

**U. S. Nuclear Regulatory Commission** 

## **Office of Inspector General**

## **FY 2014 Performance Report**

November 2014

#### OIG PERFORMANCE REPORT Fiscal Year 2014

#### **INTRODUCTION**

NRC was formed in 1975, in accordance with the Energy Reorganization Act of 1974, to regulate the various commercial and institutional uses of nuclear materials. The agency succeeded the Atomic Energy Commission, which previously had responsibility for both developing and regulating nuclear activities. Under its responsibility to protect public health and safety, NRC has three principal regulatory functions: (1) establish standards and regulations, (2) issue licenses for nuclear facilities and users of nuclear materials, and (3) inspect facilities and users of nuclear materials to ensure compliance with the requirements. These regulatory functions relate both to nuclear power plants and other uses of nuclear materials – like nuclear medicine programs at hospitals, academic activities at educational institutions, research, and such industrial applications as gauges and testing equipment.

NRC's OIG was established as a statutory entity on April 15, 1989 in accordance with the 1988 amendment to the Inspector General Act. NRC OIG's mission is to (1) independently and objectively conduct and supervise audits and investigations relating to NRC's programs and operations; (2) prevent and detect fraud, waste and abuse, and (3) promote economy, efficiency and effectiveness in NRC's programs and operations. In addition, OIG reviews existing and proposed regulations, legislation and directives and provides comments, as appropriate, regarding any significant concern.

The Inspector General also keeps the NRC Chairman and Members of Congress fully and currently informed about problems, makes recommendations to the agency for corrective actions, and monitors NRC's progress in implementing such actions. In fulfilling this mission, OIG assists the NRC to accomplish its mission by ensuring integrity, efficiency and accountability in the agency's programs.

#### PROGRAM ACTIVITIES

OIG accomplishes its mission through the conduct of its audit, investigative, and management and operational support programs, as well as its legislative and regulatory review activities. To fulfill its audit mission, OIG conducts performance, financial, and contract audits.

OIG's investigative staff carries out its mission by performing investigations relating to the integrity of NRC's programs and operations. Most OIG investigations focus on allegations of fraud, waste, and abuse and violations of law or misconduct by NRC employees and contractors.

#### OIG's Strategic Goals, Strategies, and Actions

The NRC-OIG Strategic Plan features three goals and guides the activities of the Audits and Investigations programs. The plan identifies the major challenges and risk areas facing the NRC and generally aligns with the agency's mission.

#### **OIG Strategic Goals**

- Strengthen NRC's efforts to protect public health and safety and the environment.
- Enhance NRC's efforts to increase security in response to an evolving threat environment.
- Increase the economy, efficiency, and effectiveness with which NRC manages and exercises stewardship over its resources.

The NRC-OIG Strategic Plan for FY 2014 – 2018 presents OIG's priorities for the covered timeframe and describes OIG's strategic direction to stakeholders, including the NRC Chairman, and the U.S. Congress. From this perspective, it presents OIG's results-based business case, explaining the return-on-investment. It also strengthens the OIG by providing a shared set of expectations regarding the goals OIG expects to achieve and the strategies that will be used to do so. OIG adjusts the plan as circumstances necessitate, uses it to develop its annual plan and performance budget, and holds managers and staff accountable for achieving the goals and outcomes.

The OIG's strategic plan also includes a number of supporting strategies and actions that describe planned accomplishments. Through associated annual planning activities, audit and investigative resources focus on assessing NRC's safety, security, and corporate management programs involving the major challenges and risk areas facing the NRC. The work of OIG auditors and investigators support and complement each other in the pursuit of these objectives.

#### Strategic Goal 1 Strengthen NRC's efforts to protect public health and safety and the environment.

**Discussion:** NRC faces many safety challenges and an associated increased workload in the coming years related to nuclear reactor oversight, the regulation of nuclear materials, and the handling of nuclear waste. A significant concern for NRC is regulating the safe operation of the Nation's nuclear power plants through an established oversight process developed to verify that licensees identify and resolve safety issues before they adversely affect safe plant operation.

