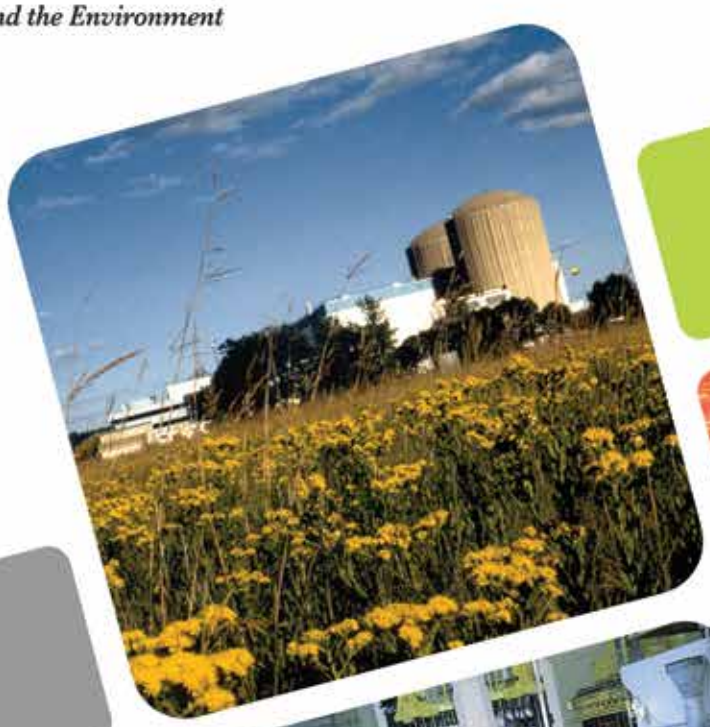
U.S.NRC

United States Nuclear Regulatory Commission

Protecting People and the Environment



FISCAL YEAR 2015 Performance and Accountability Report

UNITED STATES NUCLEAR REGULATORY COMMISSION

MISSION

License and regulate the Nation's civilian use of radioactive materials to protect public health and safety, promote the common defense and security, and protect the environment.

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Left to right: Commissioner Jeff Baran, Commissioner Kristine L. Svinicki, Chairman Stephen G. Burns, and Commissioner William C. Ostendorff.

The Fiscal Year 2015 Performance and Accountability Report provides performance results and audited financial statements that enable the President, Congress, and the public to assess the performance of the agency in achieving its mission and stewardship of its resources. The report contains a concise overview, Management's Discussion and Analysis, as well as performance and financial sections. Details of performance results and program evaluations can be found in the Program Performance section.

I am pleased to present the U.S. Nuclear Regulatory Commission's (NRC's) Performance and Accountability Report (PAR) for Fiscal Year (FY) 2015. This report presents the NRC's continuing success in achieving our mission to ensure the safe and secure use of radioactive materials for beneficial civilian purposes while protecting people and the environment. The report also provides key financial and performance information to Congress and the American people of how we used our resources during FY 2015. The report is available at http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1542/.

The NRC is an independent regulatory agency devoted to the effective and efficient oversight of the Nation's 99 operating nuclear reactors, and 31 research and test reactors. The agency also maintains oversight of the five reactors that are in the early stages of decommissioning. The NRC reviews all safety aspects of new reactor designs, environmental siting, combined license applications, and provides oversight for the four nuclear reactors currently under construction. Further, the agency focuses on the safe and secure use of nuclear materials in the energy, medical, and industrial sectors through effective oversight of fuel facilities, uranium recovery sites, decommissioning sites, and nuclear material user licensees. The NRC met all of its strategic goals, objectives, and performance indicator targets in FY 2015.

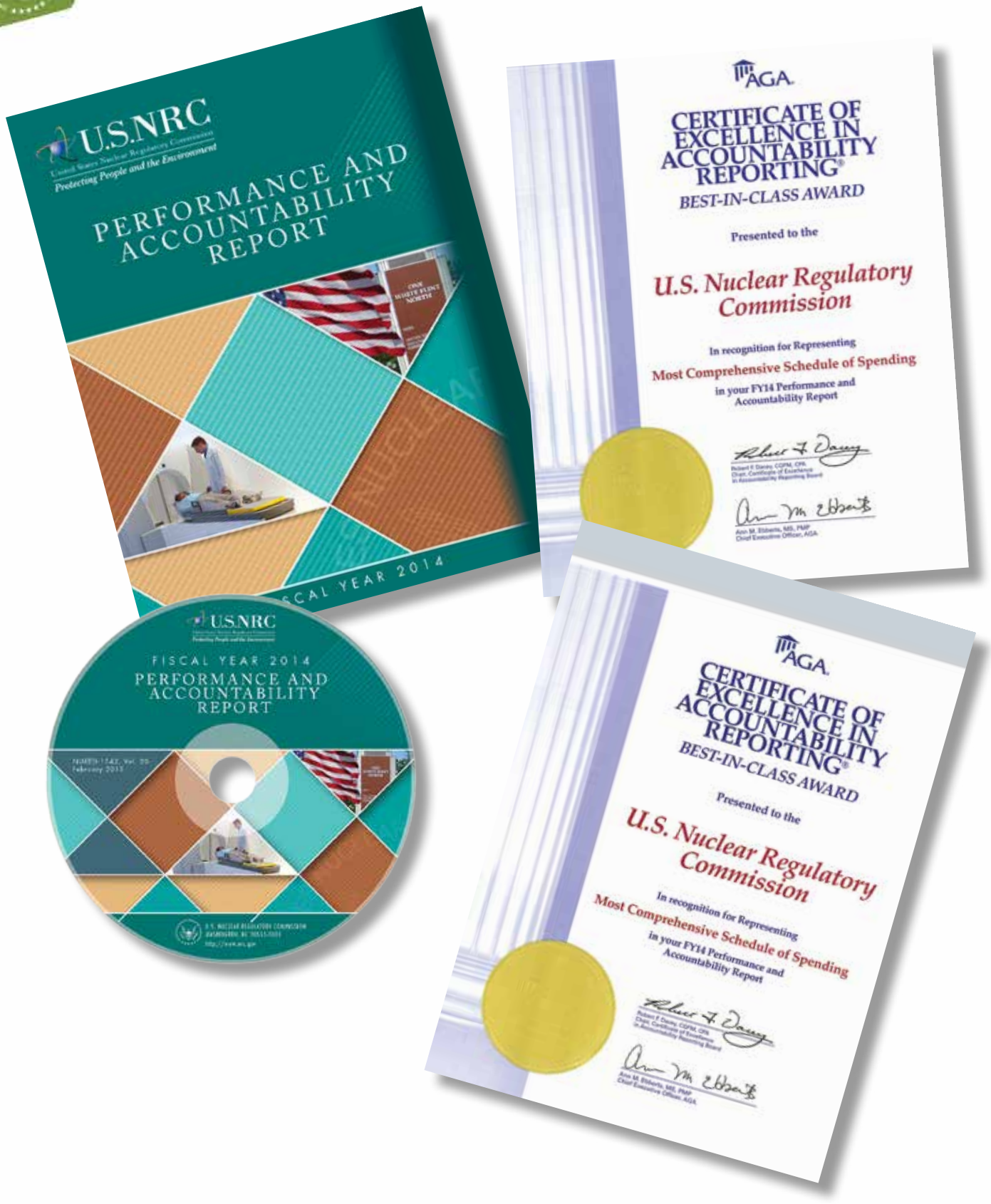
The NRC has continued addressing the recommendations developed following the 2011 Fukushima Dai-ichi accident in Japan.

During FY 2015, Fukushima activities continued to be worked under aggressive schedules with focus on the highest priority actions. During FY 2015, the agency worked to improve efficiency, effectiveness, and agility in responding to a range of possible futures while fulfilling our mission in the present and into the future. The Project Aim 2020 initiative provides the agency with an opportunity to improve by examining what we do and how we do it, and allows us to use our expertise efficiently in accomplishing our safety and security mission.

The NRC is committed to good governance and the prudent management of resources entrusted to it by the American people. I am also pleased to report that the NRC effectively managed its internal control environment during FY 2015. Based on Federal Manager's Financial Integrity Act of 1982 (FMFIA) assessments, I have concluded there is reasonable assurance that the agency is in substantial compliance with FMFIA, and the financial and performance data published in this report are complete, accurate, reliable, and timely, in accordance with the *Reports Consolidation Act of 2000* and Office of Management and Budget Circular A-136 requirements. Additionally, I have determined that the agency is in substantial compliance with the *Federal Financial Management Improvement Act of 1996* (FFMIA), based on the NRC's application of the FFMIA risk model. I am very impressed by the performance and dedication of NRC employees in achieving the agency's safety and security goals and look forward to continuing to provide the high-quality service the American people have come to expect from us.

Stephen G. Burns
Chairman
November 9, 2015

2015 Awards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In recognition for Representing
Most Comprehensive Schedule of Spending
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Robert F. Dacey, CGFM, CPA
Chair, Certificate of Excellence in Accountability Reporting Board
Ann M. Ebberts, MS, PMP
Chief Executive Officer, AGA
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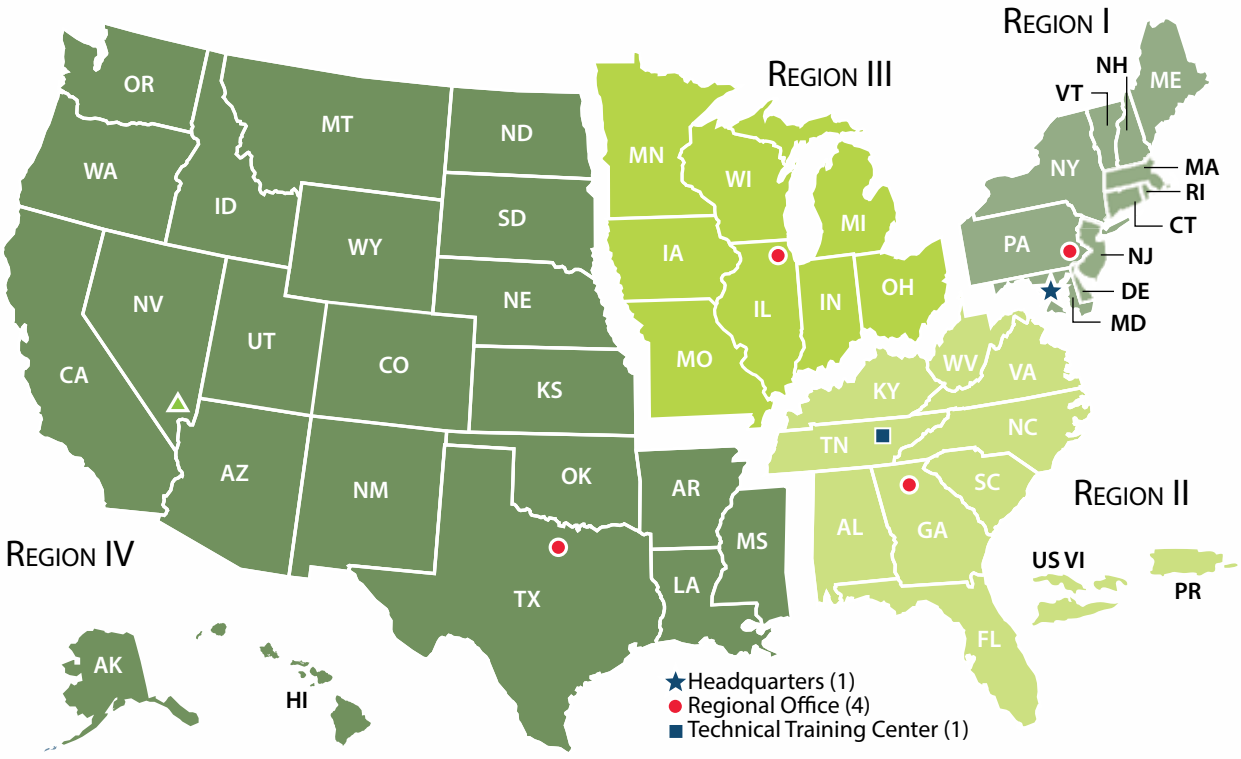
CHAPTER 1

MANAGEMENT'S DISCUSSION AND ANALYSIS

The U.S. Nuclear Regulatory Commission (NRC) Headquarters



The U.S. Nuclear Regulatory Commission (NRC) Regions

INTRODUCTION

The U.S. Nuclear Regulatory Commission (NRC) Performance and Accountability Report is an account of the agency's effectiveness in achieving its mission during fiscal year (FY) 2015. The report describes the agency's program and financial management performance during FY 2015, which covers the period from October 1, 2014 to September 30, 2015.

The agency has two strategic goals: Safety and Security. The agency achieved both its Safety and Security goals and met all of its performance indicator targets in FY 2015.

The agency's nuclear reactor and materials licensees maintained their excellent safety record. The agency also improved its operational activities by continuing to invest in its skilled workforce of engineers and scientists through knowledge transfer programs, recruiting a diverse workforce, and providing training opportunities.

The agency is in a sound financial position, having sufficient funds to meet programmatic needs and adequate control of these funds in place. The agency received an unmodified audit opinion on its financial statements from its auditors, with no instances of noncompliance with laws and regulations.

This report consists of four chapters. Chapter 1, "Management's Discussion and Analysis," provides an overview of the NRC and describes its programmatic and financial accomplishments during FY 2015. Chapter 2, "Program Performance," describes in detail the agency's success in meeting its goals and describes the programmatic activities that are the basis for accomplishing those goals. Chapter 3, "Financial Statements and Auditors' Report," describes the agency's financial position. Chapter 4, "Other Information," includes information on management challenges, a summary of the financial statement audit, and other information. The NRC places a high priority on keeping the public informed of its activities. Visit our Web site at www.nrc.gov to access this report online (http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1542/) and learn more about who we are and what we do to serve the American public.

ABOUT THE NRC

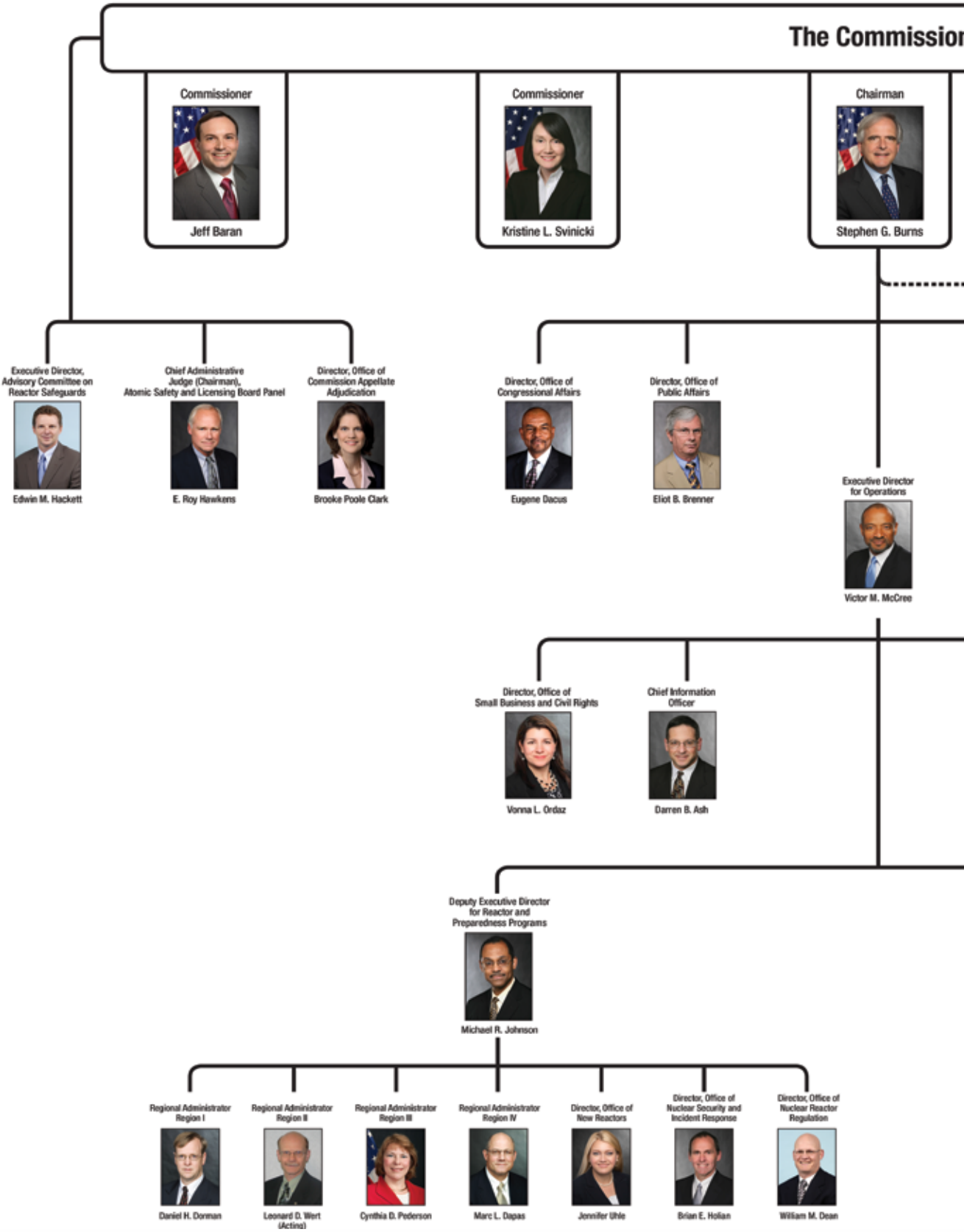
The U.S. Congress established the NRC on January 19, 1975, as an independent Federal agency regulating the commercial and institutional uses of nuclear materials. The *Atomic Energy Act of 1954*, as amended, and the *Energy Reorganization Act of 1974*, as amended, define the NRC's purpose. These acts provide the foundation for the NRC's mission to regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment. The agency regulates civilian nuclear power plants and other nuclear facilities, as well as other uses of nuclear materials. These other uses include nuclear medicine programs at hospitals; academic activities at educational institutions; research work; industrial applications, such as gauges and testing equipment; and the transport, storage, and disposal of nuclear materials and wastes.

The NRC is headed by a Commission composed of five members, with one member designated by the President to serve as Chairman. With the advice and consent of the Senate, the President appoints each member to serve a 5-year term. The Chairman is the principal executive officer and official spokesperson for the Commission. The Executive Director for Operations carries out program policies and decisions made by the Commission.

The NRC's headquarters is located in Rockville, MD. The NRC has an Operations Center in the headquarters building that coordinates communications with its licensees, State agencies, and other Federal agencies. This center is the focal point for assessing and responding to operating events in the industry. The NRC operations officers staff the Operations Center 24 hours a day, 7 days a week.

The agency also has four regional offices located in King of Prussia, PA; Atlanta, GA; Lisle, IL; and Arlington, TX. The regional offices allow the agency to work closely with the agency's licensees to ensure safety. The NRC also employs at least two resident inspectors at each of the Nation's nuclear power reactor, new reactor, and fuel fabrication sites.

U.S. NUCLEAR REGULATORY COMMISSION



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United States Nuclear Regulatory Commission
Protecting People and the Environment

n

Commissioner

William C. Ostendorff

Commissioner

Vacant

Chief Financial Officer

Maureen E. Wylie

Inspector General

Hubert T. Bell

The dotted line signifies that the Inspector General exercises a much higher degree of independence with the Chairman in carrying out his roles and responsibilities in comparison to other executives reporting to the Chairman.

General Counsel

Margaret M. Doane

Director, Office of International Programs

Nader L. Mamish

Secretary of the Commission

Annette L. Vietti-Cook

Assistant for Operations

Frederick D. Brown

Deputy Executive Director for Materials, Waste, Research, State, Tribal, Compliance, Administration and Human Capital

Glenn M. Tracy

Director, Office of Nuclear Regulatory Research

Michael F. Weber

Director, Office of Enforcement

Patricia K. Holahan

Director, Office of Nuclear Material Safety and Safeguards

Scott W. Moore (acting)

Director, Office of Investigations

Cheryl L. McCrary

Director, Office of Administration

Cynthia A. Carpenter

Chief Human Capital Officer

Miriam L. Cohen

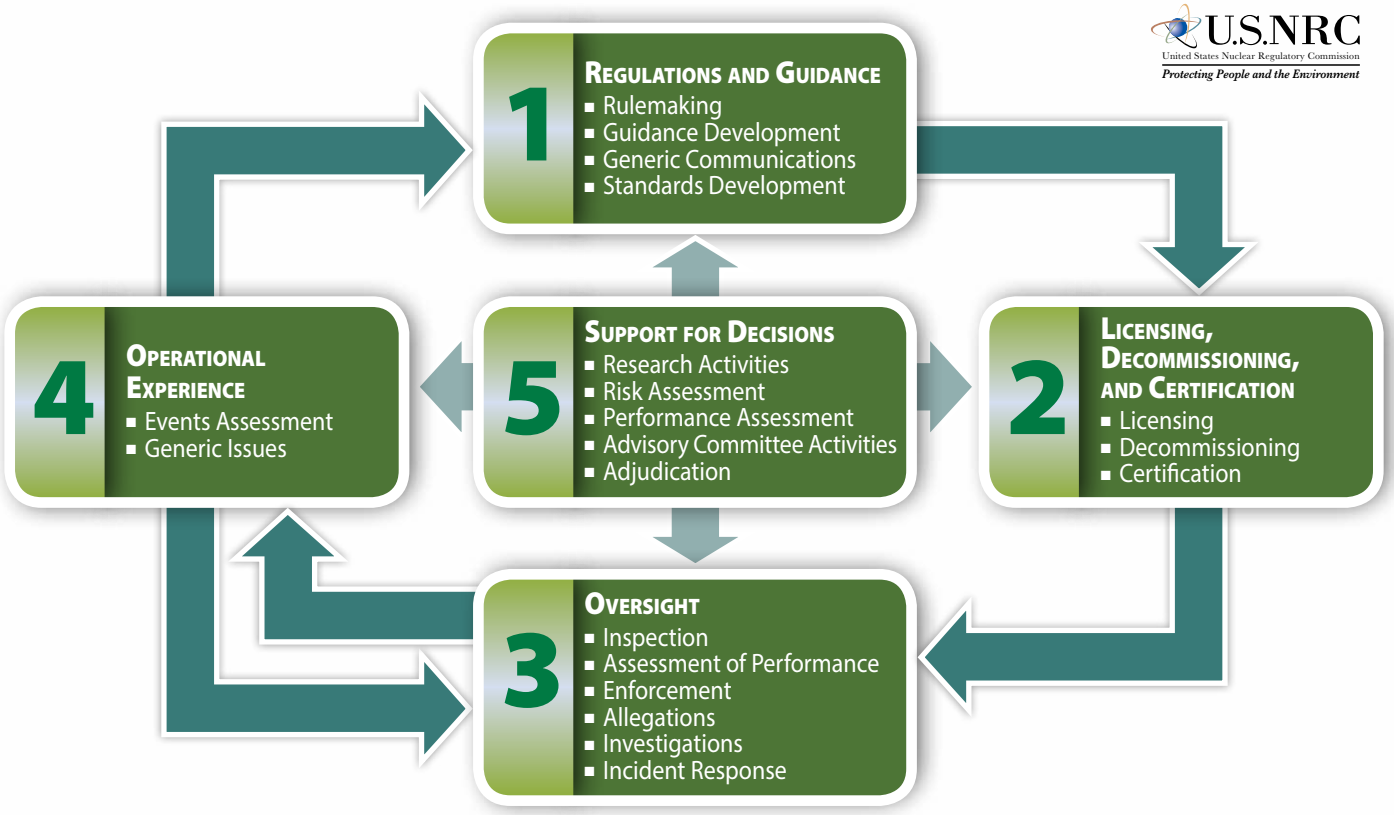
The NRC's budget for FY 2015 was $1,015.3 million, with a full-time equivalent staff ceiling of 3,778.5. The NRC is primarily supported by fees collected from its licensees. The agency collected $885.3 million (approximately 90 percent) of its budget for FY 2015 from licensees, with the remaining funds provided by the U.S. Treasury (Treasury).

THE NRC'S REGULATORY ACTIVITIES

The NRC performs five principle regulatory functions: developing regulations and guidance for applicants and licensees; licensing or certifying applicants to use nuclear materials, operate nuclear facilities, construct new nuclear facilities, and decommissioning facilities; inspecting and assessing licensee operations and facilities to ensure that licensees comply with NRC requirements and taking appropriate follow-up or enforcement actions when necessary; evaluating operational experience of license facilities and activities; and conducting research, holding hearings, and obtaining independent reviews to support regulatory decisions (see Figure 1).

The standards and regulations established by the agency set the rules that users of radioactive materials must follow. Drawing upon the knowledge and experience of the agency's scientists and engineers, these rules are the basis for protecting workers and the general public from the potential hazards associated with the use of radioactive materials.

FIGURE 1 – How We Regulate



1. Developing regulations and guidance for applicants and licensees
2. Licensing or certifying applicants to use nuclear materials, operate nuclear facilities, and decommission facilities
3. Inspecting and assessing licensee operations and facilities to ensure licensees comply with NRC requirements, responding to incidents, investigating allegations of wrongdoing and taking appropriate followup or enforcement actions when necessary.
4. Evaluating operational experience of licensed facilities and activities.
5. Conducting research, holding hearings, and obtaining independent reviews to support regulatory decisions.

With a few exceptions, any organization or individual intending to have or use radioactive materials must obtain a license. A license identifies the type and amount of radioactive material that may be held and used. NRC scientists and engineers evaluate the license application to ensure that the potential licensee's use of nuclear materials meets the agency's safety and security requirements.

The agency inspects all facilities that it licenses on a regular basis to ensure that they meet NRC regulations and are being operated safely and securely. NRC specialists conduct 10 to 25 routine inspections each year at each of the 99 operating nuclear power plants. In addition, the agency oversees approximately 2,800 licenses for medical, academic, industrial, and general uses of nuclear materials. The agency conducts approximately 1,000 health and safety inspections of its nuclear materials licensees annually. Under the NRC's Agreement State program, 37 States have assumed primary regulatory responsibility over the industrial, medical, and other users of nuclear materials within their States, accounting for approximately 18,000 licensees. The NRC works closely with these States to ensure that they maintain public safety through acceptable licensing and inspection procedures.

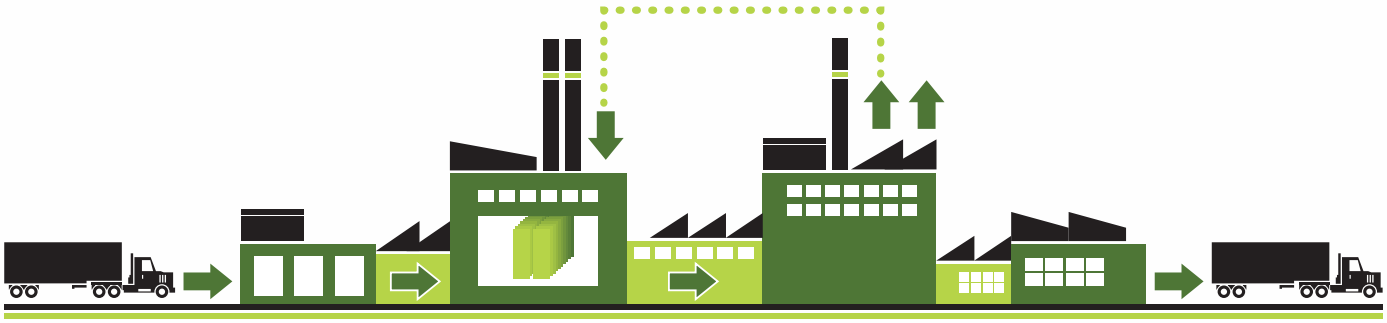
THE NUCLEAR INDUSTRY

The NRC is responsible for regulating all aspects of the civilian nuclear industry. The industry can best be described by examining the nuclear material cycle. The nuclear material cycle begins with the mining and production of nuclear fuel or the use of nuclear materials for medical, industrial, and other applications; continues with the use of nuclear fuel to power the Nation's 99 nuclear power plants; and ends with the safe transportation and storage of spent nuclear fuel and other nuclear waste. The NRC's regulatory programs ensure that radioactive materials are used safely and securely at every stage in the nuclear material cycle. To address safety and security issues, the NRC has developed regulatory practices, knowledge, and expertise specific to each activity in the nuclear material cycle.

