EDO Principal Correspondence Control

FROM: DUE: 04/04/12 EDO CONTROL: G20120158
DOC DT: 03/08/12
FINAL REPLY:

Stephen D. Dingbaum, OIG

TO:

Borchardt, EDO

FOR SIGNATURE OF : ** GRN ** CRC NO:

Virgilio, DEDR

DESC: ROUTING:

Audit of the Nuclear Regulatory Commission's Management of the Baseline Security Inspection Program (OIG-12-A-10) (EDATS: OEDO-2012-0140)

Borchardt
Weber
Virgilio
Ash
Mamish
OGC/GC
Zimmerman, OE
Dean, RI
McCree, RII
Pederson, RIII
Collins, RIV
Arildsen, OEDO

DATE: 03/08/12

ASSIGNED TO: CONTACT:

NSIR Wiggins

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EDATS

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EDATS Number: OEDO-2012-0140 **Source:** OEDO

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Assigned To: NSIR
OEDO Due Date: 4/4/2012 11:00 PM
Other Assignees:
SECY Due Date: NONE
Subject: Audit of the Nuclear Regulatory Commission's Management of the Baseline Security Inspection Program (OIG-12-A-10)
Description:
CC Routing: OE; RegionI; RegionII; RegionIII; RegionIV
ADAMS Accession Numbers - Incoming: NONE
Response/Package: NONE

Other Information

Cross Reference Number: G20120158, OIG-12-A-10
Staff Initiated: NO
Related Task:
Recurring Item: NO
File Routing: EDATS
Agency Lesson Learned: NO
OEDO Monthly Report Item: NO

Process Information

Action Type: Memo
Priority: Medium
Sensitivity: None
Signature Level: DEDR
Urgency: NO
Approval Level: No Approval Required
OEDO Concurrence: NO
OCM Concurrence: NO
OCA Concurrence: NO
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Document Information

Originator Name: Stephen D. Dingbaum
Date of Incoming: 3/8/2012
Originating Organization: OIG
Document Received by OEDO Date: 3/8/2012
Addressee: R. W. Borchardt, EDO
Date Response Requested by Originator: 4/6/2012
Incoming Task Received: Memo

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

OFFICE OF THE
INSPECTOR GENERAL

March 8, 2012

MEMORANDUM TO: R. William Borchardt
Executive Director for Operations

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

SUBJECT: AUDIT OF NRC'S MANAGEMENT OF THE BASELINE SECURITY INSPECTION PROGRAM (OIG-12-A-10)

Attached is the Office of the Inspector General's audit report titled, *Audit of NRC's Management of the Baseline Security Inspection Program.*

This report presents the results of the subject audit. Agency comments provided at the February 29, 2012, exit conference have been incorporated, as appropriate, into this report.

Please provide information on actions taken or planned regarding each of the recommendations within 30 days of the date of this memorandum. Actions taken or planned are subject to OIG follow-up in accordance with Management Directive 6.1.

We appreciate the cooperation extended to us by the members of your staff during this audit. If you have any questions or wish to discuss anything prior to the exit conference, please call me at 415-5915 or Beth Serepca, Team Leader, at 415-5911.

Attachment: As stated

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

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

OFFICE OF THE
INSPECTOR GENERAL

March 8, 2012

MEMORANDUM TO: Chairman Jaczko

FROM: Hubert T. Bell /RA/
Inspector General

SUBJECT: AUDIT OF NRC'S MANAGEMENT OF THE BASELINE SECURITY INSPECTION PROGRAM (OIG-12-A-10)

Attached is the Office of the Inspector General's audit report titled, *Audit of NRC's Management of the Baseline Security Inspection Program.* This report found that the Nuclear Regulatory Commission (NRC) has appropriate management controls to ensure the baseline security inspection program meets its objectives. However, a more systematic approach to analyzing security findings data beyond the regional level can help NRC staff better identify licensee performance trends. Further, periodic reviews of Significance Determination Process (SDP) assessment tools and systematic testing of new and revised SDP assessment tools can help staff apply SDP assessment tools in a more transparent and consistent manner.

If you have any questions, please call Stephen D. Dingbaum, Assistant Inspector General for Audits, at 415-5915, or me at 415-5930.

Attachments: As stated

cc: Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
Nader Mamish, OEDO

AUDIT REPORT

Audit of NRC's Management of the Baseline Security Inspection Program

OIG-12-A-10 March 8, 2012

EXECUTIVE SUMMARY

BACKGROUND

Baseline Security Inspection Program

The Nuclear Regulatory Commission's (NRC) baseline security inspection program is the agency's primary means for ensuring that nuclear power plants across the United States are protected in accordance with Federal Government regulations.[1] Specifically, the baseline security inspection program has six objectives:

1. To gather sufficient, factual information to determine with high assurance if a licensee's security system and material control and accounting program[2] can protect against radiological sabotage, and the theft or loss of special nuclear material.

2. To determine a licensee's ability to identify, assess, and correct security issues in proportion with the significance of these issues.

3. To determine if licensees, working with external agencies, are capable of deterring and protecting against the Design Basis Threat.[3]

4. To validate performance indicator data, which NRC uses in conjunction with inspection findings to assess the security performance of power reactor licensees.

5. To help NRC monitor plants' security status and conditions.

[1] Chapter 10 Part 73 of the Code of Federal Regulations (10 CFR 73) establishes security regulations for operating nuclear power plants.

