws, regulations, contracts and grant agreements, and have issued our audit report thereon dated November 15, 2016 (see Office of Inspector General (OIG) report AUD 2017-2/FA-16-110-1).

We conducted our audit and examination in accordance with auditing standards generally accepted in the United States of America; *Government Auditing Standards*, issued by the Comptroller General of the United States; attestation standards established by the American Institute of Certified Public Accountants; and Office of Management and Budget (OMB) Bulletin No. 15-02, *Audit Requirements for Federal Financial Statements*.

In our Independent Auditors' Report on PBGC's fiscal year (FY) 2016 financial statements, we identified certain deficiencies in internal control that we collectively consider to be significant deficiencies. The purpose of this report is to provide more detailed information on these deficiencies.

Summary

PBGC protects the pensions of nearly 40 million workers and retirees in nearly 24 thousand private defined benefit pension plans. Under Title IV of the Employee Retirement Income Security Act of 1974 (ERISA), PBGC insures, subject to statutory limits, pension benefits of participants in covered private defined benefit pension plans in the United States. The establishment of a robust internal control framework and the implementation of the appropriate internal control activities are essential to PBGC operations. OMB Circular A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*, requires agencies to integrate risk management and internal control functions. The Circular also requires management perform an assessment of its internal controls based on GAO's Standards for Internal Control in the Federal Government (known as the Green Book). The Green Book defines internal control as a process used by management to help an entity achieve its objectives.

During FY 2016, we observed improvements to the internal controls within PBGC operations that impacted long-standing control deficiencies reported in previous years. These improvements led to a change in classification of a previously reported material weakness in controls over the PVFB liability to a significant deficiency.

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However, management is continuing its corrective actions related to certain findings as discussed below.

In our FY 2016 Independent Auditors' Report, we identified the following significant deficiencies:

1. Controls over the Present Value of Future Benefit (PVFB) Liability
2. Present Value of Nonrecoverable Future Financial Assistance
3. Entity-wide Security Program Planning and Management
4. Access Controls and Configuration Management

The following provides an overview of the significant deficiencies identified in our report.

1. Controls over the Present Value of Future Benefit (PVFB) Liability

The Office of Benefits Administration (OBA) continues to make progress in their remediation efforts to correct long-standing deficiencies related to controls over the PVFB liability. The PVFB liability represents the estimated liability for future benefits that PBGC is, or will be, obligated to pay participants of covered Single-Employer and certain Multiemployer pension plans. Some of these efforts included refining OBA's organizational structure and the department's senior leadership team, updating and implementing specific plan asset valuation policies and procedures, and enlisting subject matter experts to perform key functions. Management performed a more in-depth risk assessment analysis of OBA's operations, to determine root causes of long-standing issues and procedures to mitigate such risks. Further, management's effort has led to the closure of several recommendations, previously identified by the Office of Inspector General and CliftonLarsonAllen LLP, resulting in the resolution of a long standing deficiency regarding the Corporation's valuation of plan assets and benefits.

However, the results of our FY 2016 procedures reveal certain controls over the calculation of the PVFB liability require management's continued focus.

Calculation of the Present Value of Future Benefits Liability

We continued to identify errors in the calculation of participant benefits and the related PVFB liability similar to those identified in prior audits. During our testing of the PVFB liability reported at June 30 and September 30, we identified:

- Errors caused by system limitations or programming flaws
- Data entry errors and inaccurate use of plan data provisions

Similar to the prior year test results, we continued to calculate an average error rate that exceeds more than 20% of samples tested. Using a statistically-based sampling technique, we identified approximately 27% of the samples tested in which the calculated liability for a plan participant was either overstated or understated. Our projection of our sample results suggests that, most likely, \$78 billion liability is overstated by approximately \$349 million at September 30, 2016. Our projection also indicates the balance may be understated by as much as approximately \$712 million and overstated by as much as approximately \$1.4 billion. As the Corporation continues to refine business processes related to the calculation of Individual Participant Valuation benefit liabilities, the resolution of these errors requires management

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continued focus to accurately calculate valuations for some participant's benefits and properly estimate and report related future liabilities.