FUEL FACILITIES

The production of nuclear fuel begins at uranium mines where milled uranium ore is used to produce a uranium concentrate called "yellow cake." At a special facility, the yellow cake is converted into uranium hexafluoride gas and loaded into cylinders. The cylinders are sent to a gaseous diffusion plant, where uranium is enriched for use as reactor fuel. The enriched uranium is then converted

FIGURE 2 – SIMPLIFIED FUEL FABRICATION PROCESS



Fabrication of commercial light-water reactor fuel consists of the following three basic steps:

(1) the chemical conversion of uranium hexafluoride (UF_6) to uranium dioxide (UO_2) powder
(2) a ceramic process that converts UO_2 powder to small ceramic pellets
(3) a mechanical process that loads the fuel pellets into rods and constructs finished fuel assemblies

Small ceramic fuel pellets

Figure 3 – The Boiling-Water Reactor (BWR)

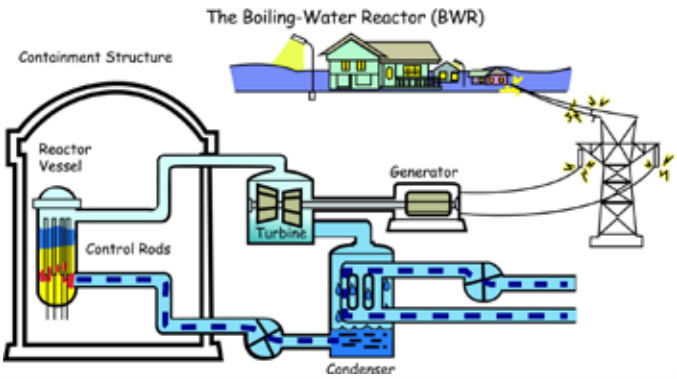
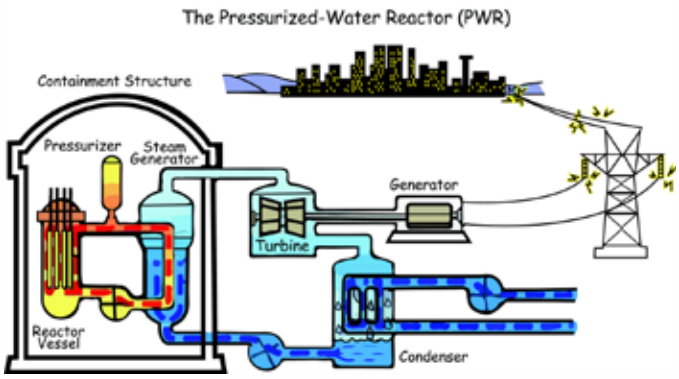


Figure 4 – The Pressurized Water Reactor (PWR)



into oxide powder, fabricated into fuel pellets (each about the size of a fingertip), loaded into metal fuel rods about 3.5 meters long, and bundled into reactor fuel assemblies at a fuel fabrication facility. Assemblies are then transported to nuclear power plants, non-power research reactor facilities, and naval propulsion reactors for use as fuel (see Figure 2). The NRC licenses eight major fuel fabrication and production facilities and three enrichment facilities in the United States. Because they handle extremely hazardous material, these facilities take special precautions to prevent theft, diversion by terrorists, and dangerous exposures to workers and the public from this nuclear material.

REACTORS

To generate electricity, power plants change one form of energy into another. Electrical generating plants convert heat energy, the kinetic energy of wind or falling water, or solar energy, into electricity. Other types of heat-conversion plants burn coal, oil, or gas to produce heat energy that is then used to produce electricity. Nuclear energy cannot be seen. Heat energy is not produced by burning of fuel in the usual sense. Rather, energy is given off by the nuclear fuel as certain types of atoms split in a process called nuclear fission. This energy is in the form of fast-moving particles and invisible radiation. As the particles and radiation move through the fuel and surrounding water, the energy is converted into heat, which generates electricity. The radiation energy can be hazardous, and facilities take special precautions at nuclear power plants to protect people and the environment from these hazards.

Because the fission reaction produces hazardous radioactive materials, nuclear power plants are equipped with safety systems to protect workers, the public, and the environment. Radioactive materials require careful use because they produce radiation, a form of energy that can damage human cells. Depending on the amount and duration of the exposure, radiation can cause cancer. In a nuclear reactor, most hazardous radioactive substances, called fission byproducts, are trapped in the fuel pellets, or in the sealed metal tubes holding the fuel. However, small amounts of these radioactive fission byproducts, principally gases, become mixed with the water passing through the reactor. Other impurities in the water also become radioactive as they pass through the reactor. The facility processes and filters the water to remove these radioactive impurities and then returns the water to the reactor cooling system.

MATERIALS USERS

The medical, academic, and industrial fields all use nuclear materials. For example, about one-third of all patients admitted to U.S. hospitals are diagnosed or treated using radioisotopes. Most major hospitals have specific departments dedicated to nuclear medicine. In all, about 112 million nuclear medicine or radiation therapy procedures are performed annually, with the vast majority used in diagnoses. Radioactive materials used as a diagnostic tool can identify the status of a disease and minimize the need for surgery. Radioisotopes give doctors the ability to look inside the body and observe soft tissues and organs, in a manner similar to the way X-rays provide images of bones. Radioisotopes carried in the blood also allow doctors to detect clogged arteries or check the functioning of the circulatory system.

The same property that makes radiation hazardous can also make it useful in treating certain diseases like cancer. When living tissue is exposed to high levels of radiation, cells can be destroyed or damaged. Doctors can selectively expose cancerous cells (cells that are dividing uncontrollably) to radiation to either destroy or damage these cells.

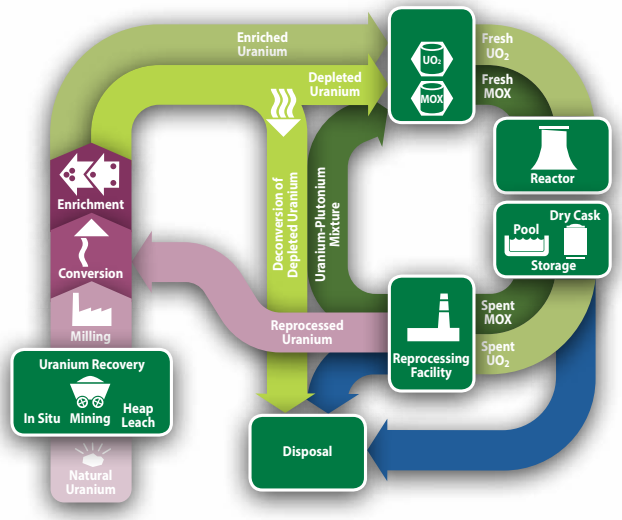
Many of today's industrial processes also use nuclear materials. High-tech methods that ensure the quality of manufactured products often rely on radiation generated by radioisotopes. To determine whether a well drilled deep into the ground has the potential for producing oil, geologists use nuclear well-logging, a technique that employs radiation from a radioisotope inside the well to detect the presence of different materials. Radioisotopes are also used to sterilize instruments, find flaws in critical steel parts and welds that go into automobiles and modern buildings, authenticate valuable works of art, and solve crimes by spotting trace elements of poison. Radioisotopes can also eliminate dust from film and compact discs and reduce static electricity (which may create a fire hazard) from can labels. In manufacturing, radiation can change the characteristics of materials, often giving them features that are highly desirable. For example, wood and plastic composites treated with gamma radiation resist abrasion and require low maintenance. As a result, they are used for some flooring in high-traffic areas of department stores, airports, hotels, and churches.

WASTE DISPOSAL

During normal operations, a nuclear power plant generates both high-level radioactive waste, which consists of spent fuel, and low-level radioactive waste, which includes contaminated equipment, filters, maintenance materials, and resins used in purifying water for the reactor cooling system. Other users of radioactive materials also generate low-level waste.

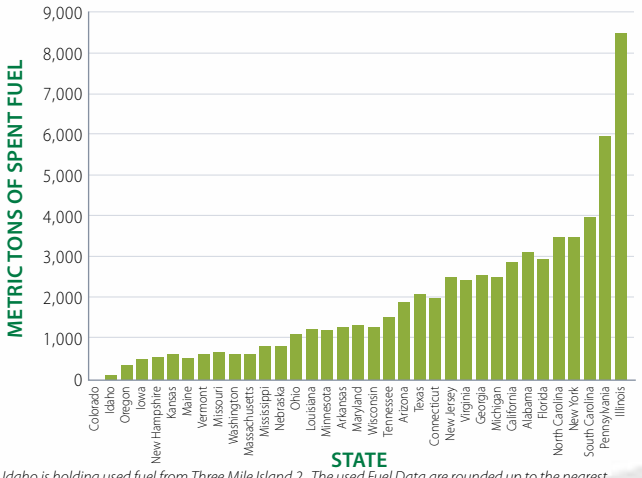
Nuclear power plants handle each type of radioactive waste differently. They must use special procedures in the handling of the spent fuel because it contains the highly radioactive fission byproducts created while the reactor was operating. Typically, the spent fuel from nuclear power plants is stored in water-filled pools at each reactor site or at a storage facility in Illinois. The water in the spent fuel storage pool provides cooling and adequately shields and protects workers from the radiation. Several nuclear power plants have also begun using dry casks to store spent fuel. These heavy metal or concrete casks rest on concrete pads adjacent to the reactor facility. The thick layers of concrete and steel in these casks shield workers and the public from radiation.

FIGURE 5 – THE NUCLEAR FUEL CYCLE



Currently, most spent fuel in the United States remains stored at individual plants. Permanent disposal of spent fuel from nuclear power plants (see Figure 6) will require a disposal facility that can provide reasonable assurance that the waste will remain isolated for thousands of years.

FIGURE 6 – STORAGE OF COMMERCIAL SPENT FUEL BY STATE THROUGH 2014



Idaho is holding used fuel from Three Mile Island 2. The used Fuel Data are rounded up to the nearest 10 for CY 2011.

Source: Gutherman Technical Services and U.S. Department of Energy

Updated: April 2014

Licensees often store low-level waste onsite until its radioactivity has decayed and the waste can be disposed of as ordinary trash, or until amounts are large enough for shipment to a low-level waste disposal site in containers approved by the U.S. Department of Transportation (DOT). The NRC has developed a waste classification system for low-level radioactive waste based on its potential hazards, and has specified disposal and waste form requirements for each of the following general classes of waste: Class A, Class B, and Class C waste. Generally, Class A waste contains lower concentrations of radioactive material than Class B and Class C wastes. There are two low-level disposal facilities that accept a broad range of low-level wastes. They are located in Barnwell, SC, and Richland, WA.

FY 2015 PERFORMANCE RESULTS

The NRC's FY 2014 – 2018 Strategic Plan describes the agency's mission, goals, and strategies. The Strategic Plan can be found on the NRC Web site at http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1614/v6/. The agency's two strategic goals are focused on Safety and Security. The Safety goal is to *Ensure the safe use of radioactive materials.* The Security goal is to *Ensure the secure use of radioactive materials.*

With the implementation of the Strategic Plan, the agency developed new performance indicators that are more in line with the Plan. Because the nature of the agency's Safety and Security strategic objectives is to prevent or minimize undesirable outcomes, the desired trends for all of its performance indicators are to either maintain these outcomes at zero or at very low levels.

STRATEGIC GOAL 1 — **Ensure the safe use of radioactive materials.**

STRATEGIC OBJECTIVE

Strategic objectives express more specifically the results that are needed to achieve a strategic goal. The strategic objective for Goal 1 is:

Prevent and mitigate accidents and ensure radiation safety.

Minimizing the likelihood of accidents and reducing the consequences of an accident (should one occur) are the key elements for achieving the NRC's safety goal. Such accidents, particularly for large complex facilities like nuclear power plants, have the potential to release significant amounts of radioactive material to the environment and expose facility workers and the public to high levels of radiation. Even in the absence of accidents, radiological hazards exist during routine operations, and the NRC ensures that measures are in place to minimize exposure for workers and the public and prevent unintended releases of radioactive materials to the environment.

FY 2015 RESULTS

In FY 2015, the NRC achieved its safety goal strategic objective. The NRC uses six performance indicators to determine whether it has met its Safety goal. The agency met all six performance indicator targets in FY 2015. Table 1 (see page 12) shows the outcomes from FY 2010 – FY 2014.

The cost of achieving the agency's Safety goal in FY 2015 was $1,025.5 million.

PERFORMANCE INDICATORS: FY 2015

The purpose behind the NRC's performance indicators is to track the effectiveness, of agency programs to prevent or minimize undesirable outcomes. Therefore, the trends indicating the agency's success in accomplishing its mission would be at or near zero.

The following performance indicators were developed in conjunction with the development of the agency's FY 2014–2018 Strategic Plan. More information on the abnormal occurrence (AO) criteria is found in the *Data Sources, Data Quality, and Data Security* section of this chapter.

Safety Objective 1: Prevent and mitigate accidents and ensure radiation safety.

Performance Goal 1: Prevent radiation exposures that significantly exceed regulatory limits.

Performance Indicator: Number of radiation exposures that meet or exceed AO criteria I.A.1 (unintended radiation exposure to an adult), I.A.2 (unintended radiation exposure to a minor), or I.A.3[1] (radiation exposure that has resulted in unintended permanent functional damage to an organ or physiological system)

[1] *All references to the AO criteria in this section refer to the definitions in Appendix A of the "Report to Congress on Abnormal Occurrences: Fiscal Year 2014," NUREG-0090, Volume 37, published May 2015.*

Timeframe: Annual

Business Line	FY 2015	
Operating Reactors	Target: 0	Actual: 0
New Reactors	Target: 0	Actual: 0
Fuel Facilities	Target: 0	Actual: 0
Decommissioning and Low-Level Waste	Target: 0	Actual: 0
Spent Fuel Storage and Transportation	Target: 0	Actual: 0
Nuclear Materials Users	Target: ≤3	Actual: 2

Discussion: This indicator tracks the effectiveness of the NRC's nuclear safety regulatory programs, in part through the number of radiation exposures to the public and occupational workers that exceed AO criteria. This indicator tracks both nuclear reactors and other nuclear material users, such as hospitals and industrial users. Two such exposures took place during FY 2015. Incidents of this nature would be included in the NRC's annual report to Congress, the latest version of which is available online through the NRC's Agencywide Documents Access and Management System (ADAMS) at Accession No. ML15140A285.

Performance Goal 2: Prevent releases of radioactive materials that significantly exceed regulatory limits.

Performance Indicator: Number of releases of radioactive materials that meet or exceed AO criterion I.B (discharge or dispersal of radioactive material from its intended place of confinement that results in releases of radioactive material)

Timeframe: Annual

Business Line	FY 2015	
Operating Reactors	Target: 0	Actual: 0
New Reactors	Target: 0	Actual: 0
Fuel Facilities	Target: 0	Actual: 0
Decommissioning and Low-Level Waste	Target: 0	Actual: 0
Spent Fuel Storage and Transportation	Target: 0	Actual: 0
Nuclear Materials Users	Target: 0	Actual: 0

Discussion: This indicator tracks the effectiveness of the NRC's nuclear material regulatory programs. Exceeding the applicable regulatory limits is defined as a release of radioactive material that causes a total effective radiation dose equivalent to individual members of the public greater than 0.1 rem in a year, exclusive of dose contributions from background radiation. In FY 2015, there were no releases of this nature.

Performance Goal 3: Prevent the occurrence of any inadvertent criticality events.

Performance Indicator: Number of instances of unintended nuclear chain reactions involving NRC-licensed radioactive materials

Timeframe: Annual

Business Line	FY 2015	
Operating Reactors	Target: 0	Actual: 0
Fuel Facilities	Target: 0	Actual: 0
Decommissioning and Low-Level Waste	Target: 0	Actual: 0

Discussion: This indicator tracks the effectiveness of the NRC's criticality regulatory programs through the number of unintended self-sustaining nuclear reactions occurring within a fiscal year. Intended criticality events include the startup of a nuclear power reactor.

Performance Goal 4: Prevent accident precursors and reductions of safety margins at commercial nuclear power plants (operating or under construction) that are of high safety significance.

Performance Indicator: Number of malfunctions, deficiencies, events, or conditions at commercial nuclear power plants (operating or under construction) that meet or exceed AO criteria II.A-II.D (events at commercial nuclear power plant licensees)

Timeframe: Annual

Business Line	FY 2015	
Operating Reactors	Target: ≤3	Actual: 0
New Reactors	Target: ≤3	Actual: 0

Discussion: The NRC's Reactor Oversight Process (ROP) monitors nuclear power plant performance in three areas: (1) reactor safety, (2) radiation safety, and (3) security. Analysis of individual plant performance is based on both licensee-submitted performance indicators and NRC inspection findings, which are independent assessments

of licensee performance by the NRC as the regulatory authority. Each issue is evaluated and assigned one of four categories in order of increasing significance: green, white, yellow, or red. Greater oversight by the NRC results as the severity of the findings increase. A red finding or performance indicator signals a significant reduction in the safety margin in the measured area. No red findings were issued in FY 2015.

Performance Goal 5: Prevent accident precursors and reductions of safety margins at nonreactor facilities or during transportation of nuclear materials that are of high safety significance.

Performance Indicator: Number of malfunctions, deficiencies, events, or conditions at nonreactor facilities or during transportation of nuclear materials that meet or exceed AO criteria III.A or III.B (events at facilities other than nuclear power plants and all transportation events)

Timeframe: Annual

Business Line	FY 2015	
Fuel Facilities	Target: 0	Actual: 0
Decommissioning and Low-Level Waste	Target: 0	Actual: 0
Spent Fuel Storage and Transportation	Target: 0	Actual: 0

Discussion: This indicator tracks the effectiveness of the NRC's safety programs for nonreactor facilities or during transportation of nuclear materials through the number of instances in which safety margins at nonreactor facilities are at unacceptable levels.

Performance Goal 6: Prevent medical events involving radioactive materials that result in death or have a significant unintended impact on patient health.

Performance Indicator: Number of medical events that meet or exceed a revised version of AO criterion III.C.3 (events involving the medical use of radioactive materials in patients or human research subjects) to be developed in 2016

Timeframe: Annual

Business Line	FY 2015	
Nuclear Materials Users	Target: N/A*	Actual:

** This indicator has been discontinued because the Commission approved alternate metrics in FY 2015 and did not approve the addition of Criterion III.C.3.*

Discussion: This indicator tracks the effectiveness of the NRC's regulatory safety program for the medical use of nuclear material through the number of medical events meeting or exceeding criterion III.C.3.

TABLE 1 – FY 2010-2014 SAFETY PERFORMANCE INDICATORS

1. Number of New Conditions Evaluated as Red by the NRC's Reactor Oversight Process*	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	Replaced by Safety Performance Goal 4
Actual	0	1	1	0	0	

** This measure is the number of new red inspection findings and the number of new red performance indicators during the fiscal year. Programmatic issues at multiunit sites that result in red findings for each individual unit are considered separate conditions for purposes of reporting for this measure. A red performance indicator and a red inspection finding that are caused by an issue with the same underlying causes also are considered separate conditions for purposes of reporting for this measure. Red inspection findings are included in the fiscal year in which the final significance determination was made. Red performance indicators are included in the fiscal year in which the ROP external Web page was updated to show the red indicator.*

2. Number of Significant Accident Sequence Precursors (ASPs) * of a Nuclear Reactor Accident	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	≤ 0	≤ 0	≤ 0	≤ 0	≤ 0	Replaced by Safety Performance Goal 4
Actual	0	0	0	0	0	

**Significant ASP events have a conditional core damage probability (CCDP) or ΔCDP of greater than 1×10^{-3}. Such events have a 1/1000 (1×10^{-3}) or greater probability of leading to a reactor accident involving core damage. An identical condition affecting more than one plant is counted as a single ASP event if a single accident initiator would have resulted in a single reactor accident.*

TABLE 1 – FY 2010-2014 SAFETY PERFORMANCE INDICATORS (CONTINUED)

3. Number of Operating Reactors with Integrated Performance That Entered the Multiple/Repetitive Degraded Cornerstone Column or the Unacceptable Performance Column of the Reactor Oversight Process Action Matrix, or the Inspection Manual Chapter 0350 Process is ≤ 3 with No Performance Leading to the Initiation of an Accident Review Group*

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	Replaced by Safety Performance Goal 4
Actual	0	2	1	0	0	

**This measure is the number of plants that have entered the process in Inspection Manual Chapter (IMC) 0350, "Oversight of Reactor Facilities in a Shutdown Condition due to Significant Performance and/or Operational Concerns," dated December 15, 2006; the multiple/repetitive degraded cornerstone column; or the unacceptable performance column during the fiscal year (but, were not in these columns or process the previous fiscal year). Data for this measure are obtained from the NRC's external Web Action Matrix Summary page, which provides a matrix of the five columns with the plants listed within their applicable column and notes the plants in the IMC 0350 process. For reporting purposes, plants that are the subject of an approved deviation from the Action Matrix are included in the column or process in which they appear on the Web page. The target value is set based on the expected addition of several indicators and a change in the long-term trending methodology (which will no longer be influenced by the earlier data and will be more sensitive to changes in current performance).*

4. Number of Significant Adverse Trends in Industry Safety Performance is ≤ 1*

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015**
Target	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1**
Actual	0	0	0	0	0	0**

**Considering all indicators qualified for use in reporting*
***Indicator discontinued with the adoption of the indicators for the FY2014-2018 Strategic Plan*

5. Number of Events with Radiation Exposures to the Public or Occupational Workers That Exceed Abnormal Occurrence (AO) Criterion I.A.3*

		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Reactors	Target	0	0	0	0	0	
Reactors	Actual	0	0	0	0	0	
Materials	Target	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	Replaced by Safety Performance Goal 1
Materials	Actual	0	0	0	0	0	
Waste	Target	0	0	0	0	0	
Waste	Actual	0	0	0	0	0	

**Releases for which a 30-day report under Title 10 of the Code of Federal Regulations (10 CFR) 20.2203(a)(3) is required.*

6. Number of Radiological Releases to the Environment That Exceed Applicable Regulatory Limits*

		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Reactors	Target	0	0	0	0	0	
Reactors	Actual	0	0	0	0	0	
Materials	Target	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	Replaced by Safety Performance Goal 2
Materials	Actual	0	0	0	0	0	
Waste	Target	0	0	0	0	0	
Waste	Actual	0	0	0	0	0	

**With no event exceeding AO criterion I.B*

SAFETY GOAL STRATEGIES

The agency used the following safety strategies from its strategic plan to guide its activities and to achieve its safety goal in FY 2015:

Safety Strategy 1: Enhance the NRC's regulatory programs as appropriate using lessons learned from domestic and international operating experience and other sources.

Safety Strategy 2: Enhance the risk-informed and performance-based regulatory framework in response to advances in science and technology, policy decisions, and other factors.

Safety Strategy 3: Ensure the effectiveness and efficiency of licensing and certification activities to maintain both quality and timeliness of licensing and certification reviews.

Safety Strategy 4: Maintain effective and consistent oversight of licensee performance to drive continued licensee compliance with NRC safety requirements and license conditions.

Safety Strategy 5: Ensure the NRC's readiness to respond to incidents and emergencies involving NRC-licensed facilities and radioactive materials and other events of domestic and international interest.

Safety Strategy 6: Ensure that nuclear facilities are constructed in accordance with approved designs and that there is an effective transition from oversight of construction to oversight of operation.

Safety Strategy 7: Ensure that the environmental and site safety regulatory infrastructure is adequate to support the issuance of new nuclear licenses.

FUKUSHIMA REGULATORY REVIEW

The NRC's efforts to implement the lessons learned from the Fukushima Dai-ichi accident in March 2011 continued during FY 2015. Nuclear power plants in the United States have made great progress in implementing the near-term actions to address natural disasters that may challenge the design bases of these plants. The agency oversaw implementation of new requirements to address hazards such as earthquakes and flooding. The NRC has also been using the insights from Fukushima to inform its licensing and oversight activities. The agency has been conducting technical studies and regulatory analyses for ensuring the safe operation of existing reactors and to be applied to new reactors. A more complete discussion of the review and the subsequent actions taken by the NRC can be found in Chapter 2 under "Operating Reactors."

Additional information can be found on the agency Web site http://www.nrc.gov/reactors/operating/ops-experience/japan-info.html

STRATEGIC GOAL 2

Ensure the secure use of radioactive materials.

STRATEGIC OBJECTIVES

Strategic objectives more specifically express the results that are needed to achieve a strategic goal. The strategic objectives for Goal 2 are:

Ensure protection of nuclear facilities and radioactive materials.

Protecting nuclear facilities and radioactive materials are key factors for achieving the NRC's security goal. Nuclear facilities and materials are protected against hostile intent by two primary means: (1) control of access to facilities and materials; and (2) accountability controls for radioactive materials. These controls are intended to prevent those with hostile intent from either damaging a nuclear facility in such a way that a significant release of radioactive materials to the environment occurs, or obtaining enough radioactive material for malevolent use.

Ensure protection of classified and Safeguards Information

Protecting classified and Safeguards Information is another key contributor to achieving the agency's security goal. This is accomplished primarily by controlling access to this information to ensure that potential adversaries cannot use it for malevolent purposes, such as sabotage, theft, or diversion of radioactive materials.

The strategic objectives specify the conditions that must be met for the agency to ensure the secure use of radioactive materials.

FY 2015 RESULTS

In FY 2015, the NRC achieved its Security goal strategic objectives. The NRC also uses three Security goal performance indicators to determine whether the agency has met its security goal. The agency met all three performance indicator targets in FY 2015. Outcomes from FY 2010 – FY 2014 are in Table 2 (see page 15).

The cost of achieving the agency's Security goal was $58.0 million in FY 2015.

SECURITY PERFORMANCE INDICATORS: FY 2015

Security Objective 1: ***Ensure protection of nuclear facilities and radioactive materials.***

Performance Goal 1: Prevent sabotage, theft, diversion, or loss of risk-significant quantities of radioactive material.

Performance Indicator: Number of instances of sabotage, theft, diversion, or loss of risk-significant quantities of radioactive material that meet or exceed AO criteria I.C.1 (unrecovered lost, stolen, or abandoned sources), I.C.2 (substantiated case of actual theft or diversion), and the portion of criterion I.C.3 (substantiated loss of a formula quantity) concerning theft or diversion of special nuclear material.

Timeframe: Annual

Business Line	FY 2015	
All Business Lines	Target: 0	Actual: 0

Discussion: This indicator tracks the agency's effectiveness at preventing sabotage, theft, diversion, or loss of risk-significant quantities of radioative material through tracking any loss or theft of radioactive nuclear sources that the NRC has determined to be of significant risk. The indicator tracks the agency's performance in ensuring the proper accounting for radioactive sources of significant risk that could be used for malicious purposes. It also tracks whether NRC-licensed facilities maintain adequate protective capabilities to prevent theft or diversion of nuclear material or sabotage that could result in substantial harm to the public health and safety, tracks whether special nuclear material is accounted for, and verifies that formula-quantity losses of this material do not occur. The indicator also tracks whether the systems in place at NRC-licensed facilities maintain accurate inventories of the special nuclear material (SNM) that the facilities process, use, or store. No such incidents took place during FY 2015.