In addition, NRC must address an increasing number of license amendment requests to increase the power generating capacity of specific commercial reactors, license renewal requests to extend reactor operations beyond originally set expiration dates, and the introduction of new technology such as new and advanced reactor designs. In fulfilling its responsibilities to regulate nuclear materials, NRC must ensure that its regulatory activities regarding nuclear fuel cycle facilities and nuclear materials adequately protect public health and safety. NRC's regulatory activities concerning nuclear materials must protect against radiological sabotage and theft or diversion of these materials. Further, licensing of facilities (e.g., fuel fabrication) with new technologies poses additional challenges. The handling of nuclear waste includes both low-level and high-level waste. Low-level waste includes items that have become contaminated with radioactive materials or have become radioactive through exposure to neutron radiation. Lowlevel waste disposal occurs at commercially operated low-level waste disposal facilities that must be licensed by either NRC or Agreement States. However, no new disposal facilities have been built since the 1980s and unresolved issues continue regarding the closures of the disposal facilities.

High-level radioactive waste is primarily in the form of spent fuel discharged from commercial nuclear power reactors. In the high-level waste area, NRC faces significant issues involving the potential licensing of the Yucca Mountain repository and certain aspects of the transportation of designated high-level waste from plants and facilities. Additional high-level waste issues include the interim storage of spent nuclear fuel both at and away from reactor sites, certification of storage and transport casks, and the oversight of the decommissioning of reactors and other nuclear sites. Further, DOE and the industry will need contingency plans if the repository is not licensed or not available as scheduled, and NRC will need to be able to respond to those plans.

### Strategy 1-1: Identify risk areas associated with NRC's Reactor Oversight Process and make recommendations, as warranted, for addressing them.

Actions:

- a. Assess the adequacy of NRC's licensing and other oversight activities with regard to the safe operation of existing nuclear reactors.
- b. Assess the extent and effectiveness of NRC's emergency preparedness and incident response in relation to design basis and beyond design basis events.
- c. Assess NRC's implementation of its risk-informed approach to licensing and regulatory oversight.
- d. Assess the impact that an increase in license renewal and power uprate requests would have on the licensing process.
- e. Assess the effectiveness of the NRC regulatory process and related enforcement actions.
- f. Assess NRC's actions to identify and address the potential risks associated with aging facilities and with the introduction of new technology.
- g. Monitor NRC activities and gather stakeholder information to identify potential gaps in NRC regulatory oversight. Conduct, as appropriate, investigations and Event Inquiries when gaps are identified.
- h. Assess NRC's actions to identify and address the potential risks associated with the introduction of new technology into currently operating facilities.

Strategy 1-2: Identify risk areas associated with NRC efforts to (1) prepare for and manage the review of applications for new power reactors, and (2) oversee construction of new power reactors to verify that they are built in conformance with approved designs and in compliance with approved construction standards and make recommendations, as warranted, for addressing the risks.

#### Actions:

- a. Assess the extent to which NRC has examined the history of the licensing and construction of the first generation of plants and has developed a methodology to incorporate the lessons learned into the new licensing and construction process to include the design certification process.
- b. Assess the adequacy of NRC's application acceptance, review process, and approval standards.
- c. Assess the adequacy of NRC's development of a construction inspection program.
- d. Assess the adequacy of NRC's development of a rigorous quality assurance oversight program.
- e. Assess the environmental review process associated with new site construction to ensure that NRC carries out its responsibilities.
- f. Assess NRC's actions to address stakeholder's concerns over potential gaps in NRC oversight of new construction.
- g. Assess NRC oversight of vendor material used in the construction of new reactor plants.
- h. Assess NRC's integration of operating experience, generic safety issues and introduction of new technologies (e.g., digital products) into new reactor licensing.
- i. As appropriate, conduct investigations and Event Inquiries when irregularities are identified.

### Strategy 1-3: Identify risk areas facing the materials programs and make recommendations, as warranted, for addressing them.

#### Actions:

- a. Assess NRC's implementation of programs for controlling, accounting for, tracking, and inspecting nuclear materials.
- b. Assess the extent to which NRC has integrated into the materials program its emergency preparedness and incident response obligations associated with a potential significant nuclear event or incident.
- c. Assess NRC activities concerning the licensing, oversight, and aging effects of fuel cycle facilities.
- d. Assess NRC's handling of low-level waste issues, including security and disposal.