Recommendations:

- Develop and/or implement improvements to the OBA systems used to calculate benefits and liabilities (Integrated Present Value Futures Benefit (IPVFB) and Spectrum) to:
 1. Value annuities starting before the age of 15.
 2. Value joint survivor to same-sex beneficiaries. **(OIG Control # FS-16-01)**
- Perform risk assessment to identify primary cause of data entry and inaccurate use of plan data provision errors. **(OIG Control #FS-16-02)**
- Implement corrective action to address root cause of data entry and inaccurate use of plan data provisions. **(OIG Control # FS-16-03)**
- Investigate the cause underlying the IPVFB valuation of the terminated recoupment and include the correction of that flaw to the IPVFB modernization project. **(OIG Control # FS-15-01) (PBGC scheduled completion date: December 31, 2018)**
- Expand modernization efforts to Spectrum and the IPVFB systems to:
 1. Value the actual popup benefit for Joint and Survivor Popup annuity forms.
 2. Value non-level and surviving spouse benefits without the need for supplemental tables. **(OIG Control # FS-14-06) (PBGC scheduled completion date: December 31, 2018)**
- Continue to promptly correct the errors in its calculations identified by the auditors during the FY 2013 testing of the Individual Participant Valuation. **(OIG Control # FS-13-01) (PBGC revised completion date: December 31, 2018)**
- Continue to develop and/or implement improvements to the OBA systems (Spectrum and the IPVFB) to:
 1. Record and value separate benefit components payable under different annuity forms.
 2. Record and value anticipated future benefit amount changes.
 3. Record and value temporary joint and survivorship benefits. **(OIG Control # FS-13-02) (PBGC scheduled completion date: December 31, 2018)**

2. Present Value of Nonrecoverable Future Financial Assistance (PV NRFFA)

The PV NRFFA represents the estimated nonrecoverable payments PBGC will make to certain multiemployer plans that will not be able to meet their benefit obligations to plan participants. Further, the classification of the future multiemployer liability is determined based on the projected date of insolvency. A cash flow model is updated by actuaries using various assumptions to calculate the PV NRFFA liability at September 30.

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The lack of a quality control review process contributed to control deficiencies we found during testing of the PV NRFFA liability at September 30. Specifically, we identified:

- Failure to use the most current and relevant data to update the actuarial assumptions needed to calculate the PV NRFFA
- Errors in the data inputs used to calculate PV NRFFA

The Multiemployer Working Group Procedures for 2016, Appendix D, states that, “PBGC will use the most recently available data”. In addition, “Actuarial Services and Technology Department (ASTD) will follow its existing controls for review and sign off on data entry and computations”.

We identified the errors in the samples examined for the large and medium plans as well as the small bulk reserve calculated for small plans. The calculated errors for the large and medium plans were approximately \$101 million and the small bulk reserve was approximately \$2 million at September 30.

Recommendations:

- Prepare separate annual assumption memos for the multiemployer and single-employer programs, with each assumption memo incorporating more refined key assumptions applicable to each program. **(OIG Control # FS-16-04)**
- Consider methods of calculating, reviewing, and documenting plan level adjustments to the IPVFB inputs in order to take individual plan conditions into account. **(OIG Control # FS-16-05)**
- Refine current quality control review procedures to effectively minimize data input errors. **(OIG Control # FS-16-06)**

3. Entity-wide Security Program Planning and Management

While PBGC continued to make progress in addressing the Corporation’s entity-wide security program planning and management control deficiencies, these efforts have not resulted in a fully implemented effective entity-wide information security program as required under OMB and the National Institute of Standards and Technology (NIST) guidance. These requirements provide a framework for assessing and managing risk, including developing and implementing security policies and procedures, conducting security awareness training, monitoring the adequacy of the entity’s computer-related controls through security tests and evaluations, and implementing remedial actions as appropriate. Without a well-designed program, security controls may be inadequate; responsibilities may be unclear, misunderstood and improperly implemented; and controls may be inconsistently applied. Such conditions may lead to insufficient protection of the Corporation’s sensitive or critical resources.