Performance Goal 2: Prevent substantial breakdowns of physical security, cyber security, or material control and accountability.

Performance Indicator: Number of substantial breakdowns of physical security, cyber security, or material control and accountability that meet or exceed a revised version of AO criterion I.C.4 (substantial breakdown in physical security or materials control) that will include breakdowns of cyber security and the portion of AO criterion I.C.3 concerning breakdowns of the accountability system for special nuclear material.

Timeframe: Annual

Business Line	FY 2015	
All Business Lines	Target: ≤ 1	Actual: 0

Discussion: This indicator tracks the agency's effectiveness in maintaining security by tracking any breakdowns in access control, containment, or accountability systems that significantly weakened the protection against theft, diversion, or sabotage for nuclear materials that the agency has determined to be of significant risk. In FY 2015, there were no incidents of this nature.

Security Objective 2: ***Ensure protection of classified and Safeguards information.***

Performance Goal 3: Prevent significant unauthorized disclosures of classified or SGI.

Performance Indicator: Number of significant unauthorized disclosures of classified or Safeguards Information by licensees as defined by AO criterion I.C.5 and by NRC employees or contractors as defined by analogous NRC internal criteria.

Timeframe: Annual

Business Line	FY 2015	
All Business Lines	Target: 0	Actual: 0

Discussion: This indicator includes significant unauthorized disclosures of classified or Safeguards information (SGI) that cause damage to national security or public safety. SGI is a special category of sensitive unclassified information concerning the physical protection of operating power reactors, spent fuel shipments, strategic special nuclear material, or other radioactive material. This indicator tracks whether information that can harm national security (classified information) or cause damage to the public health and safety (SGI) has been stored and used in ways as to prevent its disclosure to the public, terrorist organizations, other nations, or personnel without a need to know. No significant unauthorized disclosures occurred in FY 2015.

TABLE 2 – FY 2010-2014 SECURITY PERFORMANCE INDICATORS

1. Unrecovered Losses of Risk-Significant* Radioactive Sources

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	0	0	0	0	0	Replaced by Security Performance Goal 1
Actual	0	1**	0	0	0	

"Risk-significant" is defined as any unrecovered, lost, or abandoned sources that exceed the values listed in Appendix P, "Category 1 and 2 Radioactive Material," to 10 CFR Part 110, "Export and Import of Nuclear Equipment and Material." Excluded from reporting under this criterion are those events involving sources that are lost or abandoned under the following conditions: (1) sources abandoned in accordance with the requirements in 10 CFR 39.77(c), (2) recovered sources with sufficient indication that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 did not occur during the time that the source was missing, (3) unrecoverable sources lost under such conditions that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 were not known to have occurred, (4) other sources that are lost or abandoned and declared unrecoverable , (5) a source for which the agency has made a determination that its risk significance is low based on its location (e.g., water depth) or its physical characteristics (e.g., half-life and housing) and its surroundings, (6) cases in which all reasonable efforts have been made to recover the source, and (7) the determination was made that the source is not recoverable and will not be considered a realistic safety or security risk under this measure. (This includes licenses under the Agreement States.)

**There were no losses and one theft of radioactive nuclear material that the NRC considered to be risk significant during FY 2011.*

2. Number of Substantiated* Cases of Actual Theft or Diversion of Licensed, Risk-Significant Radioactive Sources, or Formula Quantities of Special Nuclear Material or Attacks That Result in Radiological Sabotage*****

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	0	0	0	0	0	Replaced by Security Performance Goal 1
Actual	0	0	0	0	0	

*"Substantiated" means a situation in which an indication of loss, theft, or unlawful diversion, such as an allegation of diversion, report of lost or stolen material, statistical processing difference, or other indication of loss of material control or accountability cannot be refuted following an investigation and requires further action on the part of the agency or other proper authorities.

**A formula quantity of special nuclear material is defined in 10 CFR 70.4, "Definitions."

***"Radiological sabotage" is defined in 10 CFR 73.2, "Definitions."

3. Number of Substantiated Losses of Formula Quantities of Special Nuclear Material or Substantiated Inventory Discrepancies of Formula Quantities of Special Nuclear Material That Are Judged To Be Caused by Theft or Diversion or by Substantial Breakdown of the Accountability System

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	0	0	0	0	0	Replaced by Security Performance Goal 1
Actual	0	0	0	0	0	

4. Number of Substantial Breakdowns* of Physical Security or Material Control (i.e., Access Control, Containment, or Accountability Systems) That Significantly Weakened the Protection against Theft, Diversion, or Sabotage

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	Replaced by Security Performance Goal 2
Actual	0	0	0	0	0	

*A "substantial breakdown" is defined as a red finding in the security cornerstone of the ROP or any plant or facility that is determined either to have overall unacceptable performance or be in a shutdown condition (inimical to the effective functioning of the Nation's critical infrastructure) as a result of significant performance problems or operational events.

5. Number of Significant Unauthorized Disclosures* of Classified and/or Safeguards Information

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	0	0	0	0	0	Replaced by Security Performance Goal 3
Actual	0	0	0	0	0	

*"Significant unauthorized disclosure" is defined as a disclosure that harms national security or public health or safety.

SECURITY GOAL STRATEGIES

The agency used the following security strategies from its Strategic Plan to guide its activities and achieve its security goal in FY 2015:

Security Strategy 1: Ensure the effectiveness and efficiency of the regulatory framework using information gained from operating experience and external and internal assessments and in response to technology advances and changes in the threat environment.

Security Strategy 2: Maintain effective and consistent oversight of licensee performance to drive continued licensee compliance with NRC security requirements and license conditions.

Security Strategy 3: Support U.S. national security interests and nuclear nonproliferation policy objectives within NRC's statutory mandate through cooperation with domestic and international partners.

Security Strategy 4: Ensure material control and accounting for special nuclear materials

Security Strategy 5: Protect critical digital assets.

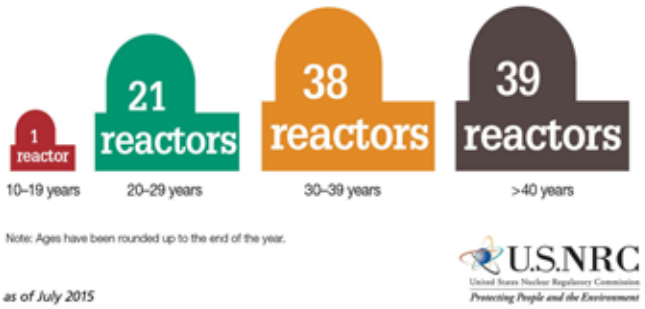
Security Strategy 6: Ensure timely distribution of security information to stakeholders and international partners.

Security Strategy 7: Ensure that programs for the handling and control of classified and Safeguards Information are effectively implemented at the NRC and at licensee facilities.

FUTURE CHALLENGES

The nuclear industry has maintained an excellent safety record at nuclear power plants over the past two decades as both the nuclear industry and the NRC have gained substantial experience in the operation and maintenance of nuclear power facilities. However, maintaining this excellent safety record of the industry requires that the agency take a proactive approach to accomplishing its mission. The key challenges that the agency faces as the regulator of nuclear materials are to ensure the safe and secure use of radioactive materials in areas where the NRC regulates.

FIGURE 7 – U.S. COMMERCIAL NUCLEAR POWER REACTORS – YEARS OF OPERATION BY THE END OF 2015



MARKET PRESSURES ON OPERATING PLANTS AND LICENSE APPLICATIONS

Market forces result in pressures to reduce operating costs. As a result, the NRC needs to be prepared to address potential shutdowns of facilities before license expiration and to continue to ensure that oversight programs identify degrading facility safety and security performance. Several entities are seeking to submit license applications for small modular reactors in the next several years. The Department of Energy (DOE) is funding a program "to design, certify and help commercialize innovative small modular reactors (SMRs) in the United States." The NRC is developing a licensing framework for these as well as other advanced reactors.

SIGNIFICANT OPERATING INCIDENT AT A NON- U.S. NUCLEAR FACILITY

A significant incident at a nuclear facility outside the United States could cause the agency to reassess its safety and security requirements, which could change the agency's focus on some initiatives related to its objectives until the situation stabilizes.

SIGNIFICANT OPERATING INCIDENT AT A DOMESTIC NUCLEAR FACILITY

A significant incident at a U.S. nuclear facility could cause the agency to reassess its safety and security requirements, which could change the agency's focus on some initiatives related to its objectives until the situation stabilizes.

Because the NRC's stakeholders are highly sensitive to many issues regarding the use of radioactive materials, even events of relatively minor safety significance could potentially require a response that consumes considerable agency resources.

INTERNATIONAL NUCLEAR STANDARDS DEVELOPMENTS

International organizations, such as the International Atomic Energy Agency (IAEA), will continue to develop and issue standards and guidance affecting global commitments to nuclear safety and security. To ensure that the best results are achieved both domestically and internationally, the NRC needs to proactively engage in these international initiatives and to provide leadership in a cooperative and collegial manner.

INTERNATIONAL TREATIES AND CONVENTIONS

As part of the international response to lessons learned from the Fukushima Dai-ichi nuclear accident in Japan, the international nuclear regulatory community is reviewing the Convention on Nuclear Safety. As one of the contracting parties to the Convention, the NRC is a member of the working group that is reviewing the Convention. Likewise, the NRC participates in the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.

The ratification by the United States of international instruments related to the security of nuclear facilities or radioactive materials could potentially impose binding provisions on the Nation and the corresponding governmental agencies, such as the NRC and the DOE.

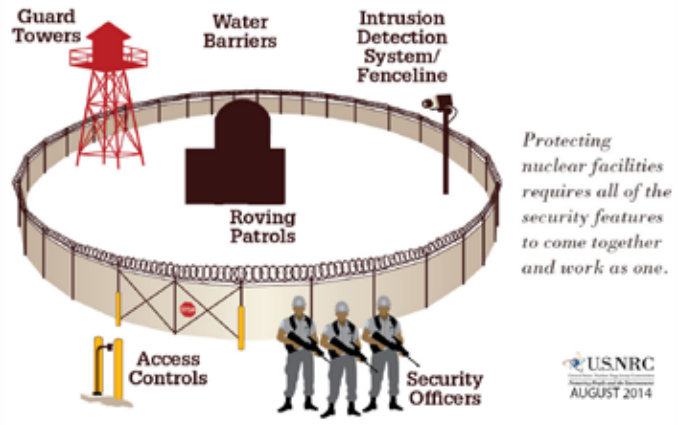
GLOBALIZATION OF THE NUCLEAR TECHNOLOGY AND THE NUCLEAR SUPPLY CHAIN

Components for nuclear facilities are increasingly manufactured overseas, resulting in challenges of providing effective oversight to ensure that these components are in compliance with NRC requirements. In addition, the continuing globalization of nuclear technology is driving the need for increasing international engagement on the safe and secure use of radioactive material.

SIGNIFICANT TERRORIST INCIDENT

A sector-specific credible threat or actual significant terrorist incident anywhere in the United States would result in the Department of Homeland Security (DHS) raising the threat level under the National Terrorism Advisory System (NTAS). In turn, the NRC would similarly elevate the oversight and response stance for NRC-regulated facilities and licensees. Potentially, new or revised security requirements or other policy decisions might affect the NRC, its partners, and the regulated community. In a similar fashion, a significant terrorist incident at a nuclear facility or activity anywhere in the world would need to be assessed domestically and potentially lead to a modification of existing security requirements for NRC-regulated facilities and licensees.

FIGURE 8 – SECURITY COMPONENTS



LEGISLATIVE AND EXECUTIVE BRANCH INITIATIVES

Congressional and Executive Branch initiatives concerning cyber security may potentially impact the NRC's regulatory framework for nuclear security. If the NRC were to become concerned about an aspect of a bill or policy initiative that had been introduced, the staff would consult the Commission to develop a strategy for making such concerns known.

LOST, MISPLACED, INTERCEPTED, OR DELAYED INFORMATION

With the increased use of mobile devices and alternative storage options, the introduction of new communication technologies, and the increased use of telecommunication, there is a heightened risk that sensitive information held by the NRC or its licensees can be lost, misplaced, or intercepted and fall into the hands of unauthorized persons.

DATA COMPLETENESS AND RELIABILITY

The NRC considers the data contained in this report to be complete, reliable, and relevant. The data are complete because the agency reports actual performance data for every performance goal and indicator in the report. In addition, all of the data are reported for each measure. The agency also considers the data in this report reliable and relevant, because they have been validated and verified. More information on the abnormal occurrence criteria may be found at http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0090/. "Data Collection Procedures for Verification and Validation of Performance Measures," contains the processes the agency uses to collect, validate, and verify performance data in this report. This report can be found on page 107 of the NRC's FY 2015 Congressional Budget Justification located on the NRC Web site NRC: Congressional Budget Justification: Fiscal Year 2015 (NUREG-1100, Volume 30).

FINANCIAL PERFORMANCE OVERVIEW

The NRC prepared its principal financial statements in accordance with the accounting standards codified in the Statements of Federal Financial Accounting Standards (SFFAS) and the Office of Management and Budget (OMB) Circular A-136, "Financial Reporting Requirements."

As of September 30, 2015, the financial condition of the NRC was sound with respect to having sufficient funds to meet program needs and adequate control of these funds in place to ensure obligations did not exceed budget authority.

SOURCES OF FUNDS

TOTAL BUDGET AUTHORITY *(IN MILLIONS)*

For the fiscal years ended September 30,	2015	2014
Appropriations		
Salaries and Benefits	**$ 1,003.2**	$ 1,043.9
Office of the Inspector General	**12.1**	12.0
Total Appropriations	**1,015.3**	1,055.9
Other Budget Authority		
Prior-years Appropriations	**40.4**	22.8
Prior-years Funding for Reimbursable Work	**8.3**	9.0
Prior-years Funding from DOE*	**4.8**	11.0
Spending Authority from Offsetting Collections	**8.0**	9.8
Recoveries of Prior-year Unpaid Obligations	**5.0**	10.6
Total Other Budget Authority	**66.5**	63.2
Total NRC Budget Authority	**$ 1,081.8**	$ 1,119.1

**DOE funding for the NRC activities associated with the Nuclear Waste Policy Act of 1982, as amended.*

Appropriations. The NRC received two appropriations: (1) for Salaries and Expenses and (2) for the Office of the Inspector General (OIG). The FY 2015 appropriations were $1,015.3 million, which included $1,003.2 million for the Salaries and Expenses appropriation and $12.1 million for the OIG.

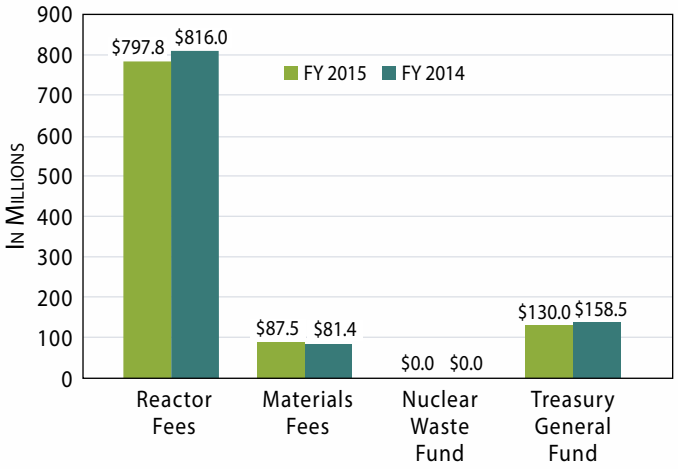
The NRC's appropriation decreased $40.6 million compared to the prior year, primarily due to a decrease of $40.7 million for the Salaries and Expenses appropriation. The appropriation for the OIG stayed basically at the same level with a $0.1 million increase.

The Salaries and Expenses appropriation is available until expended. This includes a provision that not more than $7.5 million be made available for the Office of the Commission as a 2-year (FY 2015/2016) appropriation that is available for obligation by the NRC (including OIG) through September 30, 2016. After September 30, 2016, the remaining funds which have not been obligated for the Office of the Commission will be available until expended

as part of the Salaries and Expenses appropriation. The OIG appropriation is available to obligate for 2 years (FY 2015/2016) by the OIG through September 30, 2016. This 2-year funding includes $0.85 million for Inspector General (IG) services to be provided to the Defense Nuclear Facilities Safety Board.

The Omnibus Budget Reconciliation Act of 1990 (OBRA-90), as amended, requires the NRC to collect fees to offset approximately 90 percent of its new budget authority, less the amount appropriated to the NRC from the Nuclear Waste Fund (NWF) and amounts appropriated for Waste Incidental to Reprocessing (WIR) and generic homeland security. The NRC returns the fees it collects to the Treasury during the FY which offset the NRC's two appropriations.

FIGURE 9 – SOURCES OF FUNDS FOR APPROPRIATIONS



The projected amount to be recovered from fees in FY 2015 was $895.5 million, which included $888.7 million from FY 2015 reactor and materials fees and $6.8 million from other fees (unpaid current-year invoices and terminated reactors' FY 2015 annual fee collections, offset by payments of prior-year invoices in FY 2015.) The NRC collected and transferred $885.3 million to the Treasury (see Figure 9), which represents 98.9 percent of the approximately $895.5 million projected to be recovered in FY 2015. The fees collected for FY 2014 and transferred to the Treasury totaled $897.4 million and included $871.2 million transferred during FY 2014 and $26.2 million transferred in early FY 2015. The decrease of $12.1 million in fees collected and transferred to the Treasury was mainly due to the decrease in appropriations in FY 2015.

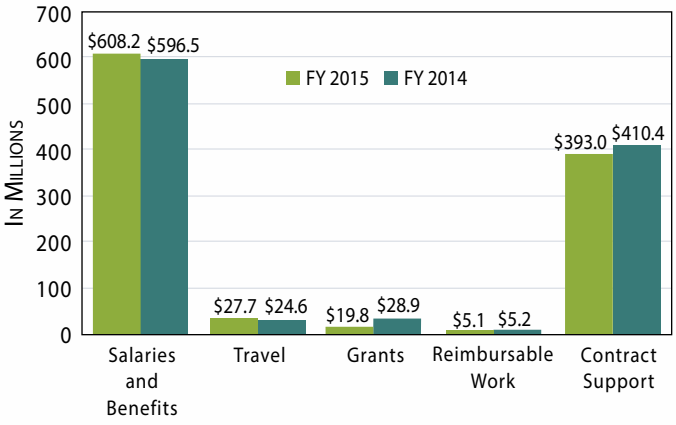
Total Budget Authority. The total budget authority available for the NRC to obligate in FY 2015 was $1,081.8 million, which includes $1,015.3 million for appropriations, $40.4 million of prior-year appropriations, $8.3 million from prior-year funding for reimbursable work, $5.0 million of recoveries of prior-year unpaid obligations, $8.0 million from FY 2015 spending authority from offsetting collections (reimbursable work performed for other Federal agencies and commercial customers, and prior-year refunds), and $4.8 million of prior-year funding for resources received from the DOE to fund the NRC activities associated with the *Nuclear Waste Policy Act of 1982*. Funds available to obligate in FY 2015 decreased from the FY 2014 amount of $1,119.1 million primarily due to decreases of $40.6 million in appropriations, $5.6 million in actual recoveries of prior-year unpaid obligations and $1.8 million spending authority from offsetting collections; offset by an increase in the beginning unobligated balances brought forward of $10.7 million.

USES OF FUNDS

Funds are used when the NRC incurs obligations against budget authority. Obligations are legally binding agreements that will result in an outlay of funds.

The NRC incurred obligations of $1,053.8 million in FY 2015, which represented a decrease of $11.8 million from FY 2014 (see Figure 10). Approximately 58 percent of obligations in FY 2015 were for salaries and benefits. The remaining 42 percent were used to obtain technical assistance for the NRC's principal regulatory programs, to conduct confirmatory safety research, to cover operating expenses (e.g., building rentals, transportation, printing, security services, supplies, office automation, and training), and to pay for staff travel.

Figure 10 – Uses of Funds *(Obligations)*



The unobligated budget authority available at the end of FY 2015 was $28.0 million which was a $25.5 million decrease from the FY 2014 amount of $53.5 million. Of the $28.0 million unobligated balance at the end of FY 2015, $7.9 million was for reimbursable work, $2.8 million was for the NWF, $4.2 million was for special purpose funds, and $13.1 million was available to fund critical needs of the NRC in FY 2016. The $53.5 million unobligated balance at the end of FY 2014 included $8.3 million for reimbursable work, $4.8 million for the NWF, $6.2 million for special purpose funds, and $34.2 million to fund critical needs of the NRC in FY 2015.

AUDIT RESULTS

The NRC received an unmodified audit opinion on its FY 2015 financial statements and an unqualified audit opinion on internal controls. The auditors found no reportable instances of noncompliance with laws and regulations during the FY 2015 audit.

A summary of the financial statement audit results is included in the "Other Information" section of this report.

LIMITATIONS ON THE FINANCIAL STATEMENTS

The principal financial statements have been prepared to report the financial position and results of operations of the NRC, pursuant to the requirements of 31 U.S.C. 3515 (b). While the statements have been prepared from the books and records of the NRC in accordance with generally accepted accounting principles (GAAP) for Federal entities and the formats prescribed by the OMB, the statements are in addition to the financial reports used to monitor and control budgetary resources, which are prepared from the same books and records. The statements should be read with the realization that they are for a component of the U.S. Government, a sovereign entity.

FINANCIAL STATEMENT HIGHLIGHTS

The NRC's financial statements summarize the agency's financial activity position. The financial statements, footnotes, and required supplementary information are included in Chapter 3, "Financial Statements and Auditors' Report." The following is an analysis of the financial statements.

ANALYSIS OF THE BALANCE SHEET

Asset Summary *(In Millions)*

As of September 30,	2015	2014
Fund Balance with Treasury	$ 353.8	$ 377.4
Accounts Receivable, Net	96.0	111.6
Property and Equipment, Net	79.1	90.3
Other Assets	11.3	8.0
Total Assets	$ 540.2	$ 587.3

Assets. The NRC's total assets were $540.2 million as of September 30, 2015, representing a decrease of $47.1 million from the same period of FY 2014. Changes in major categories include decreases of $23.6 million in the Fund Balance with Treasury, $15.6 million in Accounts Receivable, Net; and $11.2 million in Property and Equipment, Net; offset by an increase of $3.3 million in Other Assets.

The Fund Balance with Treasury was $353.8 million as of September 30, 2015, which accounts for 65 percent of total assets. This account represents appropriated funds, license fee collections, and other funds maintained at the Treasury to pay for current liabilities and to finance authorized purchase commitments. The $23.6 million decrease in the fund balance is primarily the result of an increase in the beginning balance of $59.1 million, offset by a decrease in appropriations of $40.6 million and an increase in net disbursements (cash outlays) of $41.4 million, which primarily consists of increases in

salaries and benefits of $11.2 million, contract services of $20.0 million, equipment and software of $6.9 million, and travel of $3.3 million.

Accounts receivable consists of amounts that other Federal agencies and the public owe to the NRC for license fees. Accounts Receivable, Net, as of September 30, 2015, was $96.0 million, which included an offsetting allowance for doubtful accounts of $2.2 million. For FY 2014, the year-end Accounts Receivable, Net, balance was $111.6 million, including an offsetting allowance for doubtful accounts of $4.4 million. The net decrease in accounts receivable from the prior year of $15.6 million is primarily due to outstanding receivables at the end of FY 2014 whereby collections were received during the first week of FY 2015.

Property and Equipment consists primarily of typical office furnishings, leasehold improvements, nuclear reactor simulators, and computer hardware and software. (The NRC has no real property. The land and buildings in which the NRC operates are leased from the U.S. General Services Administration (GSA).) At the end of FY 2015, net property and equipment was $79.1 million, a decrease of $11.2 million from the FY 2014 amount of $90.3 million. The decrease is primarily due to a decrease of $13.9 million in leasehold improvements (mainly for the writeoff for the initial buildout of the Three White Flint North office building resulting from a change in the lease agreement associated with the NRC vacating the space) and a decrease of $6.9 million in the book value of completed capitalized software and leasehold improvement projects, net of amortization expense; offset by increases of $4.2 million for capitalized software development-in-progress and $3.0 million for leasehold improvements-in-progress on the Headquarters office buildings in Rockville, MD.

Liabilities Summary *(In Millions)*

As of September 30,	2015	2014
Accounts Payable	$ 37.0	$ 38.2
Federal Employee Benefits	6.0	6.7
Other Liabilities	84.9	79.4
Total Liabilities	$ 127.9	$ 124.3

Liabilities. Total liabilities were $127.9 million as of September 30, 2015, representing an increase of $3.6 million from the FY 2014 year-end balance of $124.3 million. Accounts Payable, Federal Employee Benefits, and Other Liabilities remained approximately the same as the prior year. For FY 2015, Other Liabilities represents 66 percent of the Total Liabilities and includes $46.5 million in accrued annual leave, $18.3 million in accrued funded salaries and benefits, $12.1 million in grants payable, $5.5 million in advances received by the NRC for services that will be provided, $1.6 million in accrued workers' compensation, and $0.9 million in contract holdbacks, capital lease liability, and miscellaneous liabilities.

Total Liabilities include liabilities not covered by budgetary resources, which represent expenses recognized in the financial statements that will be paid from future appropriations. The liabilities not covered by budgetary resources were $54.1 million for FY 2015 compared to $55.2 million for FY 2014, a $1.1 million decrease. For FY 2015, the liabilities not covered by budgetary resources represent 42 percent of Total Liabilities and include $46.5 million in unfunded accrued annual leave that has been earned but not yet taken, $1.6 million in accrued workers' compensation included in Other Liabilities, and $6.0 million as an actuarial estimate of accrued future workers' compensation expenses included in Federal Employee Benefits.

Net Position Summary *(In Millions)*

As of September 30,	2015	2014
Unexpended Appropriations	$ 283.2	$ 306.2
Cumulative Results of Operations	129.1	156.8
Total Net Position	$ 412.3	$ 463.0

Net Position. The difference between Total Assets and Total Liabilities, Net Position, was $412.3 million as of September 30, 2015, a decrease of $50.7 million from the FY 2014 year-end balance. Net Position is comprised of two components: Unexpended Appropriations, the amount of spending authority that remains unused at the end of the year, and Cumulative Results of Operations, the cumulative excess of financing sources over expenses.

Unexpended Appropriations were $283.2 million at the end of FY 2015, a decrease of $23.0 million from the prior fiscal year-end. Cumulative Results of Operations decreased by $27.7 million from $156.8 million in FY 2014 to $129.1 million in FY 2015.

ANALYSIS OF THE STATEMENT OF NET COST

The Statement of Net Cost presents the gross cost of the NRC's two major programs (Nuclear Reactor Safety and Nuclear Materials and Waste Safety) as identified in the NRC Annual Performance Plan, offset by earned revenue. The purpose of this statement is to link program performance to the cost of programs. The NRC's net cost of operations for the year-ended September 30, 2015, was $182.6 million, representing an increase of $22.6 million compared to the FY 2014 net cost of $160.0 million. This includes an increase of $26.9 million in gross costs and an increase in earned revenues of $4.3 million, which offset gross costs.