[2] The basic objective of material control and accounting is to prevent the loss or misuse of Special Nuclear Material (i.e., enriched uranium or plutonium).

[3] The Design Basis Threat describes the capabilities of adversaries, such as terrorist groups, that could attack a nuclear power plant. The Design Basis Threat is based on classified and other sensitive information, and NRC revises it periodically to reflect current security issues. An unclassified version appears in 10 CFR 73.1(a).

6. To identify significant issues that may have generic or crosscutting applicability to the safe and secure operation of licensees' facilities.

To meet these objectives, NRC conducts routine inspections at nuclear power plants that focus on specific issue areas such as access controls, protective strategy, security training, and safeguards information (SGI) controls.[4]

Significance Determination Process

The Significance Determination Process (SDP) is the process by which NRC staff assess the risks and potential effects of inspection findings. In following the SDP, NRC staff systematically analyze apparent violations and characterize them under the following color-code scheme:

- Green = Very low safety significance.
- White = Low to moderate safety significance.
- Yellow = Substantial safety significance.
- Red = High safety significance.

NRC staff close Green findings in their inspection reports without additional analysis, but White, Yellow, and Red findings require more in-depth analysis using SDP assessment tools. Since 2004, NRC has created several assessment tools for different types of security violations. These tools and their respective issue areas are:

- Physical Protection [Access Controls, Access Authorization, Physical Protection, Contingency Response].
- Material Control and Accounting of Radiological Materials.
- Unsecured Safeguards Information.
- Significance Screen.[5]
- Force-on-Force Exercise Performance.

[4] SGI is defined as information the disclosure of which could reasonably be expected to have a significant adverse effect on the health and safety of the public and/or the common defense and security by significantly increasing the likelihood of theft, diversion, or sabotage of material or facilities subject to NRC jurisdiction. This information is not classified as National Security Information or Restricted Data.

[5] The Significance Screen is used to assess violations such as security personnel sleeping on duty; pipes leading from outside a plant into the plant's Protected Area without adequate barriers or monitoring; and unauthorized firearms brought inside a plant by employees or contractors.

PURPOSE

The objective of this audit was to evaluate NRC's management of the baseline security inspection program, including specific program features such as the Significance Determination Process.

RESULTS IN BRIEF

NRC has appropriate management controls to ensure the baseline security inspection program meets its objectives. However, a more systematic approach to analyzing security findings data beyond the regional level can help NRC staff better identify licensee performance trends. Further, periodic reviews of SDP assessment tools and systematic testing of new and revised SDP assessment tools can help staff apply SDP assessment tools in a more transparent and consistent manner.

RECOMMENDATIONS

This report makes five recommendations to improve NRC's management of the baseline security inspection program. A list of these recommendations appears on page 18 of this report.

Agency Comments

At an exit conference on February 29, 2012, agency management provided informal comments on a draft of this report. The Office of the Inspector General incorporated some of these comments into the report as appropriate. As a result, the agency opted not to provide formal comments for inclusion in this report.

ABBREVIATIONS AND ACRONYMS

ADAMS	Agencywide Documents Access and Management System
CFR	Code of Federal Regulations
FTE	Full-Time Equivalents
FY	Fiscal Year
IMC	Inspection Manual Chapter
MD	Management Directive
NRC	Nuclear Regulatory Commission
OIG	Office of the Inspector General
PIM	Plant Issues Matrix
ROP	Reactor Oversight Process
RPS	Reactor Program System
SDP	Significance Determination Process
SGI	Safeguards Information
SLES	Safeguards Information Local Area Network and Electronic Safe

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I. BACKGROUND

The Nuclear Regulatory Commission's (NRC) baseline security inspection program is the agency's primary means for ensuring that nuclear power plants across the United States are protected in accordance with Federal Government regulations.[6] Specifically, the baseline security inspection program has six objectives:

1. To gather sufficient, factual information to determine with high assurance if a licensee's security system and material control and accounting program[7] can protect against radiological sabotage, and the theft or loss of special nuclear material.

2. To determine a licensee's ability to identify, assess, and correct security issues in proportion with the significance of these issues.

3. To determine if licensees, working with external agencies, are capable of deterring and protecting against the Design Basis Threat.[8]

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5. To help NRC monitor plants' security status and conditions.

6. To identify significant issues that may have generic or crosscutting applicability to the safe and secure operation of licensees' facilities.