We note the following progress by management in this area. In FY 2016, PBGC developed and published the PBGC Risk Management Framework (RMF) Process to transition and fully implement an entity-wide information security risk management program. PBGC’s IT risk management focuses on identifying and evaluating the threats and opportunities pertinent to the

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proposed IT program/project and identifying risk management and mitigation strategies. The RMF will address both security and privacy controls when fully implemented. PBGC is proactive in addressing new federal guidance on IT security and privacy and developing corrective actions to address potential control gaps. In addition, PBGC has developed and is implementing a plan to be fully compliant with OMB Circular A-130, *Managing Information as a Strategic Resource*, issued on July 28, 2016.

PBGC, however, has not fully implemented components of its entity-wide information security risk management program. Some components not fully implemented include the following:

- Completion of the implementation of PBGC's-wide security program and management, which supports PBGC organizational, mission and information system objectives by addressing each of the six RMF phases: categorize, select, implement, assess, authorize, and monitor
- Full implementation of a continuous monitoring program
- Common control compliance with NIST SP 800-53, Revision 4, *Security and Privacy Controls for Federal Information Systems and Organizations* requirements
- Completion of the transition to NIST 800-53, Revision 4 security controls
- Full Implementation of common controls and remediation of common control weaknesses
- Availability of common controls to system owners for appropriate inclusion in system security plans

PBGC implementation of NIST's RMF will establish an integrated enterprise-wide decision structure for cybersecurity risk management that includes and integrates PBGC mission and information system objectives, which will transition to near real-time risk management. This Framework will also address common controls weaknesses and full implementation of continuous monitoring controls. The Corporation had established a timeline for transition to the RMF requirements by September 2016. The Enterprise Cybersecurity Division Monthly update for November 2015 identified that the NIST 800-53, Revision 4 controls transition should be completed by January 29, 2016. As of August 30, 2016, 43% of enterprise common controls (ECCs) have been implemented. The Information Technology Infrastructure Operations Department (ITIOD) owns 153 of the ECCs, of which 16% have been implemented.

Recommendations:

- Complete the PBGC RMF transition, fully implement the entity-wide information security risk management program and provide periodic updates to stakeholders. **(OIG Control Number FS-15-02) (PBGC completion date: December 31, 2016)**
- Complete the migration to NIST SP 800-53, Revision 4, *Security and Privacy Controls for Federal Information Systems and Organizations* and provide periodic updates to stakeholders. **(OIG Control Number FS-15-03) (PBGC completion date: December 31, 2016)**
- Complete the implementation of NIST SP 800-53, Revision 4 controls for common controls, remediation of common controls weaknesses and make available to system owners in Cyber Security Assessment and Management for appropriate inclusion in their system

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security plans. (OIG Control Number FS-15-04) (PBGC completion date: December 31, 2016)

3. Access Controls and Configuration Management

While PBGC made progress in addressing access controls and configuration management deficiencies identified in previous years, this progress did not fully resolve some security weaknesses. Weaknesses in the PBGC IT environment continue to contribute to deficiencies in system configuration, segregation of duties and role-based access controls based on least privilege.

In FY 2016, PBGC continued to implement various tools and processes to establish a more coherent environment for access controls and configuration management security controls. PBGC, however, pushed out the dates for many planned corrective actions by one year or more. We continue to make the recommendations noted below to address the underlying access controls and configuration management weaknesses in PBGC's information system security controls. The controls not fully implemented include the following:

- Implementation of controls to remedy vulnerabilities identified in key databases and applications, such as weaknesses in configuration, roles, privileges, auditing, file permission and operating system access
- Development and implementation of processes and procedures for determining and documenting defined security configuration checklists for database applications
- Implementation of requirements for the disposition of dormant accounts for all PBGC systems
- Full implementation of controls to remove separated users from systems and applications
- Removal and decommission of systems and databases that have reached their end of service life
- Development and implementation of a plan of action to address known security weaknesses in accordance with PBGC's timeline for corrective actions

Access controls and configuration management controls are an integral part of an effective information security management program. Access controls limit or detect inappropriate access to systems, protecting the data from unauthorized modification, loss or disclosure. Agencies should have formal policies and procedures, and related control activities should be properly implemented and monitored. Configuration management ensures changes to systems are tested and approved and systems are configured securely in accordance with policy.