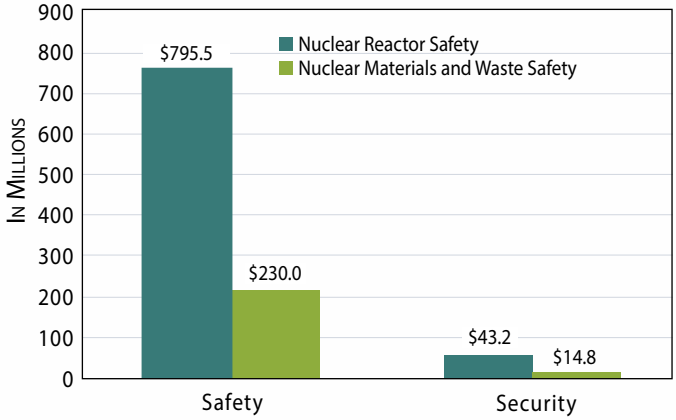
NET COST OF OPERATIONS *(IN MILLIONS)*

For the fiscal years ended September 30,	2015	2014
Nuclear Reactor Safety	$ 24.4	$ 2.2
Nuclear Materials and Waste Safety	158.2	157.8
Net Cost of Operations	$ 182.6	$ 160.0

Gross Costs. The NRC's total gross costs were $1,083.5 million for FY 2015, an increase of $26.9 million from the prior-year amount of $1,056.6 million. The Nuclear Reactor Safety program gross costs for FY 2015 were $838.7 million compared to FY 2014 gross costs of $817.3 million, an increase of $21.4 million, primarily due to increases of $12.0 million in contract services and $9.4 million in salaries and benefits. The Nuclear Materials and Waste Safety program gross costs for FY 2015 were $244.8 million compared to FY 2014 gross costs of $239.3 million, an increase of $5.5 million.

The cost of achieving the agency's Safety and Security goals for the agency's programs for FY 2015 is the gross cost presented in the Statement of Net Cost. The total cost for achieving the agency's Safety goal was $1,025.5 million and the cost of achieving the agency's Security goal was $58.0 million (see Figure 11).

FIGURE 11 – GROSS COSTS BY STRATEGIC GOALS FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2015



Earned Revenue. Total earned revenue for FY 2015 was $900.8 million, an increase of $4.3 million from the FY 2014 earned revenue of $896.5 million. Revenue from the Nuclear Reactor Safety program in FY 2015 was $814.3 million compared to $815.1 million in FY 2014, a decrease of $0.8 million. Revenue from the Nuclear Materials and Waste Safety program in FY 2015 was $86.6 million compared to $81.5 million in FY 2014, an increase of $5.1 million.

Fees collected (earned primarily in FY 2015) and offset against the NRC appropriations were $911.5 million compared to $871.2 million in FY 2014. The increase of $40.3 million in license fee collections was the result of an increase of $14.1 million in current-year license fee collections, and $26.2 million for prior-year license fee collections. The NRC is required to collect approximately 90 percent of its appropriation through license fee billing. Fees for reactor and materials licensing and inspections are collected in accordance with 10 CFR Part 170, "Fees for Facilities, Materials, Import and Export Licenses, and Other Regulatory Services under the *Atomic Energy Act of 1954*, as amended," and 10 CFR Part 171, "Annual Fees for Reactor Licenses and Fuel Cycle Licenses and Materials Licenses, Including Holders of Certificates of Compliance, Registrations, and Quality Assurance Program Approvals and Government Agencies Licensed by the NRC."

ANALYSIS OF THE STATEMENT OF CHANGES IN NET POSITION

The Statement of Changes in Net Position reports the change in net position for the reporting period. Net position is affected by changes in its two components: Cumulative Results of Operations and Unexpended Appropriations. In FY 2015, the NRC had a decrease in Net Position of $50.8 million resulting from a decrease of $27.7 million in Cumulative Results of Operations and a decrease of $23.1 million in Unexpended Appropriations.

The decrease in Cumulative Results of Operations of $27.7 million was primarily comprised of a decrease in the beginning balance, brought forward October 1, of $3.8 million, an increase in the net cost of operations of $22.6 million, and a decrease in financing sources other than the NRC licensing fees of $1.3 million. The increase in net cost of operations was due to an increase of $26.9 million in gross costs, offset by an increase of $4.3 million in earned revenue. The decrease in financing sources was due to $7.1 million of imputed financing from costs absorbed by others; offset by an increase of $5.8 million in appropriations used to finance operations.

The change in unexpended appropriations results from appropriations received, net of license fee collections, being more or less than appropriations used to fund the NRC operations. The decrease in FY 2015 unexpended appropriations of $23.1 million is due to an increase in the beginning balance, brought forward October 1, of $63.6 million; offset by an $80.9 million decrease in appropriations received, net of licensee fees collected, and an increase of $5.8 million in appropriations used to fund the NRC operations. The decrease of $80.9 million in appropriations received, net of license fees collected, is due to appropriations received for FY 2015 of $1,015.3 million, reduced by current year license fee collections of $885.3 million and prior year license fee collections of $26.2 million; compared to appropriations received in FY 2014 of $1,055.9 million, reduced by FY 2014 license fee collections of $871.2 million.

ANALYSIS OF THE STATEMENT OF BUDGETARY RESOURCES

The Statement of Budgetary Resources (SBR) provides information on budgetary resources available to the NRC and their status at the end of the period.

The Total Budgetary Resources available in FY 2015 were $1,081.8 million, which was $37.3 million less than the $1,119.1 million available for FY 2014. The major component of Total Budgetary Resources is the NRC's appropriation, which was $1,015.3 million in FY 2015 compared to $1,055.9 million in FY 2014, accounting for a $40.6 million decrease in total funding. Other decreases in funding included $5.6 million in recoveries of prior-year unpaid obligations and $1.8 million in spending authority from offsetting collections (reimbursable work and prior-year refunds); offset by an increase in the beginning unobligated balance brought forward of $10.7 million.

The Status of Budgetary Resources accounts for operational activities funded with the NRC's budgetary resources during the fiscal year. The NRC's obligations for FY 2015 totaled $1,053.8 million, a decrease of $11.8 million from the prior-year amount of $1,065.6 million. The decrease is primarily due to decreases of $14.5 million in management and support obligations consisting of the acquisition of equipment and software, leasehold improvements to the NRC Headquarters office buildings, miscellaneous office supplies, and other administrative contract services, and $9.1 million for grants; offset by an increase of $11.8 million for employee salaries and benefits.

The Status of Budgetary Resources also accounts for the funds that were not used in operations during the fiscal year. Total budgetary resources not obligated at the end of the fiscal year were $28.0 million, a decrease of $25.5 million from the prior-year balance of $53.5 million. The unobligated budgetary resources at the end of FY 2015 that were apportioned by the OMB were $23.3 million compared to $48.5 million in FY 2014. The $25.2 million decrease is primarily due to decreases of $40.6 million in appropriations in FY 2015 and $5.6 million in prior-year recoveries; offset by an

increase of $13.7 million in the beginning appropriated unobligated balance and by a reduction of $5.6 million in apportioned Category A obligations incurred in FY 2015. Other unobligated resources at the end of FY 2015 included $2.8 million for the NWF, which is exempt from the OMB apportionment, and $1.9 million in funding not apportioned by the OMB due to a transfer from another account that occurred at the end of the FY. The timing of the transfer did not allow for a reapportionment of funds in FY 2015.

MANAGEMENT ASSURANCES, SYSTEMS, CONTROLS, AND LEGAL COMPLIANCE

This section provides information on NRC's compliance with the *Federal Managers' Financial Integrity Act of 1982* (Public Law 97-255), OMB Circular A-123, "Management's Responsibility for Internal Control," and the *Federal Financial Management Improvement Act of 1996*.

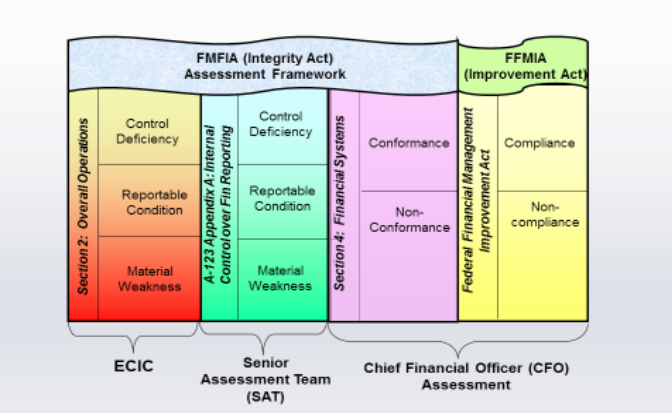
FEDERAL MANAGERS' FINANCIAL INTEGRITY ACT

The *Federal Managers' Financial Integrity Act of 1982* (FMFIA) mandates that agencies establish internal control to provide reasonable assurance that the agency complies with applicable laws and regulations; safeguards assets against waste, loss, unauthorized use, or misappropriation; and properly accounts for and records revenues and expenditures. The Integrity Act encompasses program, operational, and administrative areas, as well as accounting and financial management. It also requires the Chairman to provide an assurance statement on the adequacy of internal controls and on the conformance of financial systems with Government-wide standards.

PROGRAMMATIC INTERNAL CONTROL

Programmatic internal control consists of the organization, planning, policy, and procedures that help managers achieve intended results and safeguard the integrity of their programs. NRC managers are responsible for designing and implementing effective internal control in their areas of responsibility in accordance with the NRC's FMFIA Governance Framework (Figure 12). Under this governance framework, each NRC business line lead prepares an annual assurance certification that identifies any control weaknesses requiring the attention of the NRC Executive Committee on Internal Control (ECIC). These certifications are based on internal control activities such as Probabilistic Risk Assessments, Management Control Reviews, Construction and Reactor Oversight, Force-on-Force Inspections, Security Core Inspections, Integrated Materials Performance Evaluation Program, Lessons Learned Oversight Board recommendations, financial statement audit, Inspector General and U.S. Government Accountability Office (GAO) audits and reports, and other information supplied by the agency's Senior Assessment Team (SAT). The SAT provides detailed, centralized oversight and monitoring of financial systems and reporting. The business line leads provided substantial reasonable assurance justification documentation to support their respective certifications, as well as documented areas where internal controls can be strengthened. The ECIC assessed the agency's programmatic operations, financial systems, and internal control over financial reporting and voted to recommend that the Chairman sign the agency's Integrity Act Statement and reported to the Chairman that there were no internal control deficiencies serious enough to require reporting as a weakness or noncompliance.

FIGURE 12 – NRC'S FMFIA GOVERNANCE FRAMEWORK



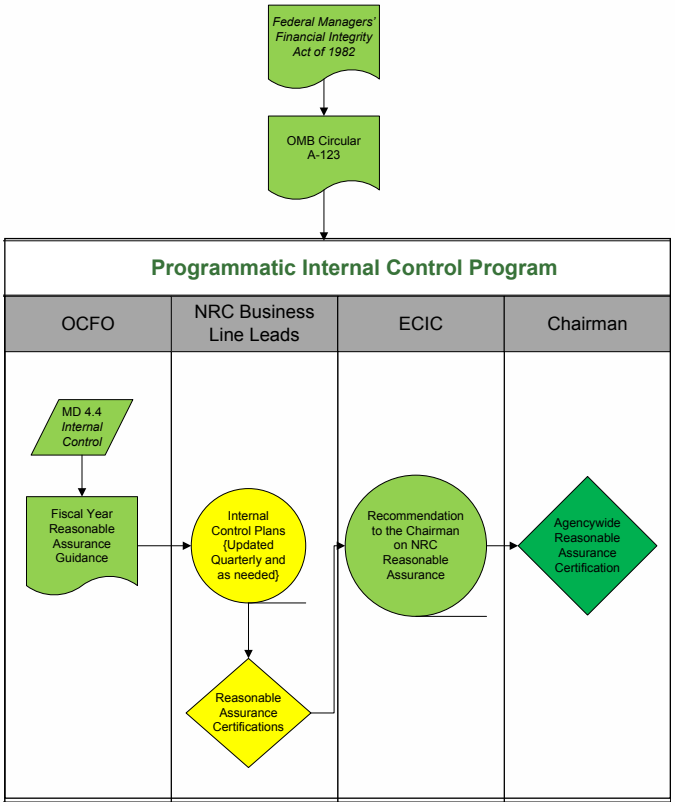
The ECIC is comprised of senior executives from the Office of the Chief Financial Officer and the Office of the

Executive Director for Operations. The agency's General Counsel and Inspector General participate as advisors. The SAT is comprised of senior executives from the agency's corporate support business lines, (i.e., the Office of the Chief Human Capital Officer, Office of Information Services, *et al*).

The Internal Control and Planning Branch (ICPB) is comprised of agency personnel responsible for the implementation of the programmatic internal control program.

In FY 2013, the agency updated its programmatic internal control framework (Figure 13). This effort required a paradigm shift in how the agency examines, documents, communicates, monitors, and reports on programmatic internal control. The agency's programmatic internal control program now aligns with its lines of business, budget structure, strategic plan, and performance reporting. The updated framework addresses the five GAO Standards for Internal Control in the Federal Government, as well as GAO's Risk Assessment Monitoring Tool, and the Committee of Sponsoring Organizations of the Treadway Commission, Internal Control – Integrated Framework. The updated framework streamlined the agency's programmatic internal control and reasonable assurance processes, reduced administrative requirements on program and technical staff, better leveraged existing programmatic internal control activities across the agency's lines of business, and eliminated silos and duplications of effort. The updated framework focused on shifting from an individual, office-based approach to assessing, documenting, monitoring, and reporting on programmatic internal control, to a business line-based approach, as supported by the *Government Performance Results Act and Modernization Act of 2010*. As a result, the NRC programmatic internal control program has become proactive in establishing the control environment that substantially complies with FMFIA.

FIGURE 13 – NRC PROGRAMMATIC INTERNAL CONTROL PROGRAM



As part of the updated framework, the agency's ICPB developed memoranda of understanding (MOUs) between the agency's lines of business and business partners that clearly identifies, clarifies, and communicates mutual mission expectations as they relate to programmatic internal control and reasonable assurance. The MOUs increased transparency, clarified roles and responsibilities, eliminated silos, and significantly improved communication channels across the agency. Additionally, the agency's senior management has become more invested in the overall programmatic internal control and reasonable assurance processes. The senior management investment in the processes has significantly improved management's responsibility for internal control and risk management.

U.S. NUCLEAR REGULATORY COMMISSION
FISCAL YEAR 2015
FEDERAL MANAGERS' FINANCIAL INTEGRITY ACT STATEMENT

The U.S. Nuclear Regulatory Commission (NRC) managers are responsible for establishing and maintaining effective internal control and financial management systems that meet the objectives of the *Federal Managers' Financial Integrity Act of 1982* (Integrity Act). The NRC is able to provide an unqualified statement of assurance that the internal controls and financial management systems meet the objectives of the Integrity Act with no material weaknesses.

The NRC conducted its assessment of internal control over programmatic operations in accordance with Office of Management and Budget Circular A-123, *Management's Responsibility for Internal Control* (A-123) guidelines. Based on the results of this evaluation, NRC can provide reasonable assurance that its internal control over programmatic operations is in substantial compliance with applicable laws and guidance, and no material weaknesses were found as of September 30, 2015.

In addition, the NRC conducted its assessment of the effectiveness of internal control over financial reporting, which includes safeguarding of assets and compliance with applicable laws and regulations, in accordance with the requirements of Appendix A of A-123. Based on the results of the evaluation, the NRC can provide reasonable assurance that its internal control over financial reporting as of June 30, 2015, was operating effectively, and no material weaknesses were found in the design or operation of the internal control over financial reporting.

The NRC can also provide reasonable assurance that its financial systems comply with applicable Federal accounting standards as required by the *Federal Financial Management Improvement Act of 1996*.

Stephen G. Burns
Chairman
U.S. Nuclear Regulatory Commission
November 9, 2015

FY 2015 FMFIA RESULTS

In accordance with FMFIA, Section 2, and under the guidance established in OMB Circular A-123, NRC business line leads certified that, as of September 30, 2015, there was reasonable assurance that internal control was in place to achieve the following objectives:

- Programs achieved their intended results and are protected from waste, fraud, abuse, and mismanagement.
- Resources were used consistently with the agency's mission.
- Information systems were authorized and appropriately secured.
- Laws and regulations were followed.
- Reliable and timely information was obtained, maintained, reported, and used for sound decisionmaking.
- Based on management's certification of reasonable assurance, the NRC is able to provide a statement of assurance that its programmatic internal control met the objectives of the FMFIA. The NRC has reasonable assurance that its internal control is effective and conforms to Government-wide standards.

OFFICE OF MANAGEMENT AND BUDGET CIRCULAR A-123, "MANAGEMENT'S RESPONSIBILITY FOR INTERNAL CONTROL"

Internal Control Over Financial Reporting (Appendix A)

In FY 2006, the NRC implemented the requirements of the revised OMB Circular A-123, which defined and strengthened management's responsibility for internal control in Federal agencies. The revised circular included updated internal control standards. Appendix A requires Federal agencies to assess the effectiveness of internal control over financial reporting and to prepare a separate annual statement of assurance as of June 30, 2015.

The NRC adopted a rotational testing plan to assess the effectiveness of its internal controls over financial reporting. In FY 2015, the NRC continued its assessment of internal controls over financial reporting and reevaluated the scope of its financial reports, materiality values, risk assessments, key processes, and key controls to update the test plan. It was determined that two of the eight key processes (financial reporting and information technology) were significant enough to include in the testing each year of the test plan cycle. The remaining six key processes (budget execution, disbursements, payroll, procurement, property, and revenue) were to be tested once in a 2-year cycle, three each year. Based on the results of the FY 2015 evaluation, the NRC can

provide reasonable assurance that its internal controls over financial reporting were operating effectively as of June 30, 2015, and that the evaluation found no material weaknesses in the design or operation of the internal controls over financial reporting.

REQUIREMENTS FOR EFFECTIVE MEASUREMENT AND REMEDIATION OF IMPROPER PAYMENTS (APPENDIX C)

In FY 2011, the NRC completed an initial risk assessment to determine if any programs were susceptible to making significant improper payments in accordance with the *Improper Payments Information Act of 2002* (IPIA) as amended by the *Improper Payments Elimination and Reporting Act of 2010* (IPERA) and the *Improper Payment Elimination and Recovery Improvement Act of 2012* (IPERIA). The results of that assessment allowed the agency to conduct future risk assessments on a triennial basis. In its FY 2014 PAR, the NRC reported on the results of the improper payment risk assessment completed in that year.

The results of the FY 2014 risk assessment did not identify any programs that were susceptible to making significant improper payments. While the results of the FY 2014 risk assessment identified programs as low risk, the NRC continues to monitor its payment processes, in addition to conducting periodic reviews of key controls for IPIA programs identified by management. The NRC will continue to conduct a risk assessment every 3 years, in accordance with the IPIA, as amended by IPERA and IPERIA as well as OMB guidance. The next NRC IPIA risk assessment will take place in FY 2017. However, the NRC will conduct additional risk assessments, as needed, if there are material changes in the way programs operate or if the NRC establishes new programs.

FEDERAL FINANCIAL MANAGEMENT IMPROVEMENT ACT

The Federal Financial Management Improvement Act of 1996 (FFMIA) requires each agency to implement and maintain systems that comply substantially with (1) Federal financial system requirements, (2) applicable Federal accounting standards, and (3) the standard general ledger at the transaction level. FFMIA requires the Chairman to determine whether the agency's financial management system complies with FFMIA and to develop remediation plans for systems that do not comply.

FY 2015 FFMIA RESULTS

The Office of Chief Financial Officer (OCFO) successfully completed a system upgrade for its core general ledger system, the Financial Accounting and Integrated Management Information System (FAIMIS). The upgrade provides the platform for the required functionality to incorporate the U.S. Treasury Government-wide Treasury Accounting Symbol (GTAS) reporting mandate for FY 2015. The agency successfully migrated to the E-Gov Travel Service 2 system (ETS2) in May 2015. The Human Resource Management System (HRMS), formerly known as Time and Labor Modernization (TLM), has completed the upgrade planning and has begun the migration to the new release to address legislative requirements and strengthen controls. Finally, the Budget Formulation System (BFS) has launched a pilot program for interactive reporting to enhance and centralize the agency's resource planning and forecasting business process.

In accordance with guidance established in A-123, Appendix D, the Chief Financial Officer reviewed audit reports and other sources of information, and as of September 30, 2015, can provide reasonable assurance that NRC's financial systems substantially comply with the requirement of the FFMIA.

FINANCIAL MANAGEMENT SYSTEMS STRATEGIES

For a second consecutive fiscal year, the OCFO has completed significant financial system modernization projects in FY 2015. The NRC plans to further upgrade FAIMIS to acquire the necessary required functionality for the FY 2018 OMB-mandated Internet Payment Platform (IPP) implementation. The agency will continue to integrate and further automate FAIMIS with the

newly implemented ETS2. The BFS has introduced a pilot integrated reporting dashboard and completed a minor system upgrade to coincide with the agency's infrastructure internet browser upgrade project.

PROMPT PAYMENT

The *Prompt Payment Act of 1982*, as amended, requires Federal agencies to make timely payments to vendors for supplies and services, to pay interest penalties when payments are made after the due date, and to take cash discounts when they are economically justified. In

FY 2015, the NRC paid 98 percent of the 8,043 invoices subject to the Prompt Payment Act on time.

DEBT COLLECTION

The *Debt Collection Improvement Act of 1996* enhances the ability of the Federal Government to service and collect debts. The agency's goal is to maintain the level of delinquent debt owed to the NRC at year end to less than 1 percent of its annual billings. The NRC met this goal. At the end of FY 2015, delinquent debt was $4.6 million or .5 percent of annual billings. The NRC was able to refer 93.5 percent of all eligible debt over 180 days delinquent to the Treasury for collection. In addition, the NRC met the collections requirements of *Omnibus Budget Reconciliation Act of 1990* which requires the agency to recover through fees approximately 90 percent of its budget authority in the current fiscal year.

The *Digital Accountability and Transparency Act of 2014* reduces the referral of delinquent invoices from 180 to 120 days for FY 2016. To accomplish this new requirement, the NRC will request input from the program and regional offices earlier in the quarter and the amount of time given to respond to requests will be limited so that appropriate actions can be taken in a timely manner.

BIENNIAL REVIEW OF USER FEES

The *Chief Financial Officers Act of 1990* requires agencies to conduct a biennial review of fees, royalties, rents, and other charges imposed by agencies, and to make revisions to cover program and administrative costs incurred. On June 30, 2015, the NRC issued a final rule in the *Federal Register* amending the licensing, inspection, and annual fees charged to its applicants and licensees. The amendments are necessary to implement the *Omnibus Budget Reconciliation Act of 1990* (OBRA–90), as amended, which requires the NRC to recover through fees approximately 90 percent of its budget authority, not including amounts appropriated for Waste Incidental to Reprocessing (WIR) , Defense Nuclear Facilities Safety Board, and amounts appropriated for generic homeland security activities. Based on the *Consolidated and Further Continuing Appropriations Act of 2015*, the NRC's fee recovery amount for the FY 2015 budget was $895.5 million. After accounting for billing adjustments, the total amount to be billed as fees to licensees was $888.7 million. The NRC Fee Recovery Schedules for FY 2015 are located at http://www.gpo.gov/fdsys/pkg/FR-2015-06-30/pdf/2015-15763.pdf.

INSPECTOR GENERAL ACT OF 1978

The NRC has established and continues to maintain an excellent record in resolving and implementing Office of the Inspector General (OIG) open audit recommendations. The status of these recommendations can be found at: http://www.nrc.reading-rm/due-collections/insp-gen/.

UNITED STATES NUCLEAR REGULATORY COMMISSION

CHAPTER 2

PROGRAM PERFORMANCE

UNITED STATES NUCLEAR REGULATORY COMMISSION

MEASURING AND REPORTING

This chapter presents detailed information on the U.S. Nuclear Regulatory Commission's (NRC's) activities and performance in achieving its mission during fiscal year (FY) 2015. The agency's FY 2014–2018 Strategic Plan presents the agency's mission, strategic goals, objectives, and strategies. This chapter describes the NRC's performance results and program achievements in accomplishing the agency's strategic goals and objectives. The NRC has implemented improved performance indicators that took effect at the beginning of FY 2015 to reflect the updated Strategic Plan.

The NRC's mission is to license and regulate the Nation's civilian use of radioactive materials to protect public health and safety, promote the common defense and security, and protect the environment. The NRC's vision is to carry out the mission as a trusted, independent, transparent, and effective nuclear regulator. The agency's strategic goals are to ensure the safe and secure use of radioactive materials.

The NRC's safety and security activities are carried out through two major programs: Nuclear Reactor Safety, consisting of Operating Reactors and New Reactors, business lines, and Nuclear Materials and Waste Safety, consisting of Fuel Facilities, Nuclear Materials Users, Decommissioning and Low-Level Waste, Spent Fuel Storage and Transportation, and High-Level Waste business lines. The agency accomplishes its mission to ensure safety and security through regulatory activities that include licensing, oversight, and rulemaking. Licensees are subject to oversight through inspection, assessment, investigation, and enforcement actions, the last two constituting a subset of oversight when there are suspected or proven instances of noncompliance with safety or security regulations. The NRC's event response activities prepare the agency to respond to emergencies involving radioactive materials.

In addition, the NRC's safety research program supports the agency's regulatory activities. The program evaluates and resolves safety issues for nuclear power plants and other facilities and materials users that the agency regulates. The research program assesses and confirms existing and potential safety issues; supplies independent expertise, information, and technical judgments to support timely and realistic regulatory decisions; reduces uncertainties in risk assessments; and develops technical regulations and standards. The NRC also engages in cooperative research with other government agencies, the nuclear industry, universities, and international partners.

This chapter also describes the agency's progress in achieving crosscutting strategies of regulatory effectiveness and openness, its management objectives related to information technology, information management, and human capital. In addition, this chapter includes information on the program evaluations used to assess performance and to develop the agency's annual performance plan. A discussion of the data sources, data quality, and completeness and reliability of performance data is also included.

STRATEGIC GOAL 1

Ensure the safe use of radioactive materials.

STRATEGIC OBJECTIVE

Strategic objectives express more specifically the results that are needed to achieve a strategic goal. The strategic objective for Goal 1 is to:

Prevent and mitigate accidents and ensure radiation safety.

Minimizing the likelihood of accidents and reducing the consequences of an accident (should one occur) are the key elements for achieving the NRC's Safety goal. Such accidents, particularly for large, complex facilities like nuclear power plants, have the potential to release significant amounts of radioactive material to the environment and expose facility workers and the public to high levels of radiation. Even in the absence of accidents, radiological hazards exist during routine operations. The NRC ensures that measures are in place to minimize exposure for workers and the public and prevent unintended releases of radioactive materials to the environment.

In FY 2015, the NRC demonstrated that it achieved the Safety strategic objective by meeting the targets for the performance indicators listed below. Since the agency is required to report on performance information for the previous five fiscal years, Table 3 shows the agency's annual safety performance indicators and results for FYs 2010–2014.

PERFORMANCE INDICATORS: FY 2015

The purpose behind the NRC's performance indicators is to prevent or minimize undesirable outcomes. Therefore, the trends indicating the agency's success in accomplishing its mission would be at or near zero.

The following performance indicators were developed in conjunction with the development of the agency's FY 2014–2018 Strategic Plan. More information on the abnormal occurrence (AO) criteria is found in the *Data Sources, Data Quality, and Data Security* section of this chapter.

Safety Objective 1: ***Prevent and mitigate accidents and ensure radiation safety.***

Performance Goal 1: Prevent radiation exposures that significantly exceed regulatory limits.