- e. Assess impact of the Agreement State program on the safety and security of materials and on NRC regulatory activities.
- f. Review NRC and licensee reports and engage interested stakeholders to identify issues of concern in NRC oversight of nuclear material held by NRC licensees.
- g. Assess NRC's oversight of nuclear waste issues associated with the decommissioning and cleanup of nuclear reactor sites and other facilities.
- h. Through proactive initiatives, determine if material licensees have exceeded their license authorities and whether the NRC has failed to provide effective oversight.

# Strategy 1-4: Identify risk areas associated with low-level waste and the prospective licensing of the high-level waste repository and make recommendations, as warranted, for addressing them.

#### Actions:

- a. Assess the key issues affecting the safe management of civilian low-level waste disposal, including the availability of low-level radioactive waste disposal sites.
- b. Assess NRC's regulatory activities involving the interim storage of high-level waste and spent fuel both at and away from reactor sites.
- c. Assess the adequacy of NRC's planned response if Yucca Mountain is not licensed or available as currently scheduled, including NRC's ability to respond to DOE and industry contingency plans.
- d. Assess issues involving the review of the Yucca Mountain repository application, and certain aspects of the transportation of designated high-level waste from plants and facilities.
- e. As appropriate, conduct investigations and Event inquires to determine NRC's efforts in addressing stakeholders concerns regarding low-level and high-level waste storage issues.

#### Strategic Goal 2 Enhance NRC's efforts to increase security in response to an evolving threat environment.

**Discussion:** NRC continues to face a number of challenges in ensuring the public is protected from improper use of nuclear materials and technology.

NRC, in concert with other agencies, must maintain a comprehensive assessment of threats and effectively integrate security considerations into its regulatory process. NRC must also ensure that security is adequately incorporated into the design and construction of new facilities.

In light of terrorist threats, natural disasters, and expanding populations around nuclear power plants, NRC plays a critical role in supporting emergency preparedness and incident response

within the nuclear industry and State and local governments. NRC must protect its infrastructure and ensure that its facilities, computers, people, and competencies are adequately protected against emerging threats while providing for continuity of operations.

NRC faces new challenges in supporting United States international interests in the safe and secure use of nuclear material and technology and in nuclear non-proliferation. These challenges include improving controls on the import and export of nuclear materials and equipment and NRC's successful exercising of its international oversight commitments such as helping foreign regulators boost their efforts for controlling radioactive sources.

# Strategy 2-1: Identify risk areas involved in effectively securing both operating and proposed nuclear power plants, nuclear fuel cycle facilities, and nuclear materials and make recommendations, as warranted, for addressing them.

#### Actions:

- a. Assess the adequacy of NRC's oversight activities with regard to the security of nuclear materials and facilities.
- b. Assess the comprehensiveness of NRC's threat assessment and the process for keeping it up to date.
- c. Assess the adequacy of regulations to respond to an evolving threat environment and the extent to which NRC is making appropriate adjustments.
- d. Assess NRC's coordination with other agencies.
- e. Assess NRC's acquisition of resources and expertise to meet its security responsibilities.
- f. Monitor the development of NRC requirements to enhance nuclear security in response to an evolving threat environment.
- g. Where appropriate, conduct investigations and Event inquiries designed to address NRC's efforts in providing oversight of licensee responsibilities.

## Strategy 2-2: Identify risks associated with Emergency Preparedness and make recommendations, as warranted, for addressing them.

#### Actions:

- a. Assess NRC's management of Emergency Preparedness guidelines, regulations, and programs.
- Assess NRC's ability to provide internal technical expertise on Emergency Preparedness issues and perform regulatory reviews of Emergency Preparedness applications and amendments.

- c. Assess NRC's performance of technical reviews of Emergency Preparedness applications and amendments.
- d. Assess NRC's management of the coordination with Federal, State, and local governments and licensees.

## Strategy 2-3: Identify challenges involved in responding to incidents and make recommendations, as warranted, for addressing them.

#### Actions:

- a. Assess NRC's efforts to prepare for responding to nuclear incidents including training, system reliability and interoperability, personnel availability, and response team organization and coordination.
- b. Assess the integration and coordination of NRC's efforts with other agencies at all levels.