An information system is comprised of many components¹ that can be interconnected in a multitude of arrangements to meet a variety of business, mission and information security needs. How these information system components are networked, configured and managed is critical in providing adequate information security and supporting an organization's risk management process.

¹ Information system components include, for example, mainframes, workstations, servers (e.g., database, electronic mail, authentication, Web, proxy, file, domain name), network components (e.g., firewalls, routers, gateways, voice and data switches, wireless access points, network appliances, sensors), operating systems, middleware, and applications.

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Recommendations:

- Implement controls to remedy vulnerabilities identified in key databases and applications, such as weaknesses in configuration, roles, privileges, auditing, file permissions, and operating system access. **(OIG Control # FS-07-14) (PBGC revised completion date: June 30, 2018*)**
- Apply controls to remove/disable inactive and dormant accounts after a specified period for the affected systems in accordance with the PBGC Information Security Policy (formerly IAH). **(OIG Control # FS-07-12) (PBGC revised completion date: to be determined***)**
- Continue to remove unnecessary user and generic accounts. **(OIG Control # FS-07-08) (PBGC revised completion date: to be determined***)**
- Fully implement controls to plan, remove and decommission unsupported systems and databases **(OIG Control # FS-16-07)**
- Develop and implement plan of action for addressing known security weaknesses. **(OIG Control # FS-16-08)**

This report is intended for the information and use of the management and Inspector General of PBGC and is not intended to be and should not be used by anyone other than these specified parties.



CliftonLarsonAllen LLP

Calverton, Maryland
November 15, 2016

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Status of Internal Control Report Recommendations:

Prior Year Internal Control Report Recommendations Closed During FY 2016	Date Closed	Original Report Number
FS-07-07	09/29/2016	2008-2/FA-0034-2
FS-07-10	10/20/2016	2008-2/FA-0034-2
FS-09-12	09/29/2016	AUD-2010-2/FA-09-64-2
FS-11-07	10/18/2016	AUD-2012-2/FA-11-82-2
FS-11-09	10/25/2016	AUD-2012-2/FA-11-82-2
FS-12-02	10/25/2016	AUD-2013-2/FA-12-88-2
FS-11-11	10/18/2016	AUD-2012-2/FA-11-82-2
FS-14-01	10/18/2016	AUD-2015-3/FA-14-101-3
FS-14-02	11/9/2016	AUD-2015-3/FA-14-101-3
FS-14-03	11/9/2016	AUD-2015-3/FA-14-101-3
FS-14-04	10/25/2016	AUD-2015-3/FA-14-101-3
FS-14-16	10/25/2016	AUD-2015-3/FA-14-101-3
FS-14-19	03/23/2016	AUD-2015-3/FA-14-101-3
FS-14-20	10/25/2016	AUD-2015-3/FA-14-101-3
FS-14-21	09/20/2016	AUD-2015-3/FA-14-101-3
FS-14-22	09/20/2016	AUD-2015-3/FA-14-101-3
FS-14-46	04/05/2016	AUD-2015-3/FA-14-101-3
FS-14-47	04/05/2016	AUD-2015-3/FA-14-101-3
FS-14-48	04/05/2016	AUD-2015-3/FA-14-101-3
FS-15-05	09/30/2016	AUD-2016-3/FA-15-108-3

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Open Recommendations as of September 30, 2016:

Recommendation	Report
Prior Years'	
FS-07-08***	2008-2/FA-0034-2
FS-07-12***	2008-2/FA-0034-2
FS-07-14*	2008-2/FA-0034-2
FS-13-01	AUD-2014-3/FA-13-93-2
FS-13-02	AUD-2014-3/FA-13-93-2
FS-14-06	AUD-2015-3/FA-14-101-3
FS-14-15**	AUD-2015-3/FA-14-101-3
FS-15-01	AUD-2016-3/FA-15-108-3
FS-15-02	AUD-2016-3/FA-15-108-3
FS-15-03	AUD-2016-3/FA-15-108-3
FS-15-04	AUD-2016-3/FA-15-108-3
FY Ended September 30, 2016	

* The dates have been revised one or more times by management.