Performance Indicator: Number of radiation exposures that meet or exceed AO criteria I.A.1 (unintended radiation exposure to an adult), I.A.2 (unintended radiation exposure to a minor), or I.A.3[1] (radiation exposure that has resulted in unintended permanent functional damage to an organ or physiological system)

Timeframe: Annual

Business Line	FY 2015	
Operating Reactors	Target: 0	Actual: 0
New Reactors	Target: 0	Actual: 0
Fuel Facilities	Target: 0	Actual: 0
Decommissioning and Low-Level Waste	Target: 0	Actual: 0
Spent Fuel Storage and Transportation	Target: 0	Actual: 0
Nuclear Materials Users	Target: ≤3	Actual: 2

[1]*All references to the AO criteria in this section refer to the definitions in Appendix A of the "Report to Congress on Abnormal Occurrences: Fiscal Year 2014," NUREG-0090, Volume 37, published in May 2015.*

Discussion: This indicator tracks the effectiveness of the NRC's nuclear safety regulatory programs, in part through the number of radiation exposures to the public and occupational workers that exceed AO criteria. This indicator tracks both nuclear reactors and other nuclear materials users, such as hospitals and industrial users. Two such exposures took place during FY 2015. Incidents of this nature would be included in the NRC's annual report to Congress, the latest version of which is available online through the NRC's Agencywide Documents Access and Management System (ADAMS) at Accession No. ML15140A285.

Performance Goal 2: Prevent releases of radioactive materials that significantly exceed regulatory limits.

Performance Indicator: Number of releases of radioactive materials that meet or exceed AO criterion I.B (discharge or dispersal of radioactive material from its intended place of confinement that results in releases of radioactive material)

Timeframe: Annual

Business Line	FY 2015	
Operating Reactors	Target: 0	Actual: 0
New Reactors	Target: 0	Actual: 0
Fuel Facilities	Target: 0	Actual: 0
Decommissioning and Low-Level Waste	Target: 0	Actual: 0
Spent Fuel Storage and Transportation	Target: 0	Actual: 0
Nuclear Materials Users	Target: 0	Actual: 0

Discussion: This indicator tracks the effectiveness of the NRC's nuclear material regulatory programs. Exceeding the applicable regulatory limits is defined as a release of radioactive material that causes a total effective radiation dose equivalent to individual members of the public greater than 0.1 rem in a year, exclusive of dose contributions from background radiation. In FY 2015, there were no releases of this nature.

Performance Goal 3: Prevent the occurrence of any inadvertent criticality events.

Performance Indicator: Number of instances of unintended nuclear chain reactions involving NRC-licensed radioactive materials

Timeframe: Annual

Business Line	FY 2015	
Operating Reactors	Target: 0	Actual: 0
Fuel Facilities	Target: 0	Actual: 0
Decommissioning and Low-Level Waste	Target: 0	Actual: 0

Discussion: This indicator tracks the effectiveness of the NRC's criticality regulatory programs through the number of unintended self-sustaining nuclear reactions occurring within a fiscal year. Intended criticality events include the startup of a nuclear power reactor.

Performance Goal 4: Prevent accident precursors and reductions of safety margins at commercial nuclear power plants (operating or under construction) that are of high safety significance.

Performance Indicator: Number of malfunctions, deficiencies, events, or conditions at commercial nuclear power plants (operating or under construction) that meet or exceed AO criteria II.A-II.D (events at commercial nuclear power plant licensees)

Timeframe: Annual

Business Line	FY 2015	
Operating Reactors	Target: ≤3	Actual: 0
New Reactors	Target: ≤3	Actual: 0

Discussion: The NRC's Reactor Oversight Process (ROP) monitors nuclear power plant performance in three areas: (1) reactor safety, (2) radiation safety, and (3) security. Analysis of individual plant performance is based on both licensee-submitted performance indicators and NRC inspection findings, which are independent assessments of licensee performance by the NRC as the regulatory authority. Each issue is evaluated and assigned one of four categories in order of increasing significance: green, white, yellow, or red. Greater oversight by the NRC results as the severity of the findings increase. A red finding or performance indicator signals a significant reduction in the safety margin in the measured area. No red findings were issued in FY 2015.

Performance Goal 5: Prevent accident precursors and reductions of safety margins at nonreactor facilities or during transportation of nuclear materials that are of high safety significance.

Performance Indicator: Number of malfunctions, deficiencies, events, or conditions at nonreactor facilities or during transportation of nuclear materials that meet or exceed AO criteria III.A or III.B (events at facilities other than nuclear power plants and all transportation events)

Timeframe: Annual

Business Line	FY 2015	
Fuel Facilities	Target: 0	Actual: 0
Decommissioning and Low-Level Waste	Target: 0	Actual: 0
Spent Fuel Storage and Transportation	Target: 0	Actual: 0

Discussion: This indicator tracks the effectiveness of the NRC's safety programs for nonreactor facilities or during transportation of nuclear materials through the number of instances in which safety margins at nonreactor facilities are at unacceptable levels.

Performance Goal 6: Prevent medical events involving radioactive materials that result in death or have a significant unintended impact on patient health.

Performance Indicator: Number of medical events that meet or exceed a revised version of AO criterion III.C.3 (events involving the medical use of radioactive materials in patients or human research subjects) to be developed in 2016

Timeframe: Annual

Business Line	FY 2015	
Nuclear Materials Users	Target: N/A*	Actual:

** This indicator has been discontinued because the Commission approved alternate metrics in FY 2015 and did not approve the addition of Criterion III.C.3.*

Discussion: This indicator tracks the effectiveness of the NRC's regulatory safety program for the medical use of nuclear material through the number of medical events meeting or exceeding criterion III.C.3.

TABLE 3 – FY 2010-2014 PERFORMANCE INDICATORS RESULTS

Goal – *Safety:* ENSURE SAFE USE OF RADIOACTIVE MATERIALS

1. Number of New Conditions Evaluated as Red by the NRC's Reactor Oversight Process*

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	Replaced by Safety Performance Goal 4
Actual	0	1	1	0	0	

* *This measure is the number of new red inspection findings and the number of new red performance indicators during the fiscal year. Programmatic issues at multiunit sites that result in red findings for each individual unit are considered separate conditions for purposes of reporting for this measure. A red performance indicator and a red inspection finding that are caused by an issue with the same underlying causes also are considered separate conditions for purposes of reporting for this measure. Red inspection findings are included in the fiscal year in which the final significance determination was made. Red performance indicators are included in the fiscal year in which the ROP external Web page was updated to show the red indicator.*

2. Number of Significant Accident Sequence Precursors (ASPs) * of a Nuclear Reactor Accident

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	≤ 0	≤ 0	≤ 0	≤ 0	≤ 0	Replaced by Safety Performance Goal 4
Actual	0	0	0	0	0	

* *Significant ASP events have a conditional core damage probability (CCDP) or ΔCDP of greater than 1×10^{-3}. Such events have a 1/1000 (1×10^{-3}) or greater probability of leading to a reactor accident involving core damage. An identical condition affecting more than one plant is counted as a single ASP event if a single accident initiator would have resulted in a single reactor accident.*

3. Number of Operating Reactors with Integrated Performance That Entered the Multiple/Repetitive Degraded Cornerstone Column or the Unacceptable Performance Column of the Reactor Oversight Process Action Matrix, or the Inspection Manual Chapter 0350 Process is ≤ 3 with No Performance Leading to the Initiation of an Accident Review Group*

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	Replaced by Safety Performance Goal 4
Actual	0	2	1	0	0	

* *This measure is the number of plants that have entered the process in Inspection Manual Chapter (IMC) 0350, "Oversight of Reactor Facilities in a Shutdown Condition due to Significant Performance and/or Operational Concerns," dated December 15, 2006; the multiple/repetitive degraded cornerstone column; or the unacceptable performance column during the fiscal year (but, were not in these columns or process the previous fiscal year). Data for this measure are obtained from the NRC's external Web Action Matrix Summary page, which provides a matrix of the five columns with the plants listed within their applicable column and notes the plants in the IMC 0350 process. For reporting purposes, plants that are the subject of an approved deviation from the Action Matrix are included in the column or process in which they appear on the Web page. The target value is set based on the expected addition of several indicators and a change in the long-term trending methodology (which will no longer be influenced by the earlier data and will be more sensitive to changes in current performance).*

4. Number of Significant Adverse Trends in Industry Safety Performance is ≤ 1*

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	Discontinued**
Actual	0	0	0	0	0	

* *Considering all indicators qualified for use in reporting*
** *Indicator discontinued with the adoption of the indicators for the FY2014-2018 Strategic Plan*

TABLE 3 – FY 2010-2014 PERFORMANCE INDICATORS RESULTS (CONTINUED)

5. Number of Events with Radiation Exposures to the Public or Occupational Workers That Exceed Abnormal Occurrence (AO) Criterion I.A.3*							
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Reactors	Target	0	0	0	0	0	Replaced by Safety Performance Goal 1
Reactors	Actual	0	0	0	0	0	0
Materials	Target	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	Replaced by Safety Performance Goal 1
Materials	Actual	0	0	0	0	0	1
Waste	Target	0	0	0	0	0	Replaced by Safety Performance Goal 1
Waste	Actual	0	0	0	0	0	0

**Releases for which a 30-day report under Title 10 of the Code of Federal Regulations (10 CFR) 20.2203(a)(3) is required.*

6. Number of Radiological Releases to the Environment That Exceed Applicable Regulatory Limits*							
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Reactors	Target	0	0	0	0	0	Replaced by Safety Performance Goal 2
Reactors	Actual	0	0	0	0	0	0
Materials	Target	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	Replaced by Safety Performance Goal 2
Materials	Actual	0	0	0	0	0	0
Waste	Target	0	0	0	0	0	Replaced by Safety Performance Goal 2
Waste	Actual	0	0	0	0	0	0

**With no event exceeding AO criterion I.B*

NUCLEAR REACTOR SAFETY

The NRC regulates activities that provide for the safety and security of 99 operating reactors, 31 test and research reactors, and 5 reactors under construction. Following is a description of the safety and security activities during FY 2015 that resulted in achievement of the strategic goals, strategic objectives, and performance-indicator targets for the Operating Reactors and New Reactors business lines to ensure the safe use of radioactive materials.

OPERATING REACTORS

NRC-licensed nuclear reactors account for about 20 percent of U.S. net electric generation, providing roughly 770 billion kilowatt-hours of electricity. The agency monitors the safe and secure operation of the 99 operating power reactors. The NRC achieves its strategic goals through its licensing, oversight, rulemaking, research, international activities, event response, and generic homeland security functions.

The operating level priorities for the Operating Reactors business line during FY 2015 were as follows:

1. Ensure safe and secure operation of the nation's nuclear power plants by effectively implementing the Reactor Oversight Process and responding to events/emergencies as needed.
2. Resolve emergent technological and security issues in a safe and efficient manner.
3. Ensure plants resolve safety, security, and technical issues.
4. Implement the Tier 1 actions regarding the lessons learned from the Fukushima Dai-chi Accident.
5. Work to reduce the licensing action backlog in accordance with agency metrics.

6. Completion of Watts Bar 2 licensing and providing effective oversight of startup activities.
7. Ensure safe transition to decommissioning for affected plants.
8. Timely and efficient review of Molybdenum-99 (Moly-99) license applications.

LICENSING

The agency's nuclear reactor licensing activity ensures that the operation of civilian nuclear power reactors and test and research reactors adequately protect public health and safety and the environment while safeguarding radioactive material used in nuclear reactors. Licenses establish specific technical and operating standards for individual facilities. During FY 2015, the NRC continued actions to address a backlog of operating reactor licensing actions caused by priority on the Fukushima enhancements. More information is available at this link: http://www.nrc.gov/reactors/operating/ops-experience/japan-dashboard.html.

Prairie Island Nuclear Generating Plant, Units 1 and 2

In FY 2015, the NRC approved the Vogtle Units 1 and 2 license amendment to implement risk-informed categorization and treatment of structures, systems, and components for nuclear power reactors in accordance with 10 CFR 50.69, "Inspections, Records, Reports, Notifications." This is the first plant to implement the rule.

Progress continued on assessing and implementing the regulatory activities that were an outcome of the agency's response to Fukushima. The Commission provided direction on all of the Tier 1 activities (i.e., items to impement without delay), which continue to be worked under aggressive schedules, requiring close monitoring to ensure that implementation of the activities is successful. As part of Tier 1 actions staff will have completed regulatory audits at 49 of the 63 reactor sites to support implementation of the Mitigation Strategies and Spent Fuel Pool Instrumentation orders by the end of 2016; staff issued Interim Safety Evaluations to all operating units with Mark I or Mark II containments related to Phase 1 of EA-13-109; the Commission approved a staff-developed action plan to ensure each site's reevaluated flooding hazard is addressed by mitigating strategies by the end of 2016; and the staff issued Staff Assessments to half of the operating fleet for their reevaluated seismic hazards. The staff has continued work on remaining Tier 2 & 3 activities and will submit a paper to the Commission detailing closeout plans for each activity at the end of October 2015.

During FY 2015, the NRC continued to review the construction permit application for a medical radioisotope facility from SHINE Medical Technologies, Inc. (SHINE), submitted in FY 2013. Additionally in FY 2015, the NRC received a construction permit application from Northwest Medical Isotopes, LLC. (NWMI) to build a medical radioisotope facility in Columbia, Mo. The NWMI two-part construction permit application, consisting of an environmental report and preliminary safety analysis report was submitted to the NRC on February 5 and July 20, 2015, respectively. The NRC also continued to review a license amendment request submitted by Oregon State University (OSU) requesting approval to irradiate low-enriched uranium targets in the OSU TRIGA® reactor for the explicit purpose of demonstrating the production of Moly-99 in a research reactor. On March 26, 2015, the NRC issued a materials license to Niowave, Inc. to possess and use small quantities of uranium isotopes to demonstrate the ability to produce small quantities of Moly-99. The NRC continued to hold public meetings in FY 2015 with SHINE and NWMI to discuss technical information related to these ongoing reviews as well as with potential

applicants, including Coqui Radiopharmaceuticals Corporation, General Atomics, and Niowave in anticipation of potential construction permit applications or licensing amendment requests.

The NRC prioritizes all licensing action reviews in accordance with their safety significance; however, because of Fukushima-related work competing for the same critical skillsets, the backlog inventory of operating reactor licensing actions over one year old grew since 2012. The staff applied additional resources to support reducing the licensing action backlog. Additionally, staff and senior management increased focus on the timeliness of all licensing actions, specifically by heightening attention on actions 9-12 months old to ensure they do not enter the backlog, as well as to complete actions over one year old already in the backlog. The efforts have enabled staff to improve timeliness performance in processing licensing actions. The annual average performance at the end of August 2015 was 88 percent of licensing actions completed within one year, which is an improvement from the annual average of 87 percent reported at the end of FY 2014, and a more significant improvement from the spring of 2014 when staff performance declined to 83 percent. Further, the staff has reduced the backlog by more than 60 percent since November 2014 (112 actions to 43 actions). The staff anticipates that continued focus in this area will support improving timeliness performance further in FY 2016.

The NRC completed preoperational test inspections at Watts Bar 2 in FY 2015, and published documentation of the closure of a number of open items including hydrology, emergency preparedness, cyber security, and electrical issues.

POWER UPRATES

Since the 1970s, the Nation's utilities have sought power uprates as a way to generate more electricity from existing nuclear plants. By August 2014, the NRC had approved 156 power uprates, resulting in a gain of approximately 7,326 megawatts electric at existing plants, equivalent to the gain of seven new power reactors added to the power grid. The NRC evaluates nuclear reactor power uprate applications to determine whether licensees can safely increase the power output of their plants. The NRC review focuses on the potential impacts of the proposed power uprate on overall plant safety and confirms that plant operation at the increased power level will be safe.

In December 2014, the NRC staff conducted its most recent survey of nuclear power plant licensees' plans to submit power uprate applications over the next five years. This latest information indicates licensees plan to request power uprates for seven nuclear power plants during the next five years.

LICENSE RENEWAL

The NRC grants reactor operating licenses for 40 years, which can be renewed for additional periods of 20 years. The NRC has issued renewed licenses for 76 power reactor units currently licensed to operate and has 9 license renewal applications for 16 reactor units under review. The review process for renewal applications is designed to assess whether a reactor can continue to be operated safely during the extended period. To renew a license, the utility must demonstrate that aging will not adversely affect passive, long-lived structures or components important to safety during the renewal period. Additionally, the agency assesses the potential impacts of the extended period of operation on the environment. Inspectors travel to the nuclear reactor facility to verify the information in the license renewal application and confirm that aging management programs have been, or are ready to be, implemented. Following the safety review, the NRC prepares and makes available to the public a safety evaluation report.

The agency issued the renewed operating license for Limerick Generating Station, Callaway Nuclear Plant, Unit 1, and Sequoyah Nuclear Plant, Units 1 and 2 during FY 2015. These represented the first renewed license used since the Commission's approval of the revised rule at *10 CFR* 51.23, "Environmental Impacts of Continued Storage of Spent Nuclear Fuel Beyond the Licensed Life for Operation of a Reactor," and associated Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel, NUREG-2157, "Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel.

OVERSIGHT

The NRC provides continuous oversight of nuclear reactors through the Reactor Oversight Process (ROP) to verify that nuclear plants are operated safely and in accordance with the agency's rules and regulations. The NRC performs a rigorous program of inspections at each plant, performs supplemental inspections, and takes additional actions to ensure that the plants address significant safety issues consistent with the ROP (see Figure 14). The NRC has at least two full-time resident inspectors at each operating nuclear power plant site performing inspections and oversight activities. Inspectors from NRC regional offices and headquarters also conduct inspections at each nuclear power plant site in accordance with the ROP. The NRC has full authority to take action to protect public health and safety, up to and including shutting the plant down. The NRC also conducts public meetings with licensees to discuss the results of the agency's assessments of their safety performance.

The NRC achieved the following significant oversight highlights in FY 2015.

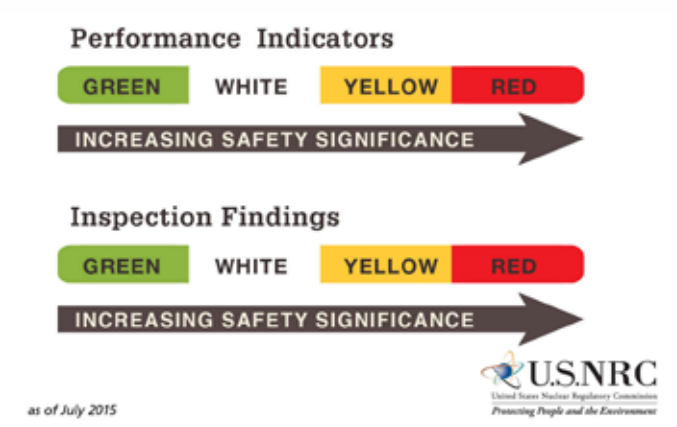
- Issued a finding of substantial safety significance (Yellow) at Arkansas Nuclear One, Units 1 and 2, caused by internal flood protection deficiencies.
- Completed the inspection and assessment activities at Fort Calhoun Station necessary for the NRC to conclude that the licensee adequately satisfied the criteria for transition from the IMC 0350 process to the IMC 0305 oversight process. As a result, Fort Calhoun transitioned back to regular ROP oversight effective April 1, 2015.
- Conducted special inspections at Pilgrim (loss of offsite power because of winter storm Juno), at River Bend (actuation of the Reactor Protection System), and at Duane Arnold (torus coating delamination).
- Issued White findings to Pilgrim (safety/relief valve's failure to open, Clinton (failure of service water pump), Dresden (reliable operation of valves), and River Bend (simulator fidelity). The agency completed a special inspection at Ft. Calhoun (aux FW valve failures), and completed inspections at Palisades (radiation safety), Millstone (TDAFW pump trips), and Salem (unplanned manual scrams).

INVESTIGATION AND ENFORCEMENT

Compliance with NRC requirements plays an important role in giving the agency confidence that safety is being maintained not only for operating reactors but for all areas that the agency regulates. NRC policies deter noncompliance and encourage prompt identification and timely, comprehensive corrective actions. Willful violations are of particular concern. Licensees, contractors, and their employees who do not achieve the high standard of compliance expected by the NRC are subject to enforcement sanctions. Each enforcement action depends on the circumstances of the case. The NRC will not permit licensees to continue to conduct licensed activities if they cannot achieve and maintain adequate levels of safety.

In FY 2015, the NRC processed 37 escalated enforcement actions with 8 of the escalated actions supported through an investigation of potential criminal wrongdoing. In FY 2015, the NRC issued one confirmatory order with civil penalty to the River Bend Station for willful loss of Safeguards Information (SGI). The agency also issued one notice of violation with civil penalty to Sequoyah for falsification of fire watch records and a notice of violation to an individual for attempting to subvert the fitness-for-duty program at the Columbia Generating Station.

FIGURE 14 – REACTOR OVERSIGHT ACTION MATRIX PERFORMANCE INDICATORS



OPERATING REACTORS RULEMAKING

During FY 2015, there was one final operating reactor rulemaking issued: The final American Society of Mechanical Engineers (ASME) Code Case rulemaking was published in November 2014. In addition, the staff also reviewed and resolved 17 petitions for rulemaking. The staff also accomplished a major milestone by completing one of the Fukushima Lessons-Learned rulemaking activities, the Mitigation of Beyond Design Basis Events (MBDBE) by providing the proposed rule to the Commission on April 30, 2015. A Commission meeting was conducted in July 2015. On the other Fukushima Lessons-Learned rulemaking (i.e., Containment Protection Release Reduction (CPRR)), upon consideration of the draft regulatory basis provided to the Commission in June 2015, the Commission directed the staff to cease rulemaking activities on CPRR.

The staff continues to develop several high-priority rulemakings, including the 10 CFR 50.46c, "Emergency Core Cooling System Performance during Loss-of-Coolant Accidents," final rule, which is due to the Commission in February 2016.

OPERATING REACTORS RESEARCH

The NRC research program supports the agency mission by providing independent technical advice, expertise, tools, and information for identifying and resolving safety issues, making regulatory decisions, and promulgating regulations and guidance for nuclear power plants and other facilities and materials regulated by the agency. In support of the licensing and oversight of operating reactors, the research program develops technical bases and information to support timely and realistic regulatory decisions and provides confirmatory research to verify licensee submittals independently. The research program also reduces uncertainties in risk assessments and coordinates the development of consensus and voluntary standards for agency use. In FY 2015, substantive research work was performed in the following technical areas.

FIRE SAFETY RESEARCH

The NRC has continued conducting independent and collaborative research with the Electric Power Research Institute (EPRI) and international parties to develop state-of-the-art tools, methods, and data in support of regulatory activities related to fire protection and fire risk analyses.

In FY 2015, key fire research included: testing and expert elicitation to develop state-of-the-art advancements for determining the probability of circuit hot shorting as a result of electrical fires in commercial nuclear power plants; evaluation of fire protection compensatory measures used in nuclear power plants; publication of an updated fire events database; continued improvements and advancements in fire probabilistic risk assessment (PRA) and human reliability analysis, specifically, main control room abandonment; fire modeling development and advancing the (a) verification and validation of select fire modeling, (b) continued study of electrical cable combustion, flame spread, and fire retardant coatings, and (c) testing of Very Early Warning Fire Detection Systems; performing experiments to better understand the heat release rate from electrical enclosures; and leading a High Energy Arcing Fault (HEAF) project with the international community under a program with the Organization for Economic Co-operation and Development to better understand the risk from HEAF events.

RADIATION PROTECTION RESEARCH

This research supports the agency in the areas of radiation protection, dose assessment, and assessment of human health effects for reactor licensing, emergency preparedness, and nuclear security activities.

In FY 2015, the NRC released an updated version of the Radiological Assessment System for Consequence Analysis (RASCAL) computer code version 4.3.1. This version of the code contains a number of new features and revisions to support licensee implementation of multi-unit dose assessment capability as addressed in the proposed rule on MBDBE, which addressed lessons learned during the NRC's response to the events during the Fukushima accident in Japan. Also in FY 2015, the NRC released an updated version of Radionuclide Transport, Removal and Dose Estimation (RADTRAD) computer code

version 4.5. This version of the code enhances the user interface and adds new features to aid the agency in performing licensing reviews. Finally, the agency recently launched a new program called the Radiation Protection Code Analysis and Maintenance Program (RAMP), which is a collaborative international effort supporting the development and maintenance of radiation protection and dose assessment codes.

MATERIALS DEGRADATION

The NRC continues to research material degradation issues for currently licensed reactors and waste and decommissioning facilities. The purpose of this research is to identify component-specific degradation mechanisms and their implications for structural and component integrity of existing reactors as well as waste and decommissioning facilities.

In FY 2015, in cooperation with DOE, the NRC continued to advance the technical basis for subsequent license renewals by identifying technical gaps that need to be addressed. The NRC continued its ongoing scrutiny of the integrity of steam generators to support response to emergent issues and future needs. The NRC also supports the development of confirmatory tools incorporating uncertainty quantification to assess piping and reactor pressure vessel integrity for independent verification of licensee submittals.

NONDESTRUCTIVE EXAMINATION RESEARCH

In accordance with 10 CFR Part 50.55(a), "Codes and Standards," licensees must inspect structures, systems, and components to ensure that the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) are met and that structures, systems, and components can continue to perform their safety functions. The NRC conducts research on nondestructive examination (NDE) of light-water reactor (LWR) components and structures and provides the technical basis for regulatory decision-making related to these requirements. The NRC program at Pacific Northwest National Laboratory (PNNL) is evaluating the ability to detect and characterize primary water stress-corrosion cracking in LWR components. In addition, the NRC is directing research at PNNL on the inspection of coarse-grained austenitic alloys and welds. NDE of these components is especially difficult because of signal attenuation and reflections. Research findings will support appropriate inspection requirements for these components to ensure safety.

DIGITAL INSTRUMENTATION AND CONTROL RESEARCH

The NRC's research supports the licensing of new digital instrumentation and control systems intended for use in retrofits to operating reactors and for use in new and next generation reactors. Research topics include safety, security, and knowledge management aspects of digital instrumentation and control systems. The research involves hazard analysis and failure mode analysis to assess safety, reliability, and security and to support safety assurance of digital systems. The research supports development of technical bases for improved regulatory guidance for licensing reviews of digital systems. Knowledge management research includes technical collaborations with the Electric Power Research Institute (EPRI) and international entities and learning from operational experience.

ELECTRICAL ENGINEERING RESEARCH

NRC electrical engineering research supports developing technical bases for regulatory guidance, confirmatory research, assessing impacts of emerging technologies, and specific technical licensing issues to ensure safer operation of nuclear power plants (NPPs). Ongoing research is examining the reliability of onsite and offsite power systems, including station blackout mitigation, vital direct current system performance, environmental qualification of safety-related equipment, and Fukushima-related topics. Research into limitations of electrical cable condition monitoring and qualification was initiated to support license renewal and the potential for extended license renewal. Long-term research in this area includes

impacts of smart grid implementation on NPP offsite power reliability.

PROBABILISTIC RISK ASSESSMENT

The NRC continues to research the development of models, methods, and tools for probabilistic risk assessment (PRA) activities to support risk-informed regulatory decision-making such as licensing, rulemaking, and oversight of licensee performance. Specific examples include continued investigation of PRA methods for digital instrumentation and control systems, improved PRA software calculational and modeling capabilities, and development of new fire and external hazard nuclear power plant risk models for agency use. In FY 2015, the NRC continued to work on a multi-year project to develop a new integrated site PRA study that will quantitatively estimate the consequences of severe accidents for all modes of operation, all significant hazard categories, and all significant radiological sources onsite (i.e., reactors and spent fuel in pool and dry cask storage). The agency also continues to support PRA standards to support risk-informed regulatory activities for both operating and new reactors.