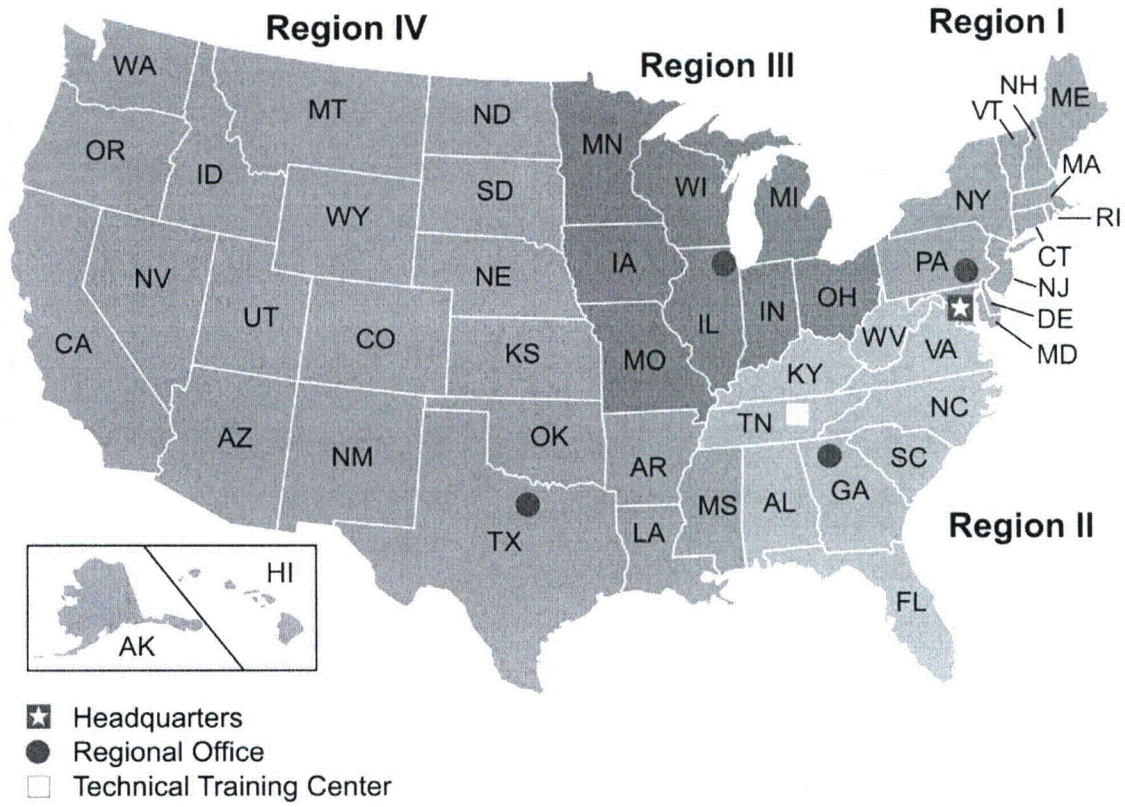
To meet these objectives, NRC conducts routine inspections at nuclear power plants that focus on specific issue areas such as access controls, protective strategy, security training, and safeguards information (SGI) controls.[9] Personnel at NRC's four regional offices plan and conduct baseline security inspections at nuclear power plants within their respective regions. Headquarters staff in NRC's Office of Nuclear Security and Incident Response (NSIR) support baseline security inspections through policy and guidance development, licensee performance data review, and review of escalated licensee violations. NSIR staff also conduct Force-on-Force inspections—the only type of baseline security inspections conducted by headquarters staff with support from regional staff.[10] In Fiscal Year (FY) 2012, NRC allocated 11.5 Full-Time Equivalents (FTE) for headquarters activities in the baseline security inspection program, and 5.7 FTE for program activities at each of the four regions for a total of 34.3 FTE. NRC staff expect these resource levels to remain constant in FY 2013.

[9] SGI is defined as information the disclosure of which could reasonably be expected to have a significant adverse effect on the health and safety of the public and/or the common defense and security by significantly increasing the likelihood of theft, diversion, or sabotage of material or facilities subject to NRC jurisdiction. This information is not classified as National Security Information or Restricted Data.

[10] Force-on-Force inspections require licensees to demonstrate their security capabilities through tactical exercises in which mock terrorist groups simulate attacks against nuclear power plants. Congress mandated triennial Force-on-Force inspections in the 2005 Energy Policy Act.

Figure 1 shows NRC's regions, as well as the locations of regional and headquarters offices, and the agency's Technical Training Center.

Figure 1: Map of the United States and NRC Regions



Source: NRC

Significance Determination Process

The Significance Determination Process (SDP) is the process by which NRC staff assess the risks and potential effects of inspection findings. In following the SDP, NRC staff systematically analyze apparent violations and characterize them under the following color-code scheme:

- Green = Very low safety significance.
- White = Low to moderate safety significance.
- Yellow = Substantial safety significance.
- Red = High safety significance.