** The recommendation remains open and has been move to the Management Letter.

*** PBGC has not established a revised completion date.

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Pension Benefit Guaranty Corporation
1200 K Street, N.W., Washington, D.C. 20005-4026

Office of the Director

MEMORANDUM

November 15, 2016

To: Robert Westbrooks
Inspector General

From: W. Thomas Reeder 
Director

Subject: Response to Draft FY 2016 Internal Control Report

Thank you for the opportunity to comment on the draft FY 2016 internal control report. We generally agree with this year's findings and recommendations, with the understanding that additional communications may be needed as we move forward.

As your draft report reflects, with respect to the agreed-upon recommendations from prior years, we continue to make substantive progress. We continue to establish detailed corrective action plans to address the areas needing additional work and are committed to reporting on our progress on each and every recommendation both within management and to your office.

We are pleased that your report recognizes the progress made in benefits administration in FY 2016, reducing the *material weakness* to a *significant deficiency* by improving the controls over our process to calculate our Present Value of Future Benefits Liability. In addition, your report's acknowledgement of the progress made in eliminating the *significant deficiency* related to our premium controls is much appreciated.

We also appreciate the recognition of the progress that PBGC made in addressing IT security and access controls, as we have detailed plans in place to address these.

Clearly, work remains to be done. Management stands prepared to do whatever is necessary to address the new *significant deficiency* related to the present value of nonrecoverable future financial assistance.

Working with your office throughout FY 2017 will certainly make PBGC an even better agency in service to millions of Americans.

cc:

Patricia Kelly
Cathleen Kronopolus
Alice Maroni
Karen Morris
Ann Orr
Michael Rae
Robert Scherer
Judith Starr
Martin O. Boehm
Theodore J. Winter

Report on Internal Controls Related to the
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Fiscal Year 2016 and 2015 Financial Statements

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Updated Management Response

Received on December 22, 2016

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Pension Benefit Guaranty Corporation
1200 K Street, N.W., Washington, D.C. 20005-4026

Office of the Director

MEMORANDUM

December 22, 2016

To: Robert Westbrooks
Inspector General

From: W. Thomas Reeder 
Director

Subject: Supplemental Management Response to FY 2016 Report on Internal Controls

Thank you for incorporating our earlier response into the FY 2016 Report on Internal Controls. The attachment to this memorandum provides additional information regarding our plans to address the eight recommendations which were included in that report.

As we work to address these recommendations, we will coordinate with your office, as needed, and will submit, for your review, evidence documenting any corrective actions taken.

Addressing OIG audit recommendations in a timely and effective manner helps improve PBGC's control environment and support compliance with OMB Circular A-50, *Audit Follow-up*, and the Government Accountability Office's *Standards for Internal Control in the Federal Government*.

Please contact Marty Boehm should you have any questions.

cc:

Patricia Kelly	Cathleen Kronopolus
Alice Maroni	Karen Morris
Ann Orr	Michael Rae
Robert Scherer	Judith Starr
Martin O. Boehm	Theodore J. Winter

OIG Recommendation No. FS-16-01: Develop and/or implement improvements to the OBA systems used to calculate benefits and liabilities (Integrated Present Value Futures Benefit (IPVFB) and Spectrum) to (1) value annuities starting before the age of 15, and (2) value joint survivor to same-sex beneficiaries.

PBGC Response: PBGC agrees with this recommendation. The following corrective actions will be taken in response to this recommendation:

IPVFB was modified to include mortality prior to age 14 in the latest release of the IPVFB Modernization System. This change will be reflected in the March 31, 2017 valuation. IPVFB will be modified to value joint and survivor annuities for same-sex beneficiaries in the next release of the system. This change should be reflected in the June 30, 2017 valuation. ASD estimates that we will provide supporting documentation to address both issues by June 30, 2017.