NATURAL HAZARDS RESEARCH

The NRC's natural hazards research plan that has been broadly reviewed for both technical quality and programmatic elements. The current emphases of this research plan is to evaluate potential risks to U.S. nuclear plants from severe earthquakes, tsunamis and other flooding hazards, and to ensure the continued safety of new and operating U.S. nuclear power plants. Over the last year the flooding portion of this work has produced a Probabilistic Flood Hazard Research Program Plan and initiated eleven research projects to address both short- and long-term goals expressed in the joint user-need from the operating and new reactor licensing programs. The NRC research on natural hazards is needed to meet the agency's safety strategies to enhance the risk-informed and performance-based regulatory framework. The research also produces timely results and insights that are essential for the review of the licensee responses to the 50.54(f) letter that was sent to licensees related to the implementation of the Tier 1 recommendations from the Fukushima Near-Term Task Force (NTTF) on seismic and flooding reevaluations (recommendations 2.1 and 2.2).

CONCRETE DEGRADATION RESEARCH

In support of license renewal and future revisions of the Generic Aging Lessons Learned (GALL) report, the NRC initiated a research program with the National Institute of Standards and Technology (NIST) to increase the understanding of chemical processes that can degrade the long-term performance of concrete. In particular, alkali silicate reaction is being studied to determine the progress of the chemical process over time and the effect on the strength of affected concrete over the service life of the structure. Coordinated efforts with the international community (Nuclear Energy Agency/Committee on the Safety of Nuclear Installations) are bringing in the experience of other countries and cooperative efforts are yielding ongoing research results. The NRC participated in an international workshop on concrete degradation held at NIST in June 2015.

SEVERE ACCIDENT AND CONSEQUENCE RESEARCH ANALYSIS

The NRC plans, develops, and manages research programs that create computer codes, models, and experimental databases for evaluating nuclear reactor and plant systems under severe accident conditions for current, new, and advanced reactors. State-of-the-art analytical techniques are used to develop realistic best estimates of the potential consequences for the public of low-likelihood accidents involving nuclear power plants and spent fuel storage and transportation, which could release radioactive material into the environment. Major projects in this area are detailed below.

In FY 2015, research was completed to develop the technical basis for the boiling-water reactor (BWR) Mark I/II containment protection and release reduction (CPRR) rulemaking effort. The analysis estimated the risk of potential radioactive releases and offsite

consequences of Mark I and Mark II containment failure due to an extended loss of alternating power (ELAP) accident caused by a beyond-design-basis external event. Additional analytical work is being conducted to analyze accident progression and offsite consequences for a PWR plant with an ice condenser containment. The NRC is participating in domestic research with DOE and the EPRI and international research with the Organization for Economic Co-operation and Development (OECD) and other international bodies to better understand the accident progression and lessons learned from the multiple reactor units during the Fukushima Dai-ichi Nuclear Power Plant accident. Examples include the OECD-led Fukushima accident benchmark exercise, a DOE/NRC joint effort on Fukushima accident reconstructions, and several Nuclear Energy Agency (NEA) studies on related topics.

Through the State-of-the-Art Reactor Consequence Analyses (SOARCA) project, the NRC has developed an updated body of knowledge on the realistic outcomes of selected important severe reactor accidents for two pilot plants, Peach Bottom and Surry. The NRC completed an uncertainty analysis of one of the SOARCA scenarios, the Peach Bottom unmitigated long-term station blackout, to take an integrated look at uncertainties in the accident progression and offsite consequence analyses. The results of the analysis show that the uncertainties studied do not change the overall SOARCA conclusions for this accident scenario. The analysis is publicly available in draft NUREG/CR-7155 (ML13189A145) and is in the process of being published as a finalized NUREG report. The staff is currently conducting two other related analyses to further update the severe accident knowledge base and support a variety of ongoing projects: (1) an uncertainty analysis of the SOARCA Surry unmitigated short-term station blackout and (2) an analysis of accident progression and offsite consequences for a PWR plant with an ice condenser containment (Sequoyah).

HUMAN RELIABILITY ANALYSIS RESEARCH

The NRC continues to conduct research to improve human reliability analysis (HRA) methods, data, and models. Based on research insights, the NRC is developing an improved HRA model for agency use and a standard agencywide expert elicitation process. Further, the NRC is collaborating with the nuclear power reactor industry and international partners to collect human performance data from simulator exercises to inform both the qualitative and quantitative analysis portions of HRA methods. The agency is also developing a standard agencywide expert elicitation process for use in many regulatory processes.

The NRC is creating updated human factors review guidance for the review of license applications for new and advanced reactors and is performing research in support of rulemaking activities on fatigue, technologies for drug and alcohol testing, and severe accident mitigation.

GENERIC ISSUES PROGRAM

The NRC's Generic Issues Program enables the public and the NRC staff to raise issues with potentially significant generic safety or security implications in order to ensure that those issues are assessed through an effective, collaborative, and open process and that pertinent information is appropriately disseminated. The agency is currently addressing four active generic issues and one proposed generic issue.

COLLECTION AND ANALYSES OF OPERATING EXPERIENCE DATA

The NRC continues to collect and analyze operating experience data from power reactors to support risk analysis tools that are used in regulatory decision-making. Sources of information include, for example, NRC inspection reports, licensee event reports, and voluntary information provided by nuclear plant licensees to the Institute for Nuclear Power Operations (INPO). The NRC purchases the right to access the INPO Consolidated Events System, formerly known as the Equipment Performance Information and Exchange (EPIX) system, to use this data to support updates to risk analysis tools, such as the Standardized Plant Analysis Risk models. Analysis of the operating experience data is used to improve the understanding of the uncertainty associated with component reliability and performance, common-

cause failure parameters, and initiating event frequencies. Further, trending analysis of operating experience has led the NRC to initiate research into causal factors associated with equipment failures that have challenged the safe operation of nuclear power plants.

Collection and analysis of operating experience data also supports the NRC's ROP Significance Determination Process (SDP), Operating Experience Clearinghouse, NRC Incident Investigation Program, event assessment process, the Generic Issues Program resolution process, and the Accident Sequence Precursor (ASP) Program. Operating experience data also supports development of generic communications and informs inspections conducted under the ROP to review, for example, equipment and performance issues related to age-related degradation of active components and the risk contribution from electrical equipment failures. Applying risk assessment techniques to operating experience has provided risk insights for the Operating Experience Clearinghouse on the potential risk significance of event notifications.

THERMAL-HYDRAULICS RESEARCH AND ANALYSIS

The NRC plans, develops, and manages research programs that develop computer codes, models, and experimental databases for evaluating coupled neutronic and thermal-hydraulic transient behavior of nuclear reactors and plant systems under normal, abnormal, and accident conditions for current, new, and advanced reactors. The agency also performs thermal-hydraulic and computational fluid dynamics analytical analyses to support regulatory decision-making and safety assessments. The results of thermal-hydraulic research are also used to quantify margins, reduce unnecessary burden, and reduce uncertainties for areas of potentially high risk or safety significance. By working in partnerships with universities, laboratories, and other national and international research centers, the agency is able to leverage resources in this area. The agency recently released TRACE/PARCS Version 5.0 Patch 4. This version incorporates new features for confirmatory analysis of contemporary nuclear plant designs and design changes. During FY 2015, the updated code was used for modeling small modular reactors, simulating containment behavior, performing more accurate fuel rod behavior studies, and simulating plant transients such as Anticipated Transient Without Scram (ATWS), and Maximum Extended Load Line Limit Analysis Plus (MELLLA+).

EVENT RESPONSE

The agency participated in the on-site visit to the Tennessee Valley Authority's Clinch River site and led the emergency preparedness review for the early site permit pre-application readiness assessment. During the assessment, the staff identified approximately 70 questions spanning the 16 planning standards. NRC staff engaged in in-depth discussion to determine the extent of the readiness of the TVA application and the basis for the exemptions being requested.

The NRC's emergency preparedness and incident response activities ensure that adequate measures can and will be taken to mitigate plant events, to minimize possible radiation doses to members of the public, and to ensure that the agency can respond effectively to events at licensee sites.

The NRC successfully planned, executed, and evaluated a full participation exercise with the Sequoyah Nuclear Power Plant in a hostile-action-based exercise in November 2014 and a similar exercise at Fort Calhoun in August 2015. These exercises involved incident responders from various NRC program and regional offices.

The agency took part in the Southern Exposure 2015 exercise on July 21-23 and September 9-10. For the first time in response to a (simulated) domestic nuclear reactor incident, the NRC continued exercise participation with the licensee after the completion of the licensee's inspected exercise. The continued exercise play explored emergency response actions and considerations that could be necessary after the immediate actions and activations were completed (i.e., recovery aspects). This unique experience will inform future response planning and assist in development of an agency recovery plan.

NEW REACTORS

The NRC reviews applications for standard new reactor design certifications (DCs), early site permits (ESPs), limited work authorizations, combined licenses (COLs), construction permits, and operating licenses. The current and anticipated applications for new reactors involve both large light-water reactor facilities and small modular reactor facilities in a variety of projected locations throughout the United States. The NRC oversees construction activities for commercial nuclear power plants that include inspection, licensee performance assessment, investigation of allegations, and enforcement activities. This also includes the NRC's Vendor Inspection Center of Expertise, which develops and implements quality assurance and vendor inspection programs for both new and operating reactors.

The operating level priorities for the New Reactors business line during FY 2015 were as follows:

1. Execute construction oversight at Watts Bar Unit 2 and four AP 1000 Units, including the construction inspection program, ITAAC closure verification reviews, and necessary license amendments to ensure that the facilities are being constructed in conformity with the license or construction permit, the provisions of the Atomic Energy Act, and the Commission's rules and regulations.
2. Implement the agency's Vendor Inspection Program, including inspection, allegations, enforcement, communication to stakeholders, and self-assessments in support of the safety of both new reactor construction and operating reactors.
3. Plan for the effective transition of regulatory oversight and licensing authority for plants licensed under Part 52 to the operating reactor business line.
4. Conduct timely and high quality safety, security, and environmental reviews for all active combined licenses, design certification, and early site permit applications for large light-water reactors. Conduct appropriate rulemaking activities to support decisions on the licenses. Participate in mandatory and adjudicatory hearings to support the staff's licensing conclusions.
5. Establish and maintain the regulatory, technical, and policy infrastructure necessary to support timely and high-quality safety and environmental reviews for SMR applications and associated licensing actions expected in 2016- 2017.
6. Prepare for the licensing of non-light water reactors at a level commensurate with the industry's pace of developing technologies and anticipated timeframes for potential industry submttals.

LICENSING

NEW REACTOR DESIGN CERTIFICATIONS

The NRC reviews applications for standard DCs using 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." By issuing a DC, the NRC approves a nuclear power plant design independent of an application to construct or operate a plant. A DC is valid for 15 years from the date of issuance but can be renewed for an additional 10 to 15 years.

During FY 2015, the NRC published the final rule on the Economic Simplified Boiling-Water Reactor (ESBWR) DC, and the rule became effective. The NRC also completed the acceptance review of the APR1400 DC application, accepted the application for docketing, and commenced the NRC staff's detailed technical review.

In FY 2015, the NRC continued the reviews of DC applications for the AREVA Evolutionary Power Reactor (EPR™) design and Mitsubishi's U.S. Advanced Pressurized-Water Reactor design. Both of these DC application reviews were of limited scope at the requests of the applicants.

In February 2015, AREVA, Inc. requested that the NRC suspend the U.S. EPR DC application review. AREVA did not define an end date for the review suspension period.

EARLY SITE PERMITS

As part of the licensing process, the NRC can issue an ESP to approve a site for a domestic nuclear power plant independent of an application for a COL. ESPs are valid for 10 to 20 years and can be renewed for an additional 10 to 20 years.

During FY 2015, the NRC continued its safety and environmental review of one ESP application for the PSEG ESP site located adjacent to the operating Salem and Hope Creek Generating Stations in Salem County, NJ. In September 2015, the NRC issued its final safety evaluation report (FSER) for the PSEG ESP application, completing the safety review for this application. In addition, the NRC continued to prepare for the review of the Tennessee Valley Authority (TVA) ESP application for the Clinch River site. As part of this preparation, the NRC held pre-application meetings with TVA to discuss technical and policy topics and completed a pre-application readiness assessment and an emergency planning site visit.

COMBINED LICENSES

A COL authorizes construction and operation of a nuclear power plant, through the 10 CFR Part 52 licensing process. The application for a COL is one option to receive a license; the other is through the conventional process used since the 1960s, 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," which provides a construction permit followed by an operating license. The COL application must include the inspections, tests, analyses, and acceptance criteria (ITAAC) that are necessary prior to plant operation to ensure that the plant has been properly constructed and will operate safely.

During FY 2015, the NRC supported the safe construction at the Vogtle and V.C. Summer COL sites by issuing 16 license amendments with six exemptions for Vogtle, Units 3 and 4, and issuing 16 license amendments with seven exemptions for V.C. Summer, Units 2 and 3. The NRC also continued its review of eight COL applications to build and operate new reactors at sites throughout the United States, including Bell Bend, Calvert Cliffs, Fermi, Levy County, North Anna, South Texas Project (STP), Turkey Point, and Lee Station. At the end of FY 2015, the NRC was reviewing six remaining COL applications.

In FY 2015, the NRC issued the FSER for the Fermi Unit 3 COL application and concluded its mandatory hearing. The NRC issued the COL to DTE Electric Company on May 1, 2015. This was the first COL issued for an application referencing the ESBWR design. The agency also issued the FSER for the South Texas Project, Units 3 and 4, COL. During FY 2015, the NRC published the draft environmental impact statements for the Turkey Point, Units 6 and 7, and the Bell Bend COL applications.

In June 2015, UniStar Nuclear Energy (UNE) requested withdrawal of its COL application for Calvert Cliffs Nuclear Power Plant, Unit 3. The review of this application was under suspension based on a previous request by UNE in February 2015. In July 2015, the NRC accepted UNE's withdrawal request and published the notice of withdrawal of the COL application in the *Federal Register.*

FIGURE 15 – LOCATIONS OF NEW NUCLEAR POWER REACTOR APPLICATIONS

CONSTRUCTION PERMITS AND OPERATING LICENSES

The NRC has continued the extensive inspection and licensing efforts associated with the reactivation of the TVA Watts Bar, Unit 2, nuclear power plant. The agency issued a construction permit for this unit in 1973; however, construction was suspended in 1985. Watts Bar, Unit 1, received a full-power operating license in early 1996 and is presently the most recent power reactor to be licensed under 10 CFR Part 50 in the United States.

In August 2007, TVA informed the NRC of its plan to resume construction of Watts Bar, Unit 2. In FY 2011, the NRC continued its review of the operating license application for Unit 2, which TVA updated in March 2009, and assigned dedicated resident inspectors to monitor TVA's construction activities. The NRC is continuing its safety review. The current schedule calls for the NRC to complete its review efforts in calendar year (CY) 2015, with inspection activities continuing into FY 2016 (startup testing).

SMALL MODULAR REACTORS

The NRC continued to prepare for future review of the NuScale Power small modular reactor (SMR) design and licensing application, including development of the regulatory framework to support reviews of this new design and extensive outreach to external stakeholders. As part of this preparation, the NRC published for public comment draft sections of the design specific review standard (DSRS) for the NuScale design. The NuScale DSRS Scope and Safety Review Matrix provides ADAMS Accession Nos. for draft DSRS sections that are design-specific to NuScale, identifies which Standard Review Plan (SRP) sections will be used for the NuScale design review, and identifies which SRP sections are not applicable to the NuScale design. The matrix is available through ADAMS, accessible through the agency's Web site at http://www.NRC.gov/reading-rm/adams.html, by searching for Accession No. ML15156B063. In addition, the NRC held pre-application meetings on technical and policy topics associated with the NuScale design to develop an understanding on how major issues could be resolved prior to the application submittal.

In FY 2015, the NRC staff issued SECY-15-0077, "Options for Emergency Preparedness for Small Modular Reactors and Other New Technologies." The purpose of this paper was to seek Commission approval of the staff's recommendation to initiate a rulemaking to revise regulations and guidance for emergency preparedness for SMRs and other new technologies, such as non light water reactors (non-LWRs) and medical isotope production facilities. In a Staff Requirements Memorandum to SECY-2015-0077, the Commission approved the staff's recommendation to initiate a rulemaking to revise regulations and guidance for emergency preparedness for SMRs, non-light water reactors, and other new technologies.

ADVANCED NON-LIGHT WATER REACTORS

During FY 2015, the NRC continued to take strategic steps to prepare for future non-LWR applications, and have collaborated with DOE, industry standards organizations like the American Nuclear Society, and with the Generation IV International Forum. The development of a regulatory framework tailored to advanced reactors will increase the efficiency and effectiveness of the NRC's regulatory process. In addition, the NRC and DOE have engaged in a joint initiative to develop general design criteria for advanced non-light water reactors. A workshop was held on September 1–2, 2015 to explore steps the NRC, DOE, and industry could take to facilitate development and deployment of innovative reactor technologies focused on safety, timeliness, and cost-effectiveness.

NEW REACTORS OVERSIGHT

CONSTRUCTION INSPECTION

The NRC continues to inspect construction of the four AP1000 units at the Vogtle and Summer sites and for Watts Bar, Unit 2. In FY 2015, AP1000 construction activities were focused on the structural modules and concrete pours.

The agency also completed construction and pre-operational testing inspections at Watts Bar, Unit 2. Some of the significant activities included an Operational Readiness Assessment Team inspection and hot functional testing (HFT) inspections. HFT is a series of tests, some of which are conducted at normal operating pressure and temperature conditions, that demonstrate that systems can meet their specified design safety functions to control primary pressure and temperature.

In FY 2015, the agency received and processed 32 ITAAC closure notifications. The NRC continues to refine the processes and guidance for ITAAC closure, including facilitating several public workshops to solicit

input, exchange views, and reach consensus on issues such as the early submittal of uncompleted ITAAC closure notifications. The agency also issued in July 2015 Revision 2 of Regulatory Guide 1.215, "Guidance for ITAAC Closure under 10 CFR Part 52," which updated the guidance for the ITAAC closure process based on lessons learned and industry outreach.

VENDOR INSPECTION

The NRC continued implementation of the Vendor Inspection Program, including conducting 39 vendor or quality assurance implementation inspections in FY 2015 to support both new and existing reactor licenses. A majority of the inspections were related to ITAAC for the AP1000 or were specific to commercial grade dedication. All inspections focused on the design, qualification, and testing of safety-related structures, systems, components and services, and the findings were reported in areas of inadequate design control and commercial grade dedication.

INVESTIGATIONS AND ENFORCEMENT

Consistent with the description for investigations and enforcement of operating reactors, the NRC will not permit applicants for new licenses, nor their contractors and vendors, to continue to conduct licensed activities if they cannot achieve and maintain adequate levels of safety. In FY 2015, the NRC processed one escalated enforcement action, which was supported through an investigation. On April 20, 2015, the NRC issued a notice of violation and proposed imposition of civil penalty in the amount of $11,200 to the Chicago Bridge & Iron Company (CB&I) based on a Severity Level (SL) II problem involving deliberate misconduct on the part of CB&I officials and employees related to a dropped module incident. A notice of violation was also issued to a CB&I official for deliberate misconduct.

NEW REACTORS RULEMAKING

In FY 2015, the NRC published for public comment the draft regulatory basis for the "Financial Qualifications Requirements for Reactor Licensing" rulemaking. The draft regulatory basis explains, in part, why the existing regulations should be updated, estimates the cost, and provides other impacts of the potential changes. If approved, the rule would amend the current financial qualification requirements of "reasonable assurance" under 10 CFR Part 50 to conform to the 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," review standard of "appears to be financially qualified." The draft regulatory basis is available on the Federal Government's regulations Web site at http://www.regulations.gov by searching for docket number NRC 2014-0161.

The NRC published an advanced notice of proposed rulemaking to obtain input from stakeholders on the development of a regulatory basis for the NRC's regulations governing radioactive effluents from nuclear power plants. The regulatory basis would support potential changes to better align the NRC regulations governing dose assessments for radioactive effluents from nuclear power plant operations with the most recent terminology and dose-related methodology published by the International Commission on Radiological Protection (ICRP) contained in the ICRP Publication 103, "The 2007 Recommendations for International Commission on Radiological Protection," (2007).

The NRC published in the *Federal Register* for public comment 47 sections of the NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition" during FY 2015. An annual total of 54 Interim Staff Guidance documents and Standard Review Plan sections were published, 14 sections above the annual metric.

NEW REACTORS RESEARCH

Much of the technical work and research described earlier for operating reactors applies to new reactors as well. Over the past several years, the NRC has focused its new reactor regulatory research efforts on potential new light-water reactor facilities to prepare for and evaluate standard design certifications. The NRC research program addressed key areas that support the agency's safety mission. Some of the more important issues addressed include the following:

- assessment of digital systems, including hazard analysis and failure mode effects analysis.

- development of advanced tools for probabilistic risk assessment activities that support risk-informed regulatory decisionmaking, and seismic and structural research.
- research on hazards from natural events, including seismic hazard issues, flooding, and tsunami events.
- thermal-hydraulic research and analysis.
- severe accident and consequence research and analysis.
- radiation protection research.
- human reliability analysis research.

Research related to small modular reactor (SMR) concepts focuses on identifying phenomenological differences from large reactors and developing and validating tools for analyses to support potential licensing reviews.

In FY 2015, the NRC completed the following research:

- initial thermal-hydraulic model to be used to support containment and severe accident confirmatory analyses related to the Advanced Power Reactor 1400.
- phenomena identification and ranking effort for an SMR design.
- initial updates to computer models used for confirmations of estimated concentrations of toxic gases in certain postulated accidents.
- updates to human factors guidance.
- improvements to PRA models on new reactors that will be used to support agency post-construction inspection oversight efforts at those sites.
- regulatory guidance related to closure of ITAAC.
- hazard analysis of digital safety systems for SMRs.
- evaluation of seismic structural regulations and regulatory guidance for SMRs.

In FY 2015, the NRC issued NUREG/CR-7196, "Large- Scale Earthquake Simulation of a Hybrid Lead Rubber Isolation System Designed with Consideration of Nuclear Seismicity." Seismic isolation systems can decouple structures from their foundations to protect them from the effects of earthquake ground motions. The study performed large-scale testing of isolation systems to confirm their behavior for a wide range of seismic ground motions as well as to assess analysis tools, models and modeling assumptions. The results of this study can be used by the NRC to develop, design, and review guidance for seismic isolation systems for nuclear power plants.

NUCLEAR MATERIALS AND WASTE SAFETY

Effective October 5, 2014, the NRC reorganized its materials and waste programs by merging the Office of Federal and State Materials and Environmental Management Programs and the Office of Nuclear Material Safety and Safeguards. The new office retained the name of the Office of Nuclear Material Safety and Safeguards (or NMSS), an office established by Congress when it created the NRC in 1974. The merger reflects changes in the NRC's materials and waste management workload and an effort to integrate regulatory activities of the front and back ends of the nuclear fuel cycle, as well as to reduce costs and improve efficiency.

The following narrative describes major activities and accomplishments under the Nuclear Materials and Waste Safety business lines that contributed to achieving the strategic goal for ensuring the safe use of radioactive materials.

FUEL FACILITIES

The NRC licenses and inspects all commercial nuclear fuel facilities that process and fabricate uranium concentrates into the reactor fuel that powers the Nation's nuclear reactors. Licensing activities include detailed health, safety, safeguards, and environmental evaluations. Oversight involves reviews of licensee programs, procedures, operations, and facilities to ensure safe and secure operations.

The operating level priorities for the Fuel Facilities business line during FY 2015 were as follows:

1. Ensure safety and security through effective oversight of operating fuel facilities and facilities under

construction, and through effective management of licensing actions, including Section 106 Tribal Consultations, environmental reviews and other regulatory activities.

2. Support U.S. non-proliferation activities through implementation of international safeguards and domestic material control and accounting.

3. Maintain effective communications with stakeholders on staff approaches to emergent issues, rulemaking, guidance development, and other regulatory activities.

LICENSING AND OVERSIGHT

The NRC issued a confirmatory order to GE-Vallecitos to enhance physical security and material control and accounting and accepted the license renewal application for review. This confirmatory order resolved a longstanding issue on implementing appropriate site security documentation.

The NRC completed its environmental and safety reviews and approved an amendment for Louisiana Energy Services to expand its gas centrifuge uranium enrichment plant from an annual production rate of 3.7 million separative work units (SWU) to 10 million SWU. The amendment also increases the possession limits for natural, depleted, and enriched uranium.

The NRC closed the Nuclear Fuel Services (NFS) confirmatory action letter, dated March 2013, related to the NFS material control and accounting program and inventory differences within the control limits of the license.

The NRC issued an order to Shaw AREVA MOX Services extending the construction authorization from March 30, 2015, to March 30, 2025.

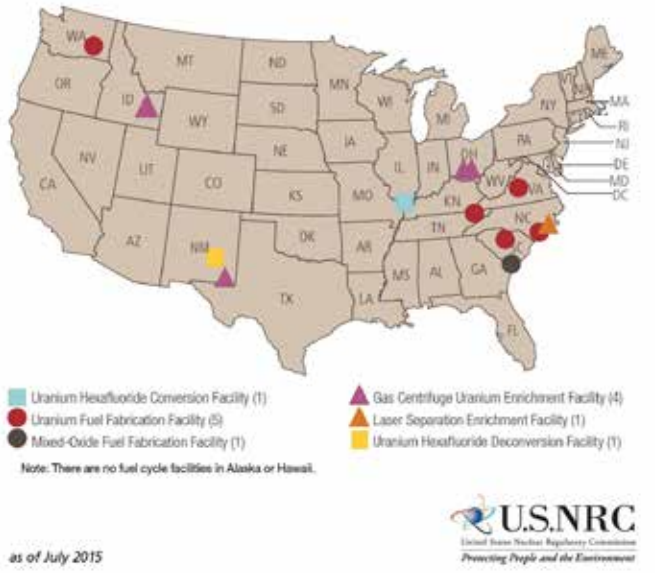
On June 26, 2015, the NRC issued the second revision of NUREG-1520, "Standard Review Plan for Fuel Cycle Facilities License Applications." NUREG-1520 provides guidance to NRC staff members who perform safety and environmental impact reviews of applications to construct or modify and operate nuclear fuel cycle facilities.

The NRC issued Generic Letter 2015-01, "Treatment of Natural Phenomena Hazards in Fuel Cycle Facilities." The NRC also issued Interim Staff Guidance (ISG) FCSE-ISG-15, "Natural Phenomena Hazards in Fuel Cycle Facilities," to provide additional guidance for evaluating events that may result from natural phenomena hazards.

The NRC issued its "Fuel Cycle Oversight Process" cornerstone technical basis document for public comment.

The NRC issued draft "Guidance for the Evaluation of Acute Chemical Exposures and the Proposed Quantitative Standards," for public comment and held an implementation workshop with stakeholders on March 4, 2015.

FIGURE 16 – LOCATIONS OF FUEL CYCLE FACILITIES



During FY 2015, the NRC issued NUREG/CR-7168, "Regulatory Approaches for Addressing Reprocessing Facility Risks: An Assessment." This report addressed methods for assessing the risks posed by a reprocessing facility, which have not previously been quantified relative to other fuel-cycle facilities. Reprocessing facilities can have higher potential source terms than other fuel cycle facilities, which heighten the risk relative to the other facilities.

In FY 2015, the NRC performed special inspections at Honeywell to review an unplanned uranium hexafluoride leak and declaration of an Alert at the site, and at BWX Technologies to review failure of double contingency requirements for nuclear criticality safety.