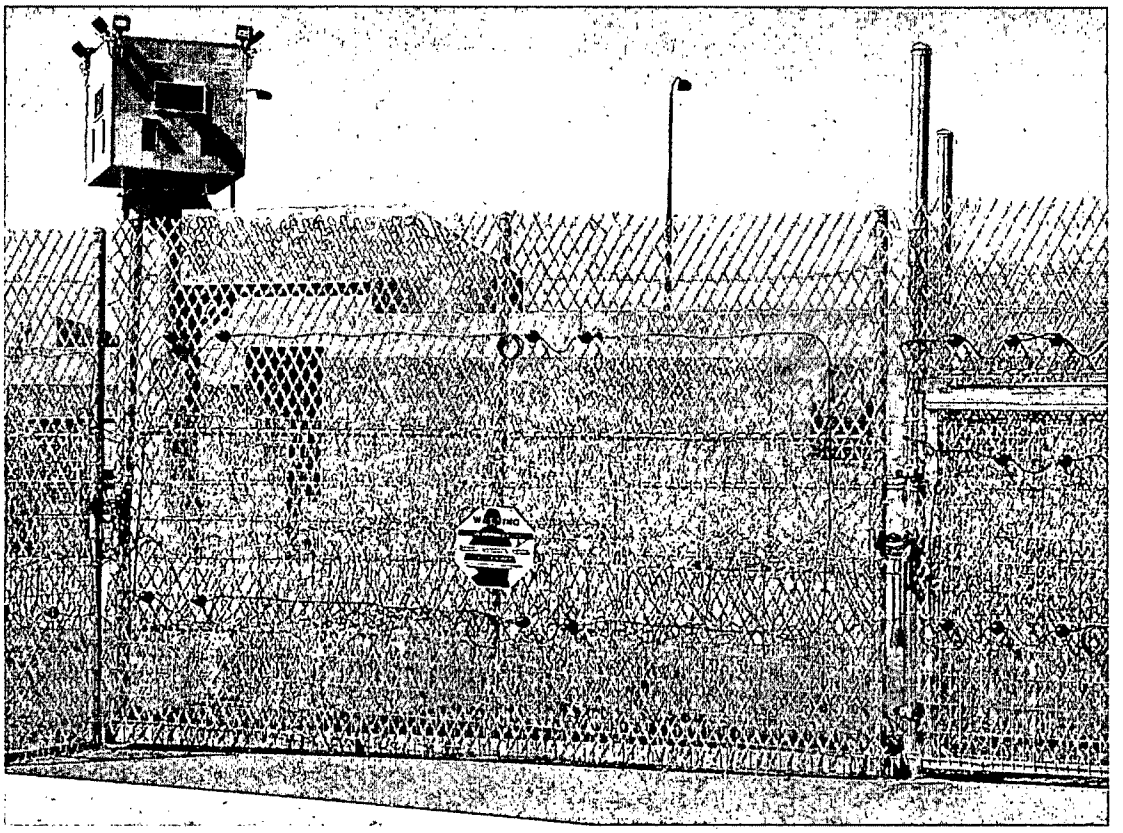
NRC staff close Green findings in their inspection reports without additional analysis, but White, Yellow, and Red findings require more in-depth analysis using SDP assessment tools. Since 2004, NRC has created several assessment tools for different types of security violations. These tools and their respective issue areas are:

- Physical Protection [Access Controls, Access Authorization, Physical Protection, Contingency Response].
- Material Control and Accounting of Radiological Materials.
- Unsecured Safeguards Information.
- Significance Screen.[11]
- Force-on-Force Exercise Performance.

[11] The Significance Screen is used to assess violations such as security personnel sleeping on duty; pipes leading from outside a plant into the plant's Protected Area without adequate barriers or monitoring; and unauthorized firearms brought inside a plant by employees or contractors.

Figure 2 shows security barriers, which are one of many security system elements that NRC staff inspect at nuclear power plants.

Figure 2: Security Barriers at a Nuclear Power Plant



Source: NRC

White, Yellow, and Red findings require additional review by NRC staff. First, NRC notifies licensees of a finding, and licensees must then formally respond by either accepting the finding and committing to corrective actions, or by contesting the finding. Second, NRC management must review findings to ensure that their staff have applied SDP assessment tools correctly. Third, if licensees contest findings, they may provide mitigating information or other analysis to explain why they believe findings should be downgraded. NRC staff must factor this information into their final decision. Lastly, the technical complexity of a particular finding can impact the amount of time and effort needed by NRC staff and licensee personnel to support their respective positions.

Greater-than-Green findings are relatively uncommon in the baseline security inspection program. In 2010, for example, NRC issued 112 Green findings, and 6 Greater-than-Green findings.[12]

Correct and consistent application of SDP assessment tools is essential to the Reactor Oversight Process (ROP), which is NRC's framework for regulating the nuclear power industry. The ROP is based upon principles of risk-informed decisionmaking and transparency. Accordingly, NRC should:

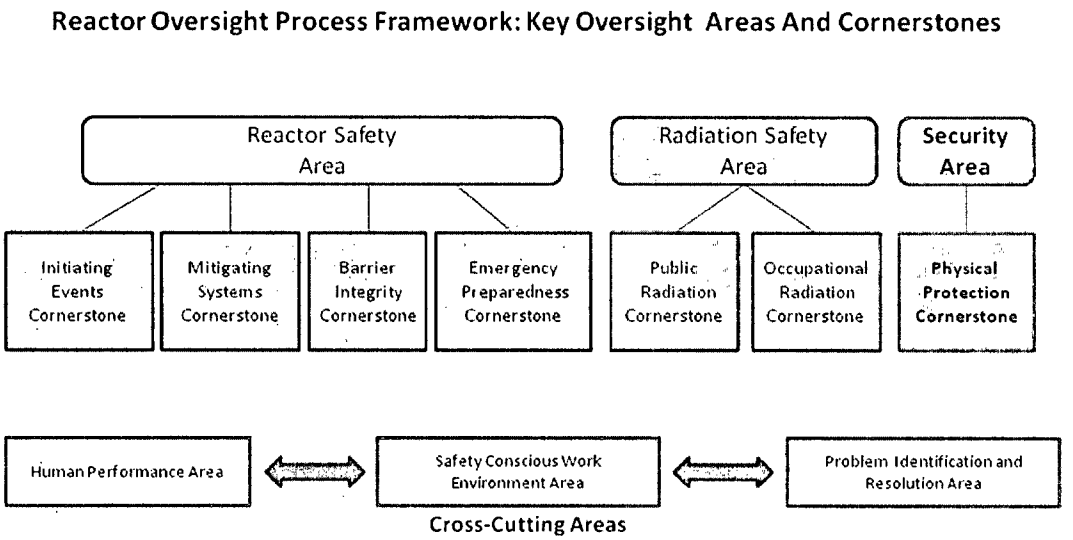
- Focus inspections on activities where the potential risks are greater.
- Apply greater regulatory attention to nuclear power plants with performance problems.
- Use objective measurements of performance of nuclear power plants.
- Give both the public and the nuclear industry timely and understandable assessments of plant performance.
- Respond to violations of regulations in a predictable and consistent manner that reflects the potential safety impact of the violations.

The ROP categorizes NRC's oversight activities into seven distinct "cornerstones" of safe operation, one of which is physical protection. NRC also assesses licensee performance in the context of cross-cutting issues, such as problem identification and resolution, which may affect multiple ROP cornerstones.

[12] These do not include results of Force-on-Force inspections.

Figure 3 illustrates the ROP cornerstones and their relation to key oversight areas and cross-cutting issue areas.

Figure 3: Reactor Oversight Process Framework



Source: NRC

The ROP is complemented by NRC's enforcement program, which, in this context, focuses on violations that are caused by deliberate misconduct. NRC may pursue enforcement action against licensees while staff are determining a finding's significance within the ROP framework. Enforcement action can result in the issuance of civil penalties against licensees.

II. PURPOSE

The audit objective was to evaluate NRC's management of the baseline security inspection program, including specific program features such as the Significance Determination Process. Appendix B contains information on the audit scope and methodology.

III. FINDINGS

NRC has appropriate management controls to ensure the baseline security inspection program meets its objectives. However, a more systematic approach to analyzing security findings data beyond the regional level can help NRC staff better identify licensee performance trends. Further, periodic reviews of SDP assessment tools and systematic testing of new and revised SDP assessment tools can help staff apply SDP assessment tools in a more transparent and consistent manner.

A. NRC Can Improve Internal Control Over Baseline Security Inspection Program Data

Federal Government and NRC guidance on internal control[13] recommend the use of data analysis to inform program operations and management. NRC maintains data on security inspection findings, but does not systematically analyze it to identify trends among NRC regions and licensee fleets.[14] This occurs because NRC's baseline security inspection program emphasizes analysis of individual licensee performance and performance of licensees within each of the four NRC regions. As a result, NRC may miss opportunities to improve monitoring and management of security issues, inspection procedures, and tools.

Effective Internal Control Is Key To Maintaining Visibility Over Program Operations and Results.

Federal Government and NRC internal control guidance recommend that program managers analyze appropriate information sources used in the baseline security inspection program to inform program operations and decisions and to ensure programs achieve intended results. Internal controls comprise the plans, methods, and procedures used to meet missions, goals, and objectives. These controls include managers at all levels analyzing trends and measuring results against targets. Controls must be developed as programs are initially implemented, as well as when they are reengineered. Additionally, managers should employ a variety of activities ensuring that edit checks are used in controlling data entry and that access to data and data systems is appropriately controlled.

[13] Standards for Internal Control in the Federal Government (GAO/AIMD-00-21.3.1) U.S. General Accounting Office, Washington DC: 1999 and NRC Management Directive 4.4,"Management Controls," May 18, 2004.

[14] A fleet refers to a group of nuclear power plants operated by one licensee. Plants belonging to a licensee's fleet can be located in one or more NRC regions.

NRC Does Not Perform Systematic Cross-Regional or Cross-Fleet Analysis of Security Trends

NRC maintains and uses multiple information sources to monitor plant performance, but managers do not perform systematic analysis to assess trends across NRC regions or licensee fleets. For example, NRC maintains many information sources pertaining to inspection findings and has visibility over individual plant performance through the use of inspection reports stored in the Agencywide Documents Access and Management System (ADAMS),[15] inspection reports stored in the Safeguards Information Local Area Network and Electronic Safe (SLES),[16] mid- and end-of-cycle assessments, the Plant Issues Matrix (PIM), Reactor Program System (RPS) data, and annual reports to Congress. However, NRC does not perform systematic cross-regional or cross-fleet analysis of security inspection trends. Figure 4 shows information sources used in the baseline security inspection program.

[15] ADAMS is the official recordkeeping system through which NRC provides access to vast "libraries" or collections of documents related to the agency's regulatory activities.

[16] SLES is NRC's information repository for all SGI.

Figure 4: NRC Baseline Security Inspection Program Information Sources

Information Source	Description
Inspection Reports	Inspection reports, written by NRC inspectors, provide NRC with all the details of the final disposition of findings uncovered during NRC inspections of power reactors. Details include the date of the inspection, the number and types of findings, and the safety significance (color designation of the finding).
SLES	NRC's repository for all inspection reports and other documents containing SGI.
Mid/End Cycle Plant Assessment Reports	Reports issued at the beginning of March and September of each year for each reactor site. The reports state whether the plant is receiving increased oversight and the number of planned inspections.
PIM	The PIM provides a consolidated listing of individual plant issues (i.e., inspection findings) that NRC uses to assess plant performance.
RPS	A system used by NRC to enter administrative data about inspection scheduling and limited data regarding inspection results.
Annual Report to Congress	A report that provides a basic count of inspection findings for the year.

Source: Office of the Inspector General (OIG) analysis of information sources

Additionally, regional branch chiefs stated that they can request that headquarters generate reports in response to individual staff requests, but reports focus on individual regions and requesters' individual data needs. However, the headquarters representative responsible for responding to such requests told OIG that this type of analysis is labor intensive and requires piecing together data from the multiple sources listed above.

Incidentally, it is important for NRC to perform cross-regional and cross-fleet analysis for purposes of identifying areas that may need more regulatory emphasis. This analysis can also be used to make strategic program decisions, inform the tools and inspection procedures that are used to develop findings, and ensure the program is achieving its intended results.

Likewise, comprehensive cross-regional and cross-fleet analysis is important because NRC performs baseline security inspection activities at 104 reactor units within 65 reactor sites throughout NRC's four regions (see Figure 5). Moreover, approximately 45 percent of power reactor licensees manage more than one reactor site, and approximately 20 percent maintain reactor sites in more than one region. See Appendix A for a table showing power reactor sites by licensee operator and their locations by NRC region.

Figure 5: Breakdown of Regional Reactor Sites and Reactor Units

	Region 1	Region 2	Region 3	Region 4	Totals
Reactor Sites	**17**	**18**	**16**	**14**	**65**
Reactor Units	**26**	**33**	**24**	**21**	**104**

Source: OIG analysis of NRC data

NRC Management Does Not Emphasize Trend Analysis Across Regions and Fleets

OIG found that NRC does not perform trend analysis across regions and fleets because program management emphasizes analysis of individual plant performance, and trends within each of the four regions. Additionally, NRC does not actively maintain and manage a centralized database for analyzing security inspection findings across regions and fleets as evidenced by OIG's analysis of NRC's current information sources.

Further, OIG could not determine if data in existing data systems is complete and accurate. Two of the data systems NRC headquarters staff use to access information may not be complete or accurate.

- First, RPS is used to collect information about scheduling inspections and also collects basic data points about findings. NRC does not use a single, consistent process for data entry or define data management controls for users of this database. The headquarters official responsible for obtaining and analyzing data from this system stated that, up until very recently, the data could not be reconciled in this system because regional officials had not consistently included the official in their distribution of findings reports.

- Second, NRC maintains, in addition to the information stored in RPS, a separate secure database – SLES – that holds inspection finding reports containing SGI data. OIG found that, for various reasons, this information is not easy to obtain or analyze and, in some cases, was not obtainable at all.

Improved Data Collection and Analysis Will Enhance NRC's Ability To Regulate and Improve Program Operations, Program Tools and Procedures, and Program Results

Despite the lack of trending across regions and fleets, OIG found no material adverse effect on NRC operations. However, NRC may miss opportunities to improve monitoring and management of security issues, inspection tools and procedures, and program results. Additionally, improved data management and analysis can help NRC staff identify trends that merit additional oversight or regulatory emphasis. This, in turn,

can give NRC greater assurance that the inspection program is meeting its objective to conduct fact-based assessments of licensee security program performance.

Recommendations

OIG recommends that the Executive Director for Operations:

1. Develop and maintain a centralized database of security findings data to be used for evaluating licensee performance trends, and communicating this information to NRC staff, industry, and appropriate public stakeholders.

2. Formalize and implement a process for maintaining current and accurate data within a centralized database.

3. Formalize and implement a process for ensuring SGI findings data is current and accessible for use in trending security findings issues.

B. NRC Lacks Consensus on Content and Application of SGI and Significance Screen Tools

The ROP sets general standards for NRC's oversight of power reactors, and emphasizes objectivity, transparency, and consistency in NRC's assessments of licensee performance. NRC staff and industry representatives expressed concern about the technical basis and application of the SGI and Significance Screen tools.[17] Although NRC solicited staff comments in developing these assessment tools, NRC did not test draft versions of the tools and, further, does not have procedures for systematically reviewing SDP assessment tools on a periodic basis. Staff consensus and understanding of SDP assessment tools is critical to ensuring that staff can apply these tools in accordance with ROP standards and avoid undue resource burdens on NRC and licensees.

The ROP Emphasizes Transparent, Consistent Regulation

The ROP sets general transparency and consistency standards for NRC's oversight of the nuclear power industry. Specifically, NRC should aim for objective measurements of licensee performance and translate those measurements into timely assessments that the public and licensees can understand. Moreover, NRC should respond to licensee violations in a consistent manner that reflects the potential safety impact of the violations.

NRC Staff and Industry Concerns and Questions Focus on SGI and Significance Screen Assessment Tools

Interviews and surveys of NRC staff and nuclear power industry representatives regarding the security SDP showed that two assessment tools—SGI and the Significance Screen—produced the greatest amount of critical feedback. OIG received a broad range of comments regarding the content and application of these tools. OIG also received suggestions about how to improve these assessment tools. Additionally, some comments reflected a lack of understanding of assessment tool features, as well as doubts regarding the reliability of assessment results.

[17] See the "Background" section of this report for information on security SDP assessment tools.

OIG could not reconcile divergent staff and industry comments on the SGI and Significance Screen tools, yet several points stand out. First, some staff questioned the technical basis of criteria used to escalate findings. For example, both the SGI and Significance Screen rely on time standards to measure exploitability, but the rationale for these metrics was not clear to some NRC and industry personnel. Second, respondents questioned how these tools weigh mitigating information, and whether this information is analyzed after a finding has been prematurely escalated. Third, respondents questioned how some SGI and Significance Screen findings can be coded as White or Yellow when violations appear unlikely to impact plant safety or security. Lastly, some staff and industry personnel questioned the potential for escalation bias in the Significance Screen. The tool focuses on several particular security issues, and uses time and consequence criteria that increase the likelihood of White or Yellow findings.

NRC Revises SDP Tools, but Does Not Systematically Test and Update Assessment Tools

In reviewing the history of security SDP development, OIG found that NRC has tested other SDP tools prior to implementation but did not do so with the SGI and Significance Screen tools. NRC solicited staff and industry comments on draft tools, but did not test the draft tools by analyzing past or hypothetical findings to determine how the draft tools would work in a practical context. This differs from NRC's 2004 SDP pilot effort, during which headquarters and regional staff screened approximately 50 findings to determine whether the results would be reasonable. Similarly, NRC's current effort to update the Force-on-Force SDP involves a findings screening analysis.

OIG's review also showed that NRC updates SDP assessment tools on a circumstantial basis and does not have procedures to ensure that updates are performed consistently. The SGI and Significance Screen tools resulted from a 2007-2008 Enhancement Team effort that NRC initiated in response to staff concerns about particular security issues. Further, that Enhancement Team's leader has since retired from NRC, thereby limiting the institutional knowledge necessary to guide future SDP updates in the absence of formal procedures or best practice guidance.

Consensus and Understanding of SDP tools Is Important for Regulatory Transparency

Consensus and understanding among NRC staff regarding SDP assessment tools is critical to ensuring that staff can apply these tools easily and consistently in accordance with Reactor Oversight Process standards. This does not preclude professional disagreement over particular findings. However, staff must understand the rationale for findings so they can present them logically to licensees and uphold NRC's integrity as a fair and impartial regulator. Further, NRC staff should have confidence in the soundness of escalated findings, given that the SDP requires extra staff resources for review and final disposition, and also impacts licensees with costs for responding to NRC and taking compensatory measures.[18]

Recommendations

OIG recommends that the Executive Director for Operations:

4. Formalize and implement procedures for testing draft SDP tools by staff to determine how draft tools would screen past violations and/or hypothetical security violations.

5. Formalize and implement a process for performing periodic review of existing security SDP tools to check for consistency of application and results.

[18] Greater-than-Green (e.g., White) findings can take between 5 and 18 months to close, depending on the complexity of each case. Beyond the additional staff effort required to process these findings, licensees may need to conduct independent analysis to support their positions in enforcement conferences with NRC. Further, licensees may be obligated to upgrade plant infrastructure at considerable cost if NRC maintains its position on an escalated finding.

IV. CONSOLIDATED LIST OF RECOMMENDATIONS

OIG recommends that the Executive Director for Operations:

1. Develop and maintain a centralized database of security findings data to be used for evaluating licensee performance trends, and communicating this information to NRC staff, industry, and appropriate public stakeholders.

2. Formalize and implement a process for maintaining current and accurate data within a centralized database.

3. Formalize and implement a process for ensuring SGI findings data is current and accessible for use in trending security findings issues.

4. Formalize and implement procedures for testing draft SDP tools by staff to determine how draft tools would screen past violations and/or hypothetical security violations.

5. Formalize and implement a process for performing periodic review of existing security SDP tools to check for consistency of application and results.

V. AGENCY COMMENTS

At an exit conference on February 29, 2012, agency management provided informal comments on a draft of this report. The Office of the Inspector General incorporated some of these comments into this report as appropriate. As a result, the agency opted not to provide formal comments for inclusion in this report.

Appendix A

POWER REACTOR SITES BY LICENSEE OPERATOR AND NRC REGION

Licensee	Region 1	Region 2	Region 3	Region 4	Total
Ameren UE				1	1
Arizona Public Service Co.				1	1
Constellation Energy	3				3
Detroit Edison Co.			1		1
Dominion Generation	1	2	1		4
Duke Energy Power Company, LLC		3			3
Energy Northwest				1	1
Entergy Nuclear Operations, Inc.	4		1	4	9
Exelon Generation Co., LLC	4		6		10
FirstEnergy Nuclear Operating Co.	1		2		3
Florida Power & Light Co.	1	2	1		4
FPL Energy Point Beach, LLC			1		1
Indiana/Michigan Power Co.			1		1
Nebraska Public Power District				1	1
Nuclear Management Co.			2		2
Omaha Public Power District				1	1
Pacific Gas & Electric Co.				1	1
PPL Susquehanna, LLC	1				1
Progress Energy		4			4
PSE&G Nuclear	2				2
South Carolina Electric & Gas Co.		1			1
Southern California Edison Co.				1	1
Southern Nuclear Operating Co.		3			3
STP Nuclear Operating Co.				1	1
Tennessee Valley Authority		3			3
TXU Generating Company LP				1	1
Wolf Creek Nuclear Operating Corp.				1	1
Total	17	18	16	14	65

Source: OIG analysis of NRC data

Appendix B

OBJECTIVE, SCOPE, AND METHODOLOGY

OBJECTIVE

The audit objective was to evaluate NRC's management of the baseline security inspection program, including specific program features such as the Significance Determination Process.

SCOPE

The audit focused on reviewing NRC's oversight of the baseline security inspection program and the Significance Determination Process. We conducted this performance audit at NRC headquarters and at the four NRC regions, from July 2011 through January 2012. Internal control and ROP principles related to the audit objective were reviewed and analyzed. Throughout the audit, auditors were aware of the possibility or existence of fraud, waste, or misuse in the program.

METHODOLOGY

OIG reviewed relevant Federal regulations and internal guidance pertaining to NRC's regulatory authorities to oversee security inspections, including Chapter 10 Part 73 of the Code of Federal Regulations. OIG also reviewed NRC inspection manual chapters (IMC), NRC management directives (MD), and internal control guidance pertaining to the oversight of baseline security inspections including:

- IMC 0308 – Basis Document for Security Cornerstone of the Reactor Oversight Process.
- IMC 0609 Appendix E, Part I – Baseline Security Significance Determination Process for Power Reactors.
- MD 8.13 – Reactor Oversight Process.
- MD 8.7 – Reactor Operating Experience Program.
- MD 4.4 – Management Controls.
- Standards for Internal Control in the Federal Government.

OIG also reviewed inspection reports housed in ADAMS and SLES, performed an electronic survey of regional inspectors, and conducted interviews with headquarters personnel (Rockville, MD), regional

personnel, industry representatives, and the Nuclear Energy Institute. These interviews were conducted to obtain insights into NRC's oversight of baseline security inspections and the significance determination process. The audit team also observed inspection activities at Three Mile Island Nuclear Generating Station.

We conducted this performance audit in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

The audit work was conducted by Beth Serepca, Team Leader; Paul Rades, Audit Manager; Melissa Schermerhorn, Senior Management Analyst; John Tornabane, Management Analyst; and Kevin Nietmann, Senior Technical Advisor.

Instructions for Responding to OIG Report Recommendations

Instructions for Action Offices

Action offices should provide a written response on each recommendation within 30 days of the date of the transmittal memorandum or letter accompanying the report. The concurrence or clearance of appropriate offices should be shown on the response. After the initial response, responses to subsequent OIG correspondence should be sent on a schedule agreed to with OIG.

Please ensure the response includes:

1. The report number and title, followed by each recommendation. List the recommendations by number, repeating its text verbatim.

2. A management decision for each recommendation indicating agreement or disagreement with the recommended action.

    a. For agreement, include corrective actions taken or planned, and actual or target dates for completion.

    b. For disagreement, include reasons for disagreement, and any alternative proposals for corrective action.

    c. If questioned or unsupported costs are identified, state the amount that is determined to be disallowed and the plan to collect the disallowed funds.

    d. If funds put to better use are identified, then state the amount that can be put to better use (if these amounts differ from OIG's, state the reasons).

OIG Evaluation of Responses

If OIG concurs with a response to a recommendation, it will (1) note that a management decision has been made, (2) identify the recommendation as resolved, and (3) track the action office's implementation measures until final action is accomplished and the recommendation is closed.

If OIG does not concur with the action office's proposed corrective action, or if the action office fails to respond to a recommendation or rejects it, OIG will identify the recommendation as unresolved (no management decision). OIG will attempt to resolve the disagreement at the action office level. However, if OIG determines that an impasse has been reached, it will refer the matter for adjudication to the Chairman.

Semiannual Report to Congress

In accordance with the Inspector General Act of 1978, as amended, OIG is required to report to Congress semiannually on April 1 and October 1 of each year, a summary of each OIG report issued for which no management decision was made during the previous 6-month period. Heads of agencies are required to report to Congress on significant recommendations from previous OIG reports where final action has not been taken for more than one year from the date of management decision, together with an explanation of delays.

Jaegers, Cathy

From:	Kreuter, Jane
Sent:	Thursday, March 08, 2012 12:19 PM
To:	Borchardt, Bill
Cc:	Mamish, Nader; Brock, Kathryn; Arildsen, Jesse; Jaegers, Cathy
Subject:	OIG-12-A-10 AUDIT OF NRC'S MANAGEMENT OF THE BASELINE SECURITY INSPECTION PROGRAM
Attachments:	Final Report- NRC's Management of the Baseline Security Inspection Program (jak) .pdf; Instructions for Responding to OIG Report Recommendations.doc

Attached is the Office of the Inspector General's audit report titled, *Audit of NRC's Management of the Baseline Security Inspection Program.* The audit objective was to evaluate the Nuclear Regulatory Commission's (NRC) management of the baseline security inspection program, including specific program features such as the Significance Determination Process (SDP).

Auditors found that NRC has appropriate management controls to ensure the baseline security inspection program meets its objectives. However, a more systematic approach to analyzing security findings data beyond the regional level can help NRC staff better identify licensee performance trends. Further, periodic reviews of SDP assessment tools and systematic testing of new and revised SDP assessment tools can help staff apply SDP assessment tools in a more transparent and consistent manner.

This report makes recommendations to improve the collection and analysis of baseline security inspection finding data, and to improve security SDP assessment tools.

If you have any questions or comments about our report, please contact me at 415-5915 or Beth Serepca, Security and Information Team Leader, at 415-5911.

Attachments: As stated

Stephen D. Dingbaum
Assistant Inspector General for Audits