Recommendation No. FS-16-02: Perform risk assessment to identify primary cause of data entry and inaccurate use of plan data provision errors.

PBGC Response: PBGC agrees with this recommendation. The following corrective actions will be taken in response to this recommendation:

ASD will analyze the data entry and calculation exceptions that were reported during the FY 2013 – FY 2016 financial statement audits. We will use the results of this analysis to identify the risks associated with these errors and assess the impact to the calculation of the liability reported on PBGC's financial statements. Upon completion of the analysis we will develop any policies or procedures that are necessary to address these issues. The estimated completion date for the risk assessment is June 30, 2017.

Recommendation No. FS-16-03: Implement corrective action to address root cause of data entry and inaccurate use of plan data provisions.

PBGC Response: PBGC agrees with this recommendation. The following corrective actions will be taken in response to this recommendation:

ASD will publish and implement any policies or procedures that are necessary to address the results of Recommendation No. FS-16-02. The estimated completion date for this is December 31, 2017.

Recommendation No. FS-16-04: Prepare separate annual assumption memos for the multiemployer and single-employer programs, with each assumption memo incorporating more refined key assumptions applicable to each program.

PBGC Response: PBGC agrees with this recommendation. The following corrective actions will be taken in response to this recommendation:

Beginning with the December 31, 2016 valuation, ASD will begin using separate assumption memos for the single and multiemployer programs. Each memo will incorporate more refined key assumptions applicable to each program. ASD will regularly monitor assumptions and the key assumptions in the memo to make future improvements on an as needed basis. The estimated completion date for these corrective actions is June 30, 2017.

Recommendation No. FS-16-05: Consider methods of calculating, reviewing, and documenting plan level adjustments to the IPVFB inputs in order to take individual plan conditions into account.

PBGC Response: PBGC agrees with this recommendation. The following corrective actions will be taken in response to this recommendation:

In the first half of FY 2017, ASD will investigate and analyze the impact of utilizing plan level adjustments to IPVFB inputs and under which circumstances, if any, is it appropriate to take individual plan conditions into account. Upon completion of the analysis, ASD will update procedures as necessary and utilize those procedures for future valuations. The estimated completion date for these corrective actions is June 30, 2017.

Recommendation No. FS-16-06: Refine current quality control review procedures to effectively minimize data input errors.

PBGC Response: PBGC agrees with this recommendation. The following corrective actions will be taken in response to this recommendation:

With respect to the small and large plan errors, in the first half of FY2017, ASD will conduct a thorough review of current quality control review procedures to analyze where errors are likely to occur and take appropriate steps to change review procedures to minimize the likelihood of these data input errors. ASD will update those procedures as necessary and utilize those procedures for future valuations. The estimated completion date for these corrective actions is June 30, 2017.

With respect to the small bulk reserve error, NRAD will similarly conduct a thorough review of current quality control review procedures to analyze where errors are likely to occur and take appropriate steps to change review procedures to minimize the likelihood of data input

errors. NRAD will update those procedures as necessary and utilize those procedures for future calculations of the Small Plan Bulk Reserve and identification of high risk large and medium plans. NRAD will complete these corrective actions by June 30, 2017.

Recommendation No. FS-16-07: Fully document and implement controls to plan, remove and decommission unsupported systems and databases.

PBGC Response: PBGC agrees that we need to remove unsupported software from the PBGC environment. Though PBGC has already documented and implemented controls to plan, remove, and decommission unsupported systems and databases as documented in the RCF submission for Recommendation No. OIT-152, we need more time to complete the removal of key infrastructure that is no longer vendor-supported. The current estimated completion date for this effort is June 30, 2018, and PBGC will submit evidence of corrective actions for this recommendation at that time.

Recommendation No. FS-16-08: PBGC should continue to develop and mature the credential scanning program and processes to remediate credentialed scan results in accordance with PBGC's policy.

PBGC Response: PBGC agrees that we should continue to develop and mature the credential scanning program, and provide evidence of maturation in connection with the audit of PBGC's FY 2017 financial statements. As such, PBGC will submit evidence of corrective actions for this recommendation by June 30, 2017.