INVESTIGATION AND ENFORCEMENT

The NRC will not permit licensees to conduct licensed activities if they cannot achieve and maintain adequate levels of safety. In FY 2015, the NRC processed two escalated enforcement actions associated with fuel facilities. On March 11, 2015, the NRC issued a confirmatory order to Honeywell International, Inc. (Honeywell), to formalize commitments made as a result of an alternative dispute mediation session held on December 9, 2014. An investigation, dated May 15, 2014, conducted by the Office of Investigations determined that an employee of a Honeywell contractor was terminated on June 15, 2012, in part, for engaging in a protected activity. Terminating an employee for engaging in a protected activity is a violation of 10 CFR 40.7, "Employee Protection."

EVENT RESPONSE

The NRC successfully planned, executed, and evaluated an exercise with URENCO-USA in November 2014. The exercise involved responses from various NRC program offices and Region II.

NUCLEAR MATERIALS USERS

The operating level priorities for Nuclear Materials Users business line in FY 2015 were as follows:

1. Oversight and implementation of materials licensing and inspection activities.
2. Agreement State Program oversight and enhancements to Integrated Materials Performance Evaluation Program (IMPEP) guidance.
3. Source security initiatives through the implementation of 10 CFR Part 37 and the recommendations of the Radiation Source Protection and Security Task Force.
4. Implement Integrated Source Management Portfolio (ISMP) 10-year plan and continue investment protection.
5. Rulemaking activities including the development of the final Part 35 rule and guidance and evaluation of comments collected on the Part 20 advanced notice of proposed rulemaking.
6. Develop Tribal Program initiatives that support implementation of the Tribal Policy Statement.

LICENSING

The NRC licenses and inspects the commercial use of nuclear materials for industrial, medical, and academic purposes. Commercial uses of nuclear materials include medical diagnosis and therapy, medical and biological research, academic training and research, industrial gauging and nondestructive testing, production of radiopharmaceuticals, and fabrication of commercial products (such as smoke detectors) and other radioactive sealed sources and devices. The agency currently regulates about 2,800 specific licensees for the use of radioactive materials. Under the NRC's Agreement State program, 37 States have assumed regulatory responsibility for approximately 18,000 licenses for the industrial, medical, and other users of nuclear materials in their States. The agency reviews Agreement State programs as well as certain NRC licensing and inspection programs through the Integrated Materials Performance Evaluation Program.

Detailed health and safety reviews of license applications, as well as inspections of licensee procedures, operations, and facilities, provide reasonable assurance of safe operations and the production of safe products. The NRC routinely inspects nuclear materials licensees to ensure that they are using nuclear materials safely, maintaining accountability of those materials, and protecting public health and safety. The agency also analyzes operational experience from the NRC and Agreement State licensees and regularly evaluates the safety significance of events reported by licensees and Agreement States.

OVERSIGHT

The NRC will not permit licensees to conduct licensed activities if they cannot achieve and maintain adequate levels of safety. The NRC conducted over 800 nuclear materials

licensing inspections with significant safety findings associated with nuclear materials licenses during FY 2015. These resulted in the issuance of notices of violation to three licensees. The agency also performed reactive inspections as follow-up to six medical events occurring in four States, the District of Columbia, and Puerto Rico.

During FY 2015, the NRC performed a special inspection to provide oversight of the removal, transport and final disposal of ten U.S. Air Force owned Radioisotope Thermoelectric Generators containing a total of 440,000 curies of strontium-90 sealed sources, from Burnt Mountain, AK, to a disposal site in Nevada. This project concluded nearly two decades of interactions with the licensee to complete environmental impact assessments, finalize transportation and disposal logistics, and obtain regulatory approvals from State and Federal agencies.

In FY 2015, the NRC coordinated and conducted training on Inspection Procedure 87132 for brachytherapy programs. This training was made available by video and teleconference for NRC and Agreement State employees to participate.

The agency published a revision to Inspection Procedure (IP) 87121, "Industrial Radiography Programs." These changes to the IP reflect revisions to close out recommendations by the OIG.

INVESTIGATION AND ENFORCEMENT

Compliance with NRC requirements plays an important role in giving the agency confidence that safety is being maintained not only for operating reactors but for all areas that the agency regulates. NRC policies deter noncompliance and encourage prompt identification and timely, comprehensive corrective actions. Willful violations are of particular concern. Licensees, contractors, and their employees who do not achieve the high standard of compliance expected by the NRC are subject to enforcement sanctions. Each enforcement action depends on the circumstances of the case. The NRC will not permit licensees to continue to conduct licensed activities if they cannot achieve and maintain adequate levels of safety.

The agency imposed escalated enforcement for six licensees. Of particular note was a case that involved the issuance of a confirmatory order stemming from alternative dispute resolution[2]. The NRC initiated a reactive inspection related to the potential improper handling, processing, and sale of radioactive materials on e-Bay. The initial onsite portion of the inspection identified improperly used and processed uranium and other radioactive materials resulting in contamination of a residential location in Boise, ID. This incident involved extensive coordination with the State of Idaho, the U.S. Environmental Protection Agency, DOE, and law enforcement agencies.

The NRC issued a confirmatory order to a cardiologist/radiation safety officer prohibiting the individual from performing the duties and functions of a radiation safety officer for his license or for any other NRC radioactive materials license until the individual meets certain requirements spelled out in the order. This resulted from a history of poor performance from the licensee and a determination that the root cause was inadequate oversight by the licensee principal who was also listed as the radiation safety officer.

In FY 2015, the agency issued five notices of violation to Howard University, Howard University Hospital, Ronan Engineering, Monongalia General Hospital, and NRD, LLC (which included a civil penalty).

EVENT RESPONSE

The NRC successfully planned, executed, and evaluated several materials scenarios during a tabletop exercise in March 2015. The materials tabletop exercise resulted in the identification of potential gaps and enhancements to the agency's response to materials events.

The NRC responded to a materials event involving a radiation overexposure of a licensee employee during a source handling/transfer operation involving a cobalt-60 source. Based on a reenactment of the event, the licensee

[2] *The NRC's alternative dispute resolution process is described at http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html*

estimated that the technician might have received a significant whole body and extremity dose, depending upon various assumptions. A Special Team Inspection was chartered to review the circumstances surrounding the incident, including an independent review of dose calculations and a root cause analysis.

RULEMAKING AND POLICY DEVELOPMENT

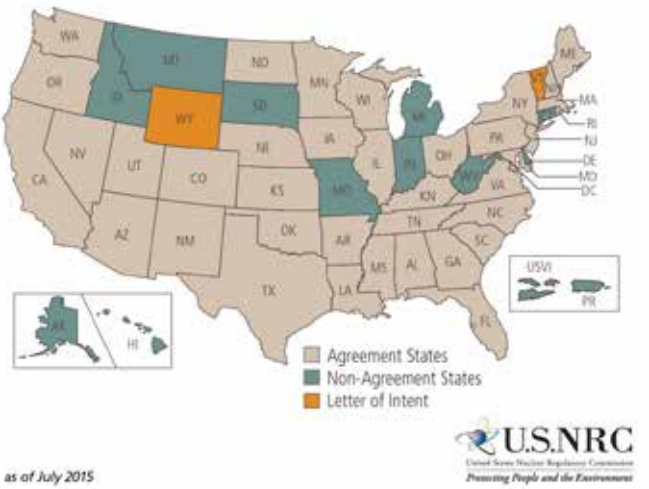
In FY 2015, the NRC published the direct final rule for 10 CFR Part 70 related to reportable safety events involving special nuclear materials. The agency also issued a proposed revision to the Commission's policy statement for reporting AOs to Congress, "Proposed Revisions to Policy Statement on Reporting Abnormal Occurrences Criteria." This proposed revision to the Commission's policy statement would enhance consistency with the NRC's current guidance, regulations, and strategic plan.

STATE AND TRIBAL PROGRAMS

In FY 2015, the NRC issued an enhanced report template for use to improve quality and consistency of Integrated Materials Performance Evaluation Program reports. In addition, the agency performed Integrated Materials Performance Evaluation Programs reviews, and corresponding Management Review Boards, for the Commonwealth of Virginia, the State of Florida, State of Maine, State of New Jersey, State of North Dakota, the NRC's Region I materials program, and the NRC's sealed source and device evaluation program. The NRC determined that the programs were adequate to protect public health and safety.

A consolidated Agreement State policy statement was submitted for Commission consideration that included recommendations for developing a more comprehensive approach to assessing Agreement State compatibility and improving the Integrated Materials Performance Evaluation Program.

FIGURE 17 – AGREEMENT STATES



During FY 2015, the NRC published the draft Tribal policy statement for public comment in the *Federal Register* and revised the Tribal Protocol Manual. The agency completed Tribal outreach and information exchanges at the Wind River Reservation Tribal College, Wyoming (October 28–29, 2014); Tsaile, Arizona (January 13–14); Bismarck, North Dakota (February 10–11); and Crownpoint, New Mexico (March 10–11). The comment period ended June 1, 2015.

The NRC completed the transfer of 57 sealed source and device registration certificates from the State of Georgia on February 10, 2015, ahead of the planned March 2015 completion date.

In FY 2015, Wisconsin became the second Agreement State to implement Web-Based Licensing (WBL) for their licensing and inspection program using the NRC hosted WBL. The State fully implemented WBL in July 2015.

SPENT FUEL STORAGE AND TRANSPORTATION

The NRC conducts detailed technical reviews to ensure that storage, transportation, and domestic and international shipments of spent nuclear fuel and other risk-significant radioactive materials are safe and secure and comply with agency regulations. The NRC closely

coordinates transportation-related activities with those of DOT and, as appropriate, DOE. The NRC inspects vendors, fabricators, and licensees that build and use storage systems and transportation packages. The NRC also inspects independent spent fuel storage installations (ISFSI) both at and away from reactor sites.

The operating level priorities for the Spent Fuel Storage and Transportation business line in FY 2015 were as follows:

1. Continue effective oversight of licensed facilities.
2. Continue effective processing of licensing actions.
3. Identify technical and administrative issues and determine effective solutions.
4. Maintain focus on establishing firm technical bases for intermediate and long-term waste management framework to support future licensing actions and the evolving national policy.

LICENSING AND OVERSIGHT

In FY 2015, the agency completed the inspection of construction activities for the first-of-its-kind Holtec HI-STORM Underground Maximum Capacity Canister Storage System (UMAX) located at the Callaway Plant. The inspection consisted of observations of various evolutions of construction of the 20-foot (6-meters) underground ISFSI over a period of 8 months.

The NRC issued the Calvert Cliffs independent spent fuel storage installation (ISFSI) license renewal in October 2014. This renewal involved a first-of-a-kind approach that was developed in concert with extensive stakeholder interactions.

FIGURE 18 – ENSURING SAFE SPENT FUEL SHIPPING CONTAINERS

The impact (free drop and puncture), fire, and water immersion tests are considered in sequence to determine their cumulative effects on a given package.

as of July 2015

The NRC completed review and approval of the Model No. M-290 spent fuel transportation package for the DOE Office of Naval Reactors during FY 2015. With an authorized weight of 520,000 pounds (235,868 kilograms), this package represented the heaviest of any certificate of compliance (CoC) the NRC has issued. The package will be shipped by rail to support future movements of the Navy's spent fuel.

The agency also issued a CoC approving high-enriched uranyl nitrate liquid (HEUNL) contents in the NAC, International legal weight truck (LWT) transportation package. This was a complex review and approval of a transportation package that is designed to support the return of the HEUNL material to DOE's Savannah River site to support the National Nuclear Security Administration's (NNSA's) Global Threat Reduction Initiative.

The NRC issued approval of West Valley Melter Package (WVMP), the first package in almost 10 years to be approved under 10 CFR 71.41(d). This was the first package approved under the new harmonized DOT regulations, therefore, not requiring a DOT special permit for use.

The agency completed an inspection at Limerick, Unit 1, following a significant drain-down of a dry shielded canister, which resulted in the top of the fuel assemblies being exposed to a helium/air mixture and higher than expected dose rates at the top of the canister. The NRC review of the licensee's evaluation determined there was reasonable assurance that the fuel cladding was not damaged.

As part of the development of the revised renewal guidance framework, the NRC issued Draft NUREG-1927, Revision 1, SRP for Renewal of Specific Licenses and CoCs for Dry Storage of Spent Nuclear Fuel for public comment on July 7, 2015

The NRC also completed pre-operational inspections and initial loading campaign inspections at the Holtec UMAX underground ISFSI at Callaway.

RULEMAKING

The NRC completed and published several rulemaking actions to add new spent fuel storage casks to the list of approved designs and requested comments on a stakeholder petition to revise 10 CFR Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material."

During FY 2015, the NRC published several rulemakings for CoCs. The final rule for Transnuclear NUHOMS, CoC No. 1029, Amendment 3, took effect February 23, 2015. The final rule addressing public comments for the new HI–STORM UMAX, CoC No. 1040, took effect on April 6, 2015, supporting loading at the Callaway Nuclear Station later in 2015. Additionally, the final rule for NAC MAGNASTOR, CoC No. 1031, Amendment 4, took effect April 14, 2015, and Amendment 5 of this same CoC took effect June 29, 2015. The final rule for Holtec HI-STORM, CoC 1032, Amendment 1, Revision 1, took effect June 2, 2015.

The agency also completed the review of NEI 14-03, "Dry Cask Storage License Renewal Industry Guidance for Operations-Based Aging Management," and provided direct feedback to NEI through a letter and a follow-on public meeting.

The NRC completed a defense-in-depth risk framework, part of the initiative to risk-inform 10 CFR Part 72 activities, and presented the framework at a public meeting. The agency issued Information Notice 2015-03, "Improper Operation of Spent Fuel Transfer Cask Neutron Shield Equipment Leading to Elevated Radiation Levels Adjacent to Spent Fuel Transfer Cask" (ADAMS Accession No. ML14213A477), regarding neutron shield operations of spent fuel transfer casks to all 10 CFR Part 72 specific and general licensees and certificate holders. It also issued a NUREG on the first phase of an initiative to develop a BWR burnup credit analysis in anticipation of future applications that take credit for BWR fuel burnup.

On June 12, 2015, the NRC published the final rule language containing amendments to 10 CFR Part 71, "Packaging and Transportation of Radioactive Material," in the *Federal Register*. These amendments make conforming changes to the NRC's regulations based on the International Atomic Energy Agency's (IAEA's) 2009 standards for the international transportation of radioactive material and maintain consistency with the DOT's regulations. The rule took effect July 13, 2015, to coincide with the compliance date of DOT's final rule.

DECOMMISSIONING AND LOW-LEVEL WASTE

The operating level priorities for the Decommissioning and Low-Level Waste business line during FY 2015 were as follows:

1. Maintain oversight activities at unique, complex, and high-risk-activity decommissioning sites.
2. Continue to focus on optimizing available resources for licensing and inspection activities (especially, uranium recovery).
3. Continue efforts to complete high priority rulemaking (10 CFR Part 61/Sight Specific Analysis).
4. Continue to support DOE on waste incidental to reprocessing (WIR) activities.

Decommissioning removes radioactive contamination from buildings, equipment, ground water, and soil and achieves levels that permit the release of the property while protecting the public. The NRC terminates the licenses for decommissioned facilities after the licensees demonstrate that the residual onsite radioactivity is within regulatory limits and is sufficiently low to protect the health and safety of the public and the environment. Completing decommissioning, environmental, and performance assessment activities provides assurance that residual radioactivity does not pose an unacceptable risk to the public.

Low-level radioactive waste includes items that are contaminated with radioactive material or have become radioactive through exposure to neutron radiation. Although the NRC regulates low-level waste (LLW) disposal, currently all commercial LLW disposal sites in

the United States are in Agreement States. The NRC's LLW regulatory program includes the following activities:

- coordinating with, and providing technical assistance to, Agreement States on LLW issues.
- representing the NRC in international waste management activities.
- consulting with Federal and State officials, Indian Tribes, and other entities to promote understanding of LLW issues and resolve concerns in a timely manner.

Under the WIR program, per Section 3116 of the *Ronald W. Reagan National Defense Authorization Act* for 2005 (NDAA), DOE consults with the NRC on incidental waste determinations in a covered State (Idaho and South Carolina). If the DOE Secretary's final determination is that the waste is WIR, then the NRC monitors DOE disposal actions in coordination with the covered State by assessing the DOE disposal actions to determine compliance with the performance objectives in 10 CFR Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste." The NRC completed expected NDAA consultation with DOE at Idaho and South Carolina.

Uranium recovery (UR), the processing of uranium ore, is also regulated under the Decommissioning and Low-Level Waste business line. The NRC ensures that UR facilities are licensed, operated, decommissioned, and monitored to protect the public and environment. This consists of oversight, inspection, and licensing of operating facilities; licensing of new sites or expansion of existing sites through license amendments; and the management of legacy sites in decommissioning or long-term care.

LICENSING AND OVERSIGHT

In FY 2015, the NRC issued a subsequent order to Waste Control Specialists (WCS) ("Supersede Exemption for Waste Control Specialists, LLC; Andrews Texas"). The previous order exempted WCS from the NRC's regulations concerning special nuclear material (SNM). The subsequent order was issued in response to a July 2014 request in which WCS requested an exemption from NRC regulations to possess SNM in excess of the critical mass limits specified in 10 CFR 150.11, "Critical Mass," while temporarily storing specific waste at a different location at the WCS facility than the previously approved location.

The agency terminated the license for the Army facility at Walter Reed Medical Center after a thorough review of survey and other documentation for the release of facilities for unrestricted use. This included significant coordination to conclude that the current radiological conditions met the NRC criteria for unrestricted use. In addition, the agency terminated the research and test reactor license for the Worcester Polytechnic Institute, in Worcester, Massachusetts and the University of Michigan in Ann Arbor, Michigan.

The agency approved the decommissioning plan for the U.S. Department of Veterans Affairs in Omaha, NE, to ensure the effectiveness and efficiency of licensing activities to maintain both quality and timeliness.

The NRC supported the U.S. Department of Justice in negotiating and signing a new forbearance agreement with Fansteel/FMRI. Fansteel/FMRI has been in bankruptcy proceedings. The forbearance agreement will allow certain specified remediation work to continue at the site while the legal issues surrounding the bankruptcy are resolved.

In FY 2015, oversight of the Kewanuee, San Onofre Units 2 and 3, and Crystal River Unit 3, nuclear power plants was transferred from operating reactor oversight to decommissioning status. Oversight of 18 power reactors undergoing decommissioning, including 7 under active decommissioning, continued during 2015.

The NRC approved completion of AAR Manufacturing Inc. (AAR) remediation activities. AAR has a long history: initial license in1957, license termination in 1971 (the license was never reinstated), reevaluation by NRC in 1994, remediation work conducted in 2000, and 2007. After consideration of possible restricted release of a portion of the site, further extensive soil remediation was completed in 2014 rendering the site acceptable for unrestricted release.

In FY 2015, the agency issued a license renewal to Crow Butte Resources Inc., allowing it to operate an in

situ uranium recovery facility in Crawford, NE, for an additional 10 years. This involved two major uranium recovery adjudicatory hearings for Crow Butte license renewal and Dewey Burdock licensing.

RULEMAKING

The NRC issued the proposed 10 CFR Part 61 rule and guidance document for a 120-day comment period to enhance the regulatory framework in a risk-informed and performance-based manner. The rule described licensing requirements for land disposal of radioactive waste.

The agency issued the Draft NUREG 2126, "Standard Review Plan for Conventional Uranium Mills and Heap Leach Facilities," for public comment on December 18, 2014. It also issued the Revised Branch Technical Position on Concentration Averaging and Encapsulation. This updated guidance provided acceptable methods that can be used to perform concentration averaging of LLW for determining its waste class for disposal.

In FY 2015, the agency issued SECY 15-0094, "Historical and Current Issues Related to Disposal of Greater-Than-Class-C (GTCC) Low-Level Radioactive Waste." The paper provided the Commission with a historical perspective on disposal of GTCC low-level radioactive waste in which the staff identifies pathways for licensing the disposal of GTCC waste.

HIGH-LEVEL WASTE

Between October 2014 and January 2015, the agency released the final four volumes of the Yucca Mountain safety evaluation report, completing the technical safety review of DOE's application. Volume 2 covers repository safety before permanent closure, Volume 3 covers the period after a repository at Yucca Mountain would be permanently closed, Volume 4 covers administrative and programmatic requirements for the repository, and Volume 5 covers proposed conditions on the construction authorization, probable subjects of license specifications, and the staff's overall conclusions.

Waste Storage

As documented in the safety evaluation report, the staff concluded that it could not recommend authorization of construction at this time, because DOE has not met certain land and water rights requirements and it has not yet completed a supplement to its environmental impact statement (EIS). A final licensing decision, should funds beyond those available be appropriated, could come only after completion of a supplemental EIS, hearings on contentions in the adjudication, and Commission review. On March 12, 2015, the NRC announced that it would use a portion of its remaining funds to prepare a supplement to DOE's EIS that will address repository-related effects on ground water and surface discharges of ground water. In August, the NRC released the draft environmental impact statement supplement. After considering public comments received on the draft, the staff will revise the supplement, as appropriate, before issuing a final supplement in early 2016.

STRATEGIC GOAL 2

Ensure the secure use of radioactive materials

STRATEGIC OBJECTIVES

The strategic objectives for Goal 2 are:

Ensure protection of nuclear facilities and radioactive materials.

Protecting nuclear facilities and radioactive materials are key elements for achieving the NRC's Security goal. Nuclear facilities and materials are protected against hostile intent by two primary means: (1) control of access to facilities and materials, and (2) accountability controls for radioactive materials. These controls are intended to prevent those with hostile intent from either damaging a nuclear facility in such a way that a significant release of radioactive materials to the environment occurs, or obtaining enough radioactive material for malevolent use.

Ensure protection of classified and Safeguards Information

Protecting classified and Safeguards Information is another key contributor to achieving the agency's Security goal. This is accomplished primarily by controlling access to this information to ensure that potential adversaries cannot use it for malevolent purposes, such as sabotage, theft, or diversion of radioactive materials.

Classified information at the NRC and at the facilities it regulates is primarily of two types. National security information is classified by an Executive order, the compromise of which could cause some degree of damage to the national security. Restricted data is information classified by the Atomic Energy Act, the compromise of which could assist in the design, manufacture, or use of nuclear weapons. SGI is a special category of sensitive unclassified information concerning the physical protection of operating power reactors, spent fuel shipments, strategic special nuclear material, or other radioactive material.

The strategic objectives specify the conditions that must be met for the agency to ensure the secure use of radioactive materials.

In FY 2015, the NRC demonstrated that it achieved the two security strategic objectives by meeting the performance indicators listed below. Because the agency is required to report on performance information for the previous 5 fiscal years, Table 4 shows the agency's annual Security performance indicators and results for FYs 2010–2014. Prior indicators 1-4 address the first security objective. Indicator 5 addresses the second security objective.

Security Objective 1: ***Ensure protection of nuclear facilities and radioactive materials.***

Performance Goal 1: Prevent sabotage, theft, diversion, or loss of risk-significant quantities of radioactive material.

Performance Indicator: Number of instances of sabotage, theft, diversion, or loss of risk-significant quantities of radioactive material that meet or exceed AO criteria I.C.1 (unrecovered lost, stolen, or abandoned sources), I.C.2 (substantiated case of actual theft or diversion), or the portion of criterion I.C.3 (subtantiated loss of a formula quantity) concerning theft or diversion of special nuclear material.

Timeframe: Annual

Business Line	FY 2015	
All Business Lines	Target: 0	Actual: 0

Discussion: This indicator tracks the agency's effectiveness at preventing sabotage, theft, diversion, or loss of risk-significant qualities of radioactive material through tracking any loss or theft of radioactive nuclear sources that the NRC has determined to be of significant risk. The indicator tracks the agency's performance in ensuring the proper accounting for radioactive sources of significant risk that could be used for malicious purposes. It also tracks whether NRC-licensed facilities maintain adequate protective capabilities to prevent theft or diversion of nuclear material or sabotage that could result in substantial harm to the public health and safety, tracks whether special nuclear material is accounted for, and verifies that formula-quantity losses of this material do not occur. The indicator also tracks whether the systems in place at NRC-licensed facilities maintain accurate inventories of the special nuclear material (SNM) that the facilities process, use, or store. No such incidents took place during FY 2015.

Performance Goal 2: Prevent substantial breakdowns of physical security, cyber security, or material control and accountability.

Performance Indicator: Number of substantial breakdowns of physical security, cyber security, or material control and accountability that meet or exceed a revised version of AO criterion I.C.4 (substantial breakdown in physical security or materials control) that will include breakdowns of cyber security and the portion of AO criterion I.C.3 concerning breakdowns of the accountability system for special nuclear material.

Timeframe: Annual

Business Line	FY 2015	
All Business Lines	Target: ≤1	Actual: 0

Discussion: This indicator tracks the agency's effectiveness in maintaining security through tracking any breakdowns in access control, containment, or accountability systems that significantly weakened the protection against theft, diversion, or sabotage for nuclear materials that the agency has determined to be of significant risk. In FY 2015, there were no incidents of this nature.

Security Objective 2: ***Ensure protection of classified and Safeguards Information.***

Performance Goal 3: Prevent significant unauthorized disclosures of classified or SGI.

Performance Indicator: Number of significant unauthorized disclosures of classified or Safeguards Information by licensees as defined by AO criterion I.C.5 and by NRC employees or contractors as defined by analogous NRC internal criteria.

Timeframe: Annual

Business Line	FY 2015	
All Business Lines	Target: 0	Actual: 0

Discussion: This indicator includes significant unauthorized disclosures of classified or Safeguards Information that cause damage to national security or public safety. This indicator tracks whether information that can harm national security (classified information) or cause damage to the public health and safety (SGI) has been stored and used in ways as to prevent its disclosure to the public, terrorist organizations, other nations, or personnel without a need to know. No significant unauthorized disclosures occurred in FY 2015.

TABLE 4 – FY 2010-2014 PERFORMANCE INDICATORS RESULTS

Goal – *Security:* ENSURE SECURE USE OF RADIOACTIVE MATERIALS

1. Unrecovered Losses of Risk Significant* Radioactive Sources

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	0	0	0	0	0	Replaced by Security Performance Goal 1
Actual	0	1**	0	0	0	

** "Risk-significant" is defined as any unrecovered, lost, or abandoned sources that exceed the values listed in Appendix P, "Category 1 and 2 Radioactive Material," to 10 CFR Part 110, "Export and Import of Nuclear Equipment and Material." Excluded from reporting under this criterion are those events involving sources that are lost or abandoned under the following conditions: (1) sources abandoned in accordance with the requirements in 10 CFR 39.77(c), (2) recovered sources with sufficient indication that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 did not occur during the time that the source was missing, (3) unrecoverable sources lost under such conditions that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 were not known to have occurred, (4) other sources that are lost or abandoned and declared unrecoverable , (5) a source for which the agency has made a determination that its risk significance is low based on its location (e.g., water depth) or its physical characteristics (e.g., half life and housing) and its surroundings, (6) cases in which all reasonable efforts have been made to recover the source, and (7) the determination was made that the source is not recoverable and will not be considered a realistic safety or security risk under this measure. (This includes licenses under the Agreement States.)*

***There were no losses and one theft of radioactive nuclear material that the NRC considered to be risk significant during FY 2011.*

2. Number of Substantiated* Cases of Actual Theft or Diversion of Licensed, Risk Significant Radioactive Sources, or Formula Quantities of Special Nuclear Material or Attacks That Result in Radiological Sabotage*****

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	0	0	0	0	0	Replaced by Security Performance Goal 1
Actual	0	0	0	0	0	

** "Substantiated" means a situation in which an indication of loss, theft, or unlawful diversion, such as an allegation of diversion, report of lost or stolen material, statistical processing difference, or other indication of loss of material control or accountability cannot be refuted following an investigation and requires further action on the part of the agency or other proper authorities.*

***A formula quantity of special nuclear material is defined in 10 CFR*

****"Radiological sabotage" is defined in 10 CFR 23.2, "Definitions"*

3. Number of Substantiated Losses of Formula Quantities of Special Nuclear Material or Substantiated Inventory Discrepancies of Formula Quantities of Special Nuclear Material That Are Judged To Be Caused by Theft or Diversion or by Substantial Breakdown of the Accountability System

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	0	0	0	0	0	Replaced by Security Performance Goal 1
Actual	0	0	0	0	0	

4. Number of Substantial Breakdowns* of Physical Security or Material Control (i.e., Access Control, Containment, or Accountability Systems) That Significantly Weakened the Protection against Theft, Diversion, or Sabotage

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	Replaced by Security Performance Goal 2
Actual	0	0	0	0	0	

** A "substantial breakdown" is defined as a red finding in the security cornerstone of the ROP or any plant or facility that is determined either to have overall unacceptable performance or be in a shutdown condition (inimical to the effective functioning of the Nation's critical infrastructure) as a result of significant performance problems or operational events.*

5. Number of Significant Unauthorized Disclosures* of Classified and/or Safeguards Information

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Target	0	0	0	0	0	Replaced by Security Performance Goal 3
Actual	0	0	0	0	0	

** "Significant unauthorized disclosure" is defined as a disclosure that harms national security or public health or safety*

NUCLEAR REACTOR SECURITY

The NRC continues to maintain an appropriate regulatory infrastructure and perform its licensing and oversight functions to ensure protection of public health and safety, promote the common defense and security, and protect the environment. NRC security and emergency preparedness programs contribute to fulfilling this mission.