## Strategy 2-4: Identify evolving threats to NRC security and make recommendations, as warranted, for addressing them.

#### Actions:

- a. Assess how well NRC maintains a comprehensive threat assessment for its facilities and personnel.
- b. Assess the extent to which NRC effectively implements physical and information security controls and procedures.
- c. Assess how NRC balances security with public openness.
- d. Assess NRC's protection of the NRC IT infrastructure against internal and external threats.
- e. Assess NRC's continuity of operations planning in the event of an emergency.
- f. As appropriate, conduct investigations into internal and external cyber breaches of NRC's IT infrastructure.

#### Strategy 2-5: Identify risks associated with nonproliferation of nuclear material and nuclear technology and make recommendations, as warranted, for addressing them.

#### Actions:

- a. Assess NRC's management of controls on the import and export of nuclear materials and address nuclear technology transfer issues.
- b. Assess NRC's responsibilities linked to established statutes, international treaties, conventions, and cooperative agreements.

c. Through proactive initiatives and, if appropriate, reactive investigations, identify potential shortcomings in NRC's actions to provide oversight of nuclear materials importation and exportation programs.

#### Strategic Goal 3

Increase the economy, efficiency, and effectiveness with which NRC manages and exercises stewardship over its resources.

**Discussion:** NRC faces significant challenges to efficiently, effectively, and economically manage its resources. Although a number of organizational changes have been implemented in recent years, more changes will occur over the strategic timeframe.

Over the next few years, the agency will need to balance workloads and priorities to support new reactor licensing efforts. This will create tremendous pressure on all program management areas, including human resources management, information technology, and financial management.

In addition, NRC needs to continue to improve its management and control over financial and other resources. As required by statute, OIG will continue to evaluate financial management practices and work with NRC to identify and improve weaknesses. The agency also needs to upgrade its information technology capabilities to provide state-of-the-art tools to NRC staff.

#### Strategy 3-1: Identify areas of corporate management risk within NRC and make recommendations, as warranted, for addressing them. Actions:

- a. Assess NRC's management of human capital.
- b. Assess NRC's financial management practices.
- c. Provide reasonable assurance that NRC's financial statements are presented fairly in all material aspects.
- d. Assess NRC's implementation of Governmentwide and agency information technology initiatives, including the security of agency technology and information.
- e. Assess NRC's management of other administrative functions (e.g., contracts, property, facilities).
- f. Examine allegations of misuse pertaining to NRC's corporate management resources to include personnel, procurement, financial, and information technology.
- g. Investigate instances of alleged misconduct associated with NRC corporate management resources and programs.

h. Reduce instances of employee criminal and administrative misconduct through investigations or proactive initiatives.

#### PERFORMANCE DATA

The following tables include the strategic goals, measures, and targets for the current strategic plan. They also provide actual performance data for FY 2010-FY 2014.

	OIG Strategic Goal	: Strengthen NRC's I and the Er	Efforts To Protect Pub avironment	lic Health and Safety	
	2010	2011	2012	2013	2014
Measure 1. Percent	t of OIG products/activ	ities that have a high i	mpact <sup>1</sup> on improving	NRC's safety program	1.
Target	85%	85%	85%	85%	85%
Actual	100%	90.9%	89%	63% <sup>2</sup>	100%
Measure 2. Numbe	r of audit recommenda	tions agreed to by age	ncy.		
Target	92%	92%	92%	92%	92%
Actual	60% <sup>3</sup>	80%4	91% <sup>5</sup>	100%	36%6
Measure 3. Final a	gency action within 2 y	ears on audit recommo	endations.		
Target	70%	70%	70%	70%	70%
Actual	80%	80%	80%	82%	33%7
Measure 4. Agency	action in response to i	nvestigative reports.			
Target	95%	95%	95%	95%	95%
Actual	100%	100%	100%	100%	100%
Measure 5. Comple	ete active cases in less t	han 18 months.			
Target			90%8	90%	90%
Actual			100%	100%	50% <sup>9</sup>
Measure 6. Percent	t of closed investigation	s referred to DOJ or o	ther relevant authorit	ies.	
Target					20%10
Actual					N/A
Measure 7. Percen	t of closed investigation	s resulting in indictme	ents, convictions, or ot	her civil actions.	
Target	0				60%11
Actual					100%

	OIG Strategic Go	al 2: Enhance NRC's To an Evolving T	s Efforts To Increase S Threat Environment	Security in Response	
	2010	2011	2012	2013	2014
Measure 1. Perce	ent of OIG products/act	vities that have a high	impact on improving	NRC's security progra	am.
Target	75%	75%	75%	75%	75%
Actual	100%	100%	100%	100%	100%
Measure 2. Num	ber of audit recommend	lations agreed to by ag	gency.		
Target	92%	92%	92%	92%	92%
Actual	96.6%	100%	96%	100%	100%
Measure 3. Final	agency action within 2	years on audit recomm	nendations.		
Target	70%	70%	70%	70%	70%
Actual	80%	100%	88%	93%	70%
Measure 4. Agen	cy action in response to	investigative reports.			
Target	90%	90%	90%	90%	90%
Actual	100%	100%	100%	100%	100%
Measure 5. Com	plete active cases in less	than 18 months.			
Target			90%12	90%	90%
Actual			100%	33% <sup>13</sup>	75% <sup>14</sup>
Measure 6. Perce	ent of closed investigation	ons referred to DOJ or	other relevant author	rities.	
Target					20% <sup>15</sup>
Actual					N/A
	ent of closed investigation	ons resulting in indictn	nents, convictions, or	other civil actions.	
Target					60%16
Actual					100%

	2010	2011	2012	2013	2014
Measure 1. Peroprogram.	cent of OIG products	activities that have	a high impact on in	proving NRC's corp	oorate management
Target	85%	85%	85%	85%	85%
Actual	69.6% <sup>17</sup>	65.1% <sup>18</sup>	85%	83%19	74% <sup>20</sup>
Measure 2. Num	ber of audit recomme	ndations agreed to by	agency.		
Target	92%	92%	92%	92%	92%
Actual	100%	100%	100%	88% <sup>21</sup>	100%
Measure 3. Fina	l agency action within	2 years on audit reco	ommendations.		
Target	70%	70%	70%	70%	70%
Actual	92.9%	100%	86%	73%	90%
Measure 4. Ager	ncy action in response	to investigative repor	ts.		
Target	90%	90%	90%	90%	90%
Actual	100%	100%	100%	100%	100%
Measure 5. Com	plete active cases in le	ss than 18 months.			
Target			90% <sup>22</sup>	90%	90%
Actual			96%	95%	91%
Measure 6. Perc	ent of closed investiga	tions referred to DOJ	or other relevant au	thorities.	
Target					20% <sup>23</sup>
Actual					27%
Measure 7. Perc	ent of closed investiga	tions resulting in indi	ictments, convictions	, or other civil action	S.
Target					60% <sup>24</sup>
Actual					100%

#### FY 2014 BUDGET RESOURCES

The following table depicts the relationship of the Inspector General program and associated FY 2014 budget resources to the OIG's strategic and general goals.

<b>Program Links to</b>	OIG Strategic and General Goals			
Strategic and General Goals	Advance NRC's	Enhance NRC's	Improve NRC's	
(\$K)	Safety Efforts (\$K)	Security Efforts (\$K)	Corporate Management (\$K)	
FY 2014 Programs (\$11,105; 58 I	TTE)			
Audits	\$3,187	\$1,324	\$2,803	
(\$7,314; 37 FTE)	18.5 FTE	6.5 FTE	12.0 FTE	
Investigations	\$1,475	\$631	\$1,685	
(\$3,791; 21 FTE)	8.0 FTE	3.5 FTE	9.5 FTE	

#### Verification and Validation of Measured Values and Performance

OIG uses an automated management information system to capture program performance data for the Audits and Investigations Programs. The integrity of the system was thoroughly tested and validated prior to implementation. Reports generated by the system provide both detailed information and summary data. All system data are deemed reliable.

#### **CROSS-CUTTING FUNCTIONS WITH OTHER GOVERNMENT AGENCIES**

NRC OIG has cross-cutting functions with other law enforcement agencies. For example, OIG provides investigatory case referrals to the Department of Justice (DOJ). It also coordinates investigative activities with U.S. Attorneys' offices, as well as with other agencies as required.

#### PEER REVIEWS

An independent audit peer review performed in September 2012 by the National Archives and Records Administration OIG found that the Audits Program's system of quality control provided reasonable assurance that audits were conducted in accordance with applicable professional standards.

In addition, an independent investigative peer review was conducted in September 2013 by the U.S. Corporation for National and Community Service OIG. The program was found to be in compliance with quality standards established by the Council of the Inspectors General on Integrity and Efficiency and the Attorney General Guidelines for Offices of Inspectors General with Statutory Law Enforcement Authority.

#### CONCLUSION

OIG has successfully met its audit and investigative program goals for FY 2014. In fact, OIG met or exceeded 74 percent of its established goals. OIG continuously reviews its Strategic Plan to ensure that its goals and work strategies continue to add value to the NRC in carrying out its important safety and security mission.

1. High impact is the effect of an issued report or activity undertaken that results in: a) confirming risk areas or management challenges that caused the agency to take corrective action, b) real dollar savings or reduced regulatory burden, c) identifying significant wrongdoing by individuals that results in criminal or administrative action, d) clearing an individual wrongly accused, or e) identifying regulatory actions or oversight that may have contributed to the occurrence of a specific event or incident or resulted in a potential adverse impact on public health or safety.

2. Starting in FY 2010, a more rigorous standard was applied for the impact of investigations in the safety arena.

3. The agency required more than 90 days to review 4 recommendations on the Quality Assurance Planning for New Reactors audit prior to resolution. Subsequently, all 4 recommendations have been closed or resolved.

4. The agency required more than 90 days to review 3 of the 5 recommendations on the Audit of NRC's Implementation of 10 CFR Part 21 on Reporting of Defects and Noncompliance. Subsequently, all five recommendations have been resolved.

5. The agency required more than 90 days to resolve 2 of 5 recommendations on the Audit of NRC's Management of Licensee Commitments prior to resolution. Subsequently, all five recommendations have been resolved.

6. The agency required more than 90 days to resolve 6 of 6 recommendations on the Audit of NRC's Compliance with 10 CFR Part 51 Related to Environmental Impact Statements. Subsequently, all six recommendations have been resolved.

7. The agency required more than 2 years for final action on one of four recommendations on the Audit of NRC's Issuance of General Licenses. Final action has been completed in October 2014.

8. Starting in FY 2012, OIG will measure the percentage of active cases completed in less than 18 months on average.

9. Of 4 active investigative cases measured in the safety arena for the year, 2 cases were closed in less than 18 months which resulted in an achievement rate of 50 percent.

10. Starting in FY 2014, OIG will measure the percentage of closed investigations referred to DOJ or other relevant authorities.

11. Starting in FY 2014, OIG will measure the percentage of closed investigations resulting in indictments, convictions, civil suits or settlements, judgments, administrative actions, or monetary results.

12. Starting in FY 2012, OIG will measure the percentage of active cases completed in less than 18 months on average.

13. In the security arena, the complexity of the investigative cases resulted in several cases exceeding 18 months on average.

14. Of 4 active investigative cases measured in the security arena for the year, 3 cases were closed in less than 18 months which resulted in an achievement rate of 75 percent.

15. Starting in FY 2014, OIG will measure the percentage of closed investigations referred to DOJ or other relevant authorities.

16. Starting in FY 2014, OIG will measure the percentage of closed investigations resulting in indictments, convictions, civil suits or settlements, judgments, administrative actions, or monetary results.

17. Starting in FY 2010, a more rigorous standard was applied for the impact of investigations in the corporate management arena.

18. Starting in FY 2010, a more rigorous standard was applied for the impact of investigations in the corporate management arena.

19. Starting in FY 2010, a more rigorous standard was applied for the impact of investigations in the corporate management arena.

20. Starting in FY 2010, a more rigorous standard was applied for the impact of investigations in the corporate management arena.

21. The agency needed more than 90 days to review the recommendations on the Audit of NRC's Contract Administration of the Enterprise Project Management (EPM). The agency agreed to all recommendations.

22. Starting in FY 2012, OIG will measure the percentage of active cases completed in less than 18 months on average.

23. Starting in FY 2014, OIG will measure the percentage of closed investigations referred to DOJ or other relevant authorities.

24. Starting in FY 2014, OIG will measure the percentage of closed investigations resulting in indictments, convictions, civil suits or settlements, judgments, administrative actions, or monetary results.