



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

**OFFICE OF THE
INSPECTOR GENERAL**

December 29, 2011

MEMORANDUM TO: R. William Borchardt
Executive Director for Operations

FROM: Stephen D. Dingbaum */RA/*
Assistant Inspector General for Audits

SUBJECT: STATUS OF RECOMMENDATIONS: INDEPENDENT
EVALUATION OF NRC'S IMPLEMENTATION OF THE
FEDERAL INFORMATION SECURITY MANAGEMENT ACT
FOR FISCAL YEAR 2011 (OIG-12-A-04)

REFERENCE: DEPUTY EXECUTIVE DIRECTOR FOR CORPORATE
MANAGEMENT MEMORANDUM DATED DECEMBER 19,
2011

Attached is the Office of the Inspector General's (OIG) analysis and status of recommendations 1 through 6 as discussed in the agency's response dated December 19, 2011. Based on this response, recommendations 1 through 6 are resolved. Please provide an update on all recommendations by November 26, 2012.

If you have any questions or concerns, please call me at 415-5915 or Beth Serepca, Team Leader, at 415-5911.

Attachment: As stated

cc: N. Mamish, OEDO
J. Arildsen, OEDO
K. Brock, OEDO
C. Jaegers, OEDO

Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act for Fiscal Year 2011

OIG-12-A-04

Status of Recommendations

Recommendation 1: Develop and implement an organizationwide risk management strategy that is consistent with NIST SP 800-37 and NIST SP 800-39.

Agency Response Dated December 19, 2011: Agree. NRC will develop and implement an organization-wide risk management strategy that is consistent with NIST SP 800-37 and NIST SP 800-39.

Target Completion Date: December 30, 2013, pending availability of funds.

OIG Analysis: The proposed corrective action meets the intent of the recommendation. This recommendation will be closed when OIG receives verification that the risk management strategy has been implemented.

Status: Resolved.

Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act for Fiscal Year 2011

OIG-12-A-04

Status of Recommendations

Recommendation 2: Revise existing configuration management procedures to include performance measures and/or monitoring procedures to ensure standard baseline configurations are implemented for all systems.

Agency Response Dated December 19, 2011:

Agree. NRC understands the importance of having clearly documented configuration management standards, and measurements to ensure that these standards are adequately adhered to. NRC will work to revise existing configuration management procedures with CSO and OIS working jointly to update our Project Management Methodology to include baseline configuration management procedures and appropriate performance measures along with where possible, automated enterprise monitoring capabilities to ensure standard baseline configurations are implemented at the system component level.

Target Completion Date: December 30, 2013, pending availability of funds.

OIG Analysis:

The proposed corrective action meets the intent of the recommendation. This recommendation will be closed when OIG receives verification that the configuration management procedures have been modified accordingly.

Status:

Resolved.

Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act for Fiscal Year 2011

OIG-12-A-04

Status of Recommendations

Recommendation 3: Revise existing configuration management procedures to include performance measures and/or monitoring procedures to ensure baseline configurations are documented for all systems.

Agency Response Dated
December 19, 2011:

Agree. NRC understands the need to document the baseline configuration for information system components that are designated for configuration management, that have been formally reviewed and agreed on at a given point in time, and which can be changed only through approved change control procedures. Consequently, NRC will revise existing change control and associated configuration management procedures to include appropriate performance measures and where possible, automated enterprise monitoring capabilities to ensure baseline configurations are documented for all systems.

Target Completion Date: December 30, 2013, pending availability of funds.

OIG Analysis:

The proposed corrective action meets the intent of the recommendation. This recommendation will be closed when OIG receives verification that the configuration management procedures have been modified accordingly.

Status:

Resolved.

Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act for Fiscal Year 2011

OIG-12-A-04

Status of Recommendations

Recommendation 4: Revise existing configuration management procedures to include performance measures and/or monitoring procedures to ensure software compliance assessments, including vulnerability assessments, are performed as required: (i) before a system is connected to the NRC production environment, (ii) during security test and evaluation of systems, and (iii) as part of the agency's continuous monitoring environment.

Agency Response Dated
December 19, 2011:

Agree. NRC understands that if an information system is inconsistent with approved configurations as defined by the organization's baseline configurations of system components, the System Security Plan, etc., or an organization's component inventory is inaccurate, the organization may be unaware of potential vulnerabilities and not take actions that would otherwise mitigate those vulnerabilities and protect the system from attacks. NRC will implement a configuration monitoring strategy to confirm that the existing configuration conforms to the current approved baseline configuration, that all items in the component inventory can be identified and are associated with the appropriate information system, and, if possible, whether there are any unapproved (i.e., not recorded in the component inventory) components and will revise existing change control and configuration management procedures to include appropriate performance measures and where possible, automated enterprise monitoring capabilities to ensure software compliance assessments, including vulnerability assessments, are performed as required: (i) before a system component is connected to the NRC production environment, (ii) during security test and evaluation of systems, and (iii) as part of the agency's continuous monitoring environment.

Target Completion Date: June 30, 2014, pending availability of funds.

**Independent Evaluation of NRC's Implementation of the Federal Information
Security Management Act for Fiscal Year 2011**

OIG-12-A-04

Status of Recommendations

Recommendation 4 (continued):

OIG Analysis: The proposed corrective action meets the intent of the recommendation. This recommendation will be closed when OIG receives verification that the configuration management procedures have been modified accordingly.

Status: Resolved.

Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act for Fiscal Year 2011

OIG-12-A-04

Status of Recommendations

Recommendation 5: Revise existing configuration management procedures to include performance measures and/or monitoring procedures to ensure all systems components are included in requisite software compliance assessments.

Agency Response Dated December 19, 2011:

Agree. NRC understands that an information system may have many components for which baseline configurations must be implemented and where practical, should ensure 100 percent of information system components are assessed for compliance and flaw remediation over time. NRC will implement a tool that adheres to the principals of the Security Protocol Automation Protocol developed by NIST for maintaining the security of enterprise systems to automatically verify the installation of patches, check system security configuration settings, and examine systems for signs of compromise and will revise existing configuration management procedures to include where possible, performance measures and automated enterprise monitoring capabilities to ensure all systems components are included in requisite software compliance assessments

Target Completion Date: June 30, 2014, pending availability of funds.

OIG Analysis: The proposed corrective action meets the intent of the recommendation. This recommendation will be closed when OIG receives verification that the configuration management procedures have been modified accordingly.

Status: Resolved.

Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act for Fiscal Year 2011

OIG-12-A-04

Status of Recommendations

Recommendation 6: Revise existing configuration management procedures to include performance measures and/or monitoring procedures to ensure all identified vulnerabilities, including configuration-related vulnerabilities, scan findings and security patch-related vulnerabilities, are remediated in a timely manner in accordance with the timeframes established by NRC.

Agency Response Dated
December 19, 2011:

Agree. NRC understands that a systematic, accountable, and documented process for managing exposure to vulnerabilities through timely deployment of patches and mitigation of configuration-related and scan finding vulnerabilities is an essential security practice for proactive prevention of the exploitation of IT vulnerabilities that might exist within the agency. NRC will revisit the current management process and develop an approach for implementing a security patch and vulnerability remediation program and will revise existing configuration management procedures to include where possible, performance measures and automated enterprise monitoring capabilities to ensure all identified vulnerabilities, including configuration-related vulnerabilities, scan findings and security patch-related vulnerabilities, are remediated in a timely manner in accordance with best practices and timeframes established by NRC and within existing budgetary resources.

Target Completion Date: June 30, 2014, pending availability of funds.

OIG Analysis: The proposed corrective action meets the intent of the recommendation. This recommendation will be closed when OIG receives verification that the configuration management procedures have been modified accordingly.

Status: Resolved.