The following narrative describes major activities and accomplishments under the Nuclear Reactor Safety business lines that contributed to achieving the strategic goal for ensuring the secure use of radioactive materials.

The NRC conducts a robust security inspection program within the security cornerstone of the agency's ROP. The security cornerstone focuses on five key attributes of licensee performance:

1. Access authorization.
2. Access control.
3. Physical protection systems.
4. Material control and accounting.
5. Response to contingency events.

Through the results obtained from all oversight activities, including baseline security inspections and performance indicators, the agency determines whether licensees comply with NRC requirements and can provide high assurance of adequate protection against the design-basis threat for radiological sabotage.

The NRC carries out force-on-force inspections at commercial operating nuclear power plants and Category I fuel facilities at least once every 3 years as part of its comprehensive security program. The agency uses these inspections to evaluate the effectiveness of security programs to prevent radiological sabotage and theft or diversion of Category I material. Force-on-force inspections assess the ability of nuclear facilities to defend against the applicable design-basis threat, which characterizes the adversary against which licensees must design appropriate defenses, such as physical protection systems and response strategies. A force-on-force inspection includes tabletop drills and simulated combat between a mock commando-type adversary force and the site security force. During the attack, the adversary force attempts to reach and simulate damaging key safety systems and components at a nuclear power plant or simulate theft of material at a Category I fuel facility.

INTEGRATED AND COORDINATED SECURITY ACTIVITIES

The Integrated Response Program (IRP) is a partnership between the Federal Government (NRC, Federal Bureau of Investigation (FBI), and DHS) and the nuclear power plant industry. It seeks to establish or leverage existing tactical law enforcement capabilities to respond to significant threats at a nuclear power plant effectively. One aspect of the IRP is the Contingency Response Tool (CRT), which is a computer-aided planning tool to assist tactical law enforcement in navigation and response planning inside nuclear power plants.

CYBER SECURITY

The NRC has developed an oversight program for cybersecurity that includes an inspection program, inspector training, and a process for evaluating the significance of inspection findings. This was accomplished collaboratively with stakeholders, including members of industry and representatives from the DHS, the Federal Energy Regulatory Commission, and NIST. The NRC has begun inspecting activities related to the interim milestones and will complete these inspections in calendar year 2015.

During FY 2015, senior leaders from independent and executive branch regulatory agencies launched the interagency Cybersecurity Forum. Led by the NRC Chairman, the forum's objectives are to enhance communication, share lessons learned, and develop a common understanding of cybersecurity activities through the sharing of best practices and exploring approaches to enhance cybersecurity protections. The officials established areas of initial discussion that included lessons learned with regulation-based and voluntary approaches to cybersecurity, proactive cyber risk assessment, and management and information sharing.

The agency completed, and the Commission approved, the final rulemaking package for the Cyber Security Event Notification Rule. The package was sent to the Office of Management and Budget in July 2015, for review prior to publication. This rule would make generally applicable certain voluntary reporting activities associated with cyber-security events contained in security advisories. The rule also would establish new cyber security event notifications that would contribute to the NRC's analysis of the reliability and effectiveness of licensees' cyber security programs, and played an important role in the continuing effort to ensure digital computer and communication systems and networks are protected adequately against cyber attacks, up to and including the Design Basis Threat.

The agency also engaged industry to inform and endorse guidance to facilitate a consequence-based, graded approach to implementing cyber security programs.

The NRC is following a cyber security roadmap (SECY-12-0088, "The Nuclear Regulatory Commission Cyber Security Roadmap") to evaluate the need for cyber-security requirements for non-power reactors, independent spent fuel storage installations, and byproduct materials licensees. Implementation of the roadmap will help ensure that appropriate cyber-security actions are carried out promptly and efficiently at all NRC-licensed facilities. Also, implementation of the roadmap will identify whether, or to what extent, the program needs to be improved.

NUCLEAR MATERIALS AND WASTE SECURITY

The following narrative describes major activities and accomplishments under the Nuclear Materials and Waste Safety business lines that contributed to achieving the strategic goal for ensuring the secure use of radioactive materials.

FUEL FACILITIES

On December 30, 2014, the NRC staff submitted a proposal to the Commission, SECY-14-0147, "Cyber Security for Fuel Cycle Facilities," which provides options and a recommendation for strengthening cyber security at fuel cycle facilities. The Commission disapproved an order, but approved the proposal to develop requirements via rulemaking on March 24, 2015. The agency developed the cyber security regulatory basis and provided it to stakeholders in early September.

The NRC developed a path forward to take appropriate enforcement actions on the Louisiana Energy Services information security issue during FY 2015. On May 19, the agency issued a confirmatory order to GE-Vallecitos to address physical security and material control and accounting and accepted the license renewal application for review. This confirmatory order resolved a longstanding issue on implementing appropriate site security documentation.

On September 4, 2015, the NRC published the draft regulatory basis related to cyber security for fuel cycle facilities rulemaking.

NUCLEAR MATERIALS USERS

During FY 2015, the NRC completed critical source security actions such as the 2015 National Source Tracking System (NSTS) Annual Inventory Reconciliation. NSTS inventories were sent to roughly 1,400 NRC and Agreement State licensees to confirm information about approximently 80,000 Category 1 and Category 2 sources. The Radiation Source Protection and Security Task Force biennial Implementation Plan was submitted to the Commission in January 2015 and is available on the NRC public Web site.

The NRC published the direct final rule for Safeguards Information—Modified Handling during FY 2015. This rule removes the requirement for specific materials licensees to handle security information as Safeguards Information - Modified Handling and rather implements the requirements for handling information under 10 CFR Part 37.

The NRC coordinated an interagency threat brief for the Radiation Source Protection and Security Task Force. This threat brief, provided by the FBI, was held at the NRC Headquarters in June 2015 for all task force

members, including the Organization of Agreement States, to provide a common understanding of the threat environment regarding Category 1 and Category 2 quantities of radioactive materials in support of a 2018 report.

SPENT FUEL STORAGE AND TRANSPORTATION

The NRC completed a multiagency memorandum of understanding (MOU) on radioactive material transportation security. This MOU serves as the foundation for cooperation in the establishment of a comprehensive and consistent transport security program for risk-significant sources. All parties had signed the MOU (i.e., the NRC, DOT, and DHS) as of January 17, 2015.

CROSS-CUTTING STRATEGIES

The NRC has two crosscutting strategies: Regulatory Effectiveness and Openness, which support the fulfillment of the Safety and Security Objectives.

REGULATORY EFFECTIVENESS

The effort to improve performance in government, coupled with increased demands on the NRC's resources, requires the agency to become more effective, efficient, and timely in its regulatory activities. The NRC's effectiveness initiatives sharpen the agency's focus on safety and security and ensure that its available resources are optimally directed toward accomplishing the agency's mission.

In late January 2015, the NRC staff sent to the Commission its Project Aim 2020 report detailing staff recommendations designed to improve the agency's agility, effectiveness, and efficiency while ensuring its ability to protect the public health and safety. The Project Aim 2020 report recommended a number of strategies under the themes of people, planning, and process to prepare the NRC for the future. The staff's report proposed that the NRC could function more efficiently by performing the following:

- Right-sizing the agency to retain appropriate skill sets needed to accomplish its mission.
- Streamlining agency processes to use resources more wisely.
- Improving timeliness in regulatory decision-making and responding quickly to changing conditions.
- Promoting unity of purpose with clearer agencywide priorities.

On June 8, 2015, the Commission approved many of the recommendations presented in the staff's report. Key among the items included in its Staff Requirements Memorandum, the Commission directed the staff to undertake a "re-baselining" effort to make the agency more efficient. This effort will review the agency workload, which has evolved over the past decade, and develop a list of tasks that could be shed as no longer needed or justified, or able to be performed at a reduced resource level. The Commission also approved a staff utilization target of 3,600 employees by September 30, 2016, but deferred setting a 2020 target until after the re-baselining review is completed.

A wide range of implementation activities are currently underway and are being tracked as 19 discrete tasks. In FY 2015, staff completed two of the 19 tasks, with substantial progress on four additional tasks.

In addition, the agency has continued implementation of the changes identified in a 2011 comprehensive review of NRC overhead functions—(e.g., administrative services, human capital, financial management (including contract management), information management (IM), and information technology (IT))—to identify effective, efficient, and cost conscious business solutions and eliminate duplicative processes and functions.

Beyond these agencywide efforts, the agency has undertaken a number of other improvements in various program areas:

- The agency has undertaken six initiatives in the operating reactors business line to be better positioned as an efficient and effective regulator, using risk-informed principles while improving how the agency sets expectations, obtains alignment, makes timely decisions, and implements the agency's plans. The agency implemented these initiatives in the first quarter of FY 2015, and they will continue into FY 2016.

As a result of these efforts, the agency has already made progress in reducing the licensing backlog and anticipates further progress by the end of CY 2015.

- The construction Reactor Oversight Process (cROP) CY 2014 self-assessment, issued on May 1, 2015, concluded that it met its program goals and the agency's strategic goals of ensuring safety and security through objective, risk-informed, understandable, and predictable oversight. All 11 performance metrics met predetermined criteria. The one out-of-standard metric identified in CY 2013 was met in 2014, demonstrating that the corrective action implemented was successful.
- The Vendor Inspection Program's FY 2014 self-assessment, issued on December 18, 2014, concluded that the program met its goals. Ten of 11 program performance metrics met the predetermined criteria, and the agency identified corrective actions for the one that was not met. Both of the out-of-standard metrics identified in 2013 were met in 2014, demonstrating that the corrective actions implemented last year were successful.
- The agency established an approach for addressing mitigation of beyond-design-basis events for new reactor applicants for DCs, COLs, and other licenses and permits in FY 2015. The agency also issued the following documents:

  1. *NUREG/CR-7193*, "Evaluations of NRC Seismic-Structural Regulations and Regulatory Guidance, and Simulation-Evaluation Tools for Applicability to Small Modular Reactors (SMRs)," which assessed the regulatory guidance in the seismic structural area.
  2. Research Information Letter–1101, "Technical Basis to Review Hazard Analysis of Digital Safety Systems," which supports the Office of New Reactors (NRO) reviews of applicant hazard analysis and NRO development of the Design Specific Review Standard for the mPower SMR.
  3. Phase 1 of User Need NRO-2011-007, "Improve and Benchmark the Control Room Habitability Package Code and Assess the Areal Locations of Hazardous Atmospheres Codes for Control Room Habitability," by re-hosting the Habit Code in a Windows-based environment.

- The NRC issued office instruction *NRO-REG-104*, "Pre-application Readiness Assessment," to provide expectations for implementation of the safety pre-application readiness of a draft application before being submitted for a formal licensing or certification review. The pre-application readiness assessment will allow the identification of information gaps between the draft application and the technical content expected to be included in the final application submitted to the NRC, identify major technical or policy issues that may adversely impact the docketing or technical review of the application, and become familiar with the application, particularly in areas where prospective applicants are proposing new concepts or novel design features.
- In response to the "New Reactor Licensing Process Lessons Learned Review: 10 CFR Part 52 Report," dated April 2013, the NRC issued a revision to office instruction *NRO-REG-100*, "Acceptance Review Process for Early Site Permit, Design Certification, and Combined License Applications." The revision changed the standard for accepting an application from enough information to "begin" the review to enough information to "conduct" the review and added criteria to support the new standard for acceptance.

OPENNESS

The openness objective explicitly recognizes that the public must be informed about, and have a reasonable opportunity to participate in, the NRC's regulatory processes. The NRC is firmly committed to transparency, participation, and collaboration as key principles governing the agency's relationship with the public and other stakeholders. The agency has demonstrated its commitment to these openness principles through its longstanding efforts to keep stakeholders informed and involved in the NRC's regulatory process.

The annual Regulatory Information Conference (RIC) is a significant event that the agency holds to provide an opportunity for attendees to discuss issues related to the safety and security of commercial nuclear facilities and current regulatory activities. Over 2,700 people

attended the 2015 RIC, which was held on March 10-12, 2015, including industry executives, representatives from state governments, non-governmental organizations, individual community members, and representatives from dozens of foreign countries. Notable sessions from the 2015 RIC included "Implementation of Lessons Learned from the Fukushima Dai-ichi Accident (an international panel discussion)" and "Regulatory Agility in the New Millennium." Other technical sessions addressed significant domestic and international issues associated with nuclear safety and security, reactor decommissioning, public participation in the regulatory process, spent fuel storage, and new reactor licensing. In addition, the agency set up tables during the conference to demonstrate improved search capability in ADAMS to allow greater access to agency information. The demonstration was highly attended, received positive feedback, and aided in informing both internal staff and external stakeholders on system use and current and future records management activities

PUBLIC MEETINGS

The agency holds over 1,000 public meetings every year to engage and inform the public about the NRC's regulatory activities. The purpose of the majority of these meetings is for the NRC to meet with licensees, applicants, or other groups. These meetings are conducted in an open manner to increase the transparency of the NRC's actions, and time is set aside for members of the public to ask questions of the NRC staff. For other public meetings, the NRC is seeking to interact directly with members of the public to inform and educate them on regulatory topics, or, in certain cases, to take public comments.

In the spirit of continual improvement, the agency assembled a task group beginning in June 2014 to complete a comprehensive review of its public meeting policies, processes, and guidance to identify potential improvements. The task group produced a set of recommendations in January 2015. The agency is currently in the process of implementing select recommendations by revising the existing public meeting policy and guidance as well as drafting new guidance.

2015 RIC Technical Session

In September 2015, the agency supported the National Association of Employee Concerns Professionals conferences, including presentations on evaluating chilling effect concerns, allegation trends, and safety culture. This forum was widely attended by NRC licensees and certificate holders, NEI, industry vendors and consultants, concerned individuals and their advocates, and representatives from the Department of Labor and DOE to share best practices and lessons learned regarding the handling of employee concerns. The NRC participants provided perspectives on the agency's Allegations Program, Safety Conscious Work Environment, and Safety Culture policies.

Several of the more notable meetings the agency held during FY 2015 are described below.

NUCLEAR REACTOR SAFETY

- The agency held several public meetings during FY 2015 regarding the decommissioning of plants at four sites (Kewaunee, Crystal River, San Onofre, and Vermont Yankee) to keep the public informed of plans, changes to security, and emergency planning requirements, and to solicit public feedback and input.
- The NRC issued the annual report for the New Reactor Program (NUREG/ BR-0476) highlighting the significant accomplishments and goals of the program and the status of its activities.

- On September 1–2, 2015, the NRC and DOE held a joint workshop on advanced non-light water reactors to explore what steps could be taken by the NRC, DOE, and industry to facilitate development and deployment of innovative reactor technologies focused on safety, timeliness, and cost-effectiveness.

NUCLEAR MATERIALS AND WASTE SAFETY

- The NRC held a public meeting and a Government-to-Government Meeting in Brattleboro, VT, on the Vermont Yankee post-shutdown decommissioning activities report (PSDAR) on February 19, 2015. The purpose of these meetings was to share information with external stakeholders about the decommissioning process, including the status of the licensee's efforts and the anticipated decommissioning schedule.
- The NRC held a public meeting in Carlsbad, CA, on October 27, 2015, to discuss the submittal of the PSDAR by the San Onofre Nuclear Generating Station. The agency presented information and answered questions from the public related to inspection activities for reactor decommissioning and spent fuel storage.
- The NRC led an international discussion of approaches to management of LLW at the 2015 NRC Regulatory Information Conference to enhance regulatory programs using lessons learned from domestic and international operating experience. In addition, the agency conducted a series of public outreach meetings to answer clarifying questions on the proposed 10 CFR Part 61 rule, "Licensing Requirements for Land Disposal and Radioactive Waste," to facilitate understanding and meaningful comments by external stakeholders, given the multiple changes involved.
- The NRC held a public meeting in FY 2015 on the defense-in-depth framework, as part of the risk-informing framework for 10 CFR Part 72 activities and its review of NEI 14-03: "Dry Cask Storage License Renewal Industry Guidance for Operations-Based Aging Management." The NRC also held two public meetings on the proposed changes in draft NUREG-1927, Rev. 1, "Standard Review Plan for Renewal of Specific Licenses and Certificates of Compliance for Dry Storage of Spent Nuclear Fuel," and the proposed changes to the position of fuel irretrievability for storage under 10 CFR Part 72.
- The agency held a public meeting with Spectrum Pharmaceuticals, Inc., related to proposed training and experience requirements in the 10 CFR Part 35, "Medical Use of Byproduct Material," proposed rule.
- The NRC held an implementation workshop with stakeholders on March 4, 2015, regarding the draft guidance for the evaluation of acute chemical exposures and proposed quantitative standards. The agency held an implementation workshop with stakeholders on March 5, 2015, about the Interim Staff Guidance on treatment of natural phenomena.
- The agency developed the final Report to Congress on the Status of the Gaseous Diffusion Plants, and the Commission approved it on September 25, 2015.

ADDITIONAL EXAMPLES

In addition to public meetings, the agency completed several other efforts to support openness during FY 2015.

- The NRC issued the annual report for the New Reactor Program (NUREG/ BR-0476) highlighting the significant accomplishments and goals of the program and the status of its activities.
- To increase the openness and transparency of its rulemaking process to the public, the NRC launched a new public Web page, "Rulemaking Priorities," on June 30, 2015. This Web page provides information about the NRC's common prioritization of rulemaking process and lists each active rulemaking activity for the current planning period.
- The NRC held a webinar on the basics of dry spent fuel storage for State Liaison Officers (individuals designated by State Governors to serve as their main-points-of contact to the NRC) and their staff. A total of 60 people from a variety of States participated in the event.
- The NRC organized and hosted a seminar with the Onondaga Nation, a federally recognized tribe, at NRC Headquarters. Onondaga tribal speakers provided information on Tribal history, culture, and concerns about radioactive material.

- The NRC continued to leverage social media as part of its strategy to support openness and transparency. The NRC blog remains the centerpiece of the agency's social media program with more than 580 posts viewed nearly 720,000 times. In 2015, the NRC's Facebook page marked its 1-year anniversary and reached a milestone 2,000 "likes." In addition, the NRC piloted live tweeting during the 2015 RIC. Finally, to demonstrate its understanding of the need for openness and transparency during a crisis situation, the NRC focused on social media communications during the large-scale 2015 Southern Exposure exercise in South Carolina.
- The agency received its 13th consecutive Certificate of Excellence in Accountability Reporting from the Association of Government Accountants (AGA) for its FY 2014 Performance and Accountability Report. The report was also recognized as Best in Class for having the "most comprehensive schedule of spending."

MANAGEMENT OBJECTIVES

This section focuses on the activities related to the key management objectives of human capital and information management and IT. Other management objectives include acquisitions, space and facilities management, and financial management and financial stewardship.

Management Objective 1: ***People: Attract, develop, and retain a high-performing, diverse, and engaged workforce with the skills needed to adapt to workload changes and effectively carry out the NRC's mission now and in the future.***

Performance Goal: Sustain scores reflecting healthy organizational engagement, training and development, and leadership on the Safety Culture and Climate Survey (SCCS) and rate competitively against external benchmarks.

Performance Indicator: Safety Culture and Climate scores in the Sustained Engagement Index, as well as indices reflecting Training and Development and Leadership (comprising Senior Management, Office/Region Management, and Management categories).

Timeframe: Data will be available in FY 2016 and every 3 years thereafter

Business Line	FY 2015	
Corporate Support	Target: Sustain scores; perform above at least 2 of 3 external benchmarks used in the SCCS Report	Actual: NA (data available in FY 2016)

Performance Goal: Sustain average scores and ratings in the OPM indices on the Federal Employee Viewpoint Survey (FEVS).[3]

Performance Indicator: Average scores in the OPM indices on the FEVS

Timeframe: Annual

Business Line	FY 2015	
Corporate Support	Target: Top 5 rating against other Federal agencies	Actual: 4

Performance Goal: Meet a specified percentage of key human capital indicators.

Performance Indicator: Percent of key human capital indicators met.[4]

Timeframe: Annual

Business Line	FY 2015	
Corporate Support	Target: Meet 75 percent of key human capital indicators	Actual: 75

Management Objective 2: *Information Management and IT: Make it easier for NRC staff members to perform their mission and obtain the information they need from authoritative sources anytime, anywhere, on any device, while managing the risk of compromise of sensitive information.*

[3] *Examples are Global Satisfaction and Employee Engagement Indices, as well as support for diversity.*

[4] *Examples include retention of professional hires within 3 years, FEVS participation, percent of veterans and employees with targeted disabilities hired, percent of attrition, iLearn user satisfaction, and percent of participants completing development programs.*

Performance Goal: Achieve target for aggregate score on agency-specific questions addressing information and IT on the annual FEVS survey.

Performance Indicator: Score on agency-specific questions addressing information and information technology on the annual FEVS

Timeframe: Annual

Business Line	FY 2015	
Corporate Support	Target: Set baseline in FY 2014 and determine target for 2015 and beyond	Actual: (Results will not be available until December 2015)

HUMAN CAPITAL

The operating level priorities for Human Resources Management in FY 2015 were as follows:

1. Ensure there is a solid infrastructure in place to support all agency functions.
2. Enhance knowledge of managers and staff to provide high-quality service and advice to stakeholders. Communicate such services to maximize their benefits.
3. Increase knowledge of NRC supervisors to ensure they have the information to successfully perform their supervisory duties.
4. Agency hiring goals are met and positions are filled to meet the needs of the agency in a timely manner.
5. Develop, enhance, and implement human resources policies and programs such that they contribute to the NRC's accomplishment of its goals and attracting and retaining engaged employees.

HUMAN RESOURCES MANAGEMENT

The agency is implementing strategies to right-size while retaining appropriate skill sets to accomplish its mission and to address the agency's ability to respond quickly to changing industry and workload conditions in the future. Towards achieving this goal, the agency is focusing efforts on re-baselining and strategic workforce planning to ensure there is a firm understanding of what skills and capabilities exist, where gaps exist, and the best ways to close those gaps through external hiring or internal mobility.

During FY 2015, the agency supported executive resource management by responding to the Office of Personnel Management's (OPM) biennial review request regarding the NRC's Senior Executive Service (SES) allocation needs for FY 2016 and FY 2017. The agency also successfully obtained OPM Qualifications Review Board certification for several new executives competitively selected for SES positons and graduates of the SES Candidate Development Program. In addition, the NRC started a new SES Candidate Development Program class in June 2015 to meet present and future executive resources staffing needs.

The NRC continues its strong commitment to work life and benefit programs, which support creating a flexible and supportive environment for employees, maximizes organizational performance, and maintains an exceptionally engaged workforce. Programs such as the Employee Wellness Program, the Employee Assistance Program, alternative work flexibilities, and telework allow employees to balance work and personal or family lives. These factors have contributed to the NRC continuing to be one of the best places to work in the Federal Government based on Federal Employee Viewpoint Survey (FEVS) data.

The agency also hosted the agency Annual Veterans Day Recognition Program to show the agency's appreciation for the tremendous personal sacrifice that our Nation's veterans have made, and hosted a presentation for all supervisors on the Operation Warfighter Federal internship program for recovering military service members. As a result of the increased emphasis on the hiring of veterans and disabled veterans, the NRC exceeded its FY 2015 established hiring goals. In FY 2015, the agency attended 49 recruitment events of which 14 focused on individuals with disabilities including disabled veterans, and has hired a total of 63 veterans and 22 disabled veterans, which represents 26.6 percent and 9.3 percent of all NRC hires respectively.

EMPLOYEE ENGAGEMENT

According to the Federal Human Capital Survey results, specifically the FY 2014 FEVS, OPM placed the NRC in the top three of 37 Federal departments and agencies in the Employee Engagement Index. The agency was in the top four in each of the four Human Capital Assessment

and Accountability Framework indices (Leadership and Knowledge Management, Results-Oriented Performance Culture, Talent Management, and Job Satisfaction) covered by the survey. The agency was also ranked fourth with regard to the survey's measure of Global Satisfaction and third on the New Inclusion Quotient.

The success of the agency depends on the talent and commitment of agency employees, and an engaged workforce is key to agency performance. In FY 2015, the NRC developed and implemented both agency-wide and Office/Region specific action plans to continue to improve the NRC work environment. The agency-wide action plan focused on improving leadership while continuing to build on activities to improve in the areas of performance management, employee development, valuing human differences, and environment for raising concerns.

TRAINING AND DEVELOPMENT

The FEVS results over the last 5 years show that the agency has remained consistent in scores for sharing job knowledge at 82%. Knowledge Management (KM) remains a top priority for the agency. The 2014 – 2018 NRC Strategic Plan outlines KM as one of the six key contributing human capital strategies. A number of practices are implemented at every level of the agency to ensure critical knowledge is identified and captured from employees, transferred to those who need it, and made accessible for the future. The month of November, marketed as KNOWvember, is dedicated to acknowledging the agency's KM successes and provides an opportunity to enhance awareness and remind employees about the importance of KM.

As part of this effort, the agency conducted a KM Best Practice Showcase featuring 20 different best practices with participation from eight offices. The 2-day showcase reached staff agency-wide to facilitate information sharing on various KM strategies, activities, programs, and software applications being used around the agency to capture, share, and transfer knowledge and information. In addition, throughout the year the NRC held learning sessions by subject matter experts on mission critical topics. These sessions were recorded and will be made available to the workforce on-demand, increasing the opportunity for staff to access them while reducing the cost of conducting such training.

The agency is adapting its training and development programs to meet the changing needs of the agency as a result of the critical skills and competencies identified through the strategic workforce planning. Illustrative of this is the agency's recent effort to gather information on requested training and associated skills. The NRC continues to focus on a competency-based approach to training, ensuring alignment between employees' learning experiences and the agency's mission. Training and development programs are designed to shorten the time to competency. The NRC's learning and development programs continue to evolve to support the needs of the next generation of regulatory experts. The agency is continuing development of an initiative to accelerate the transformation of the learning environment from an instructor-led environment to an on-line or blended delivery environment. This initiative focuses on the needs of the learner and is geared to providing the right information at the right time for individual staff members. By using these approaches, the NRC ensures effective training with the added benefits of a reduction in costs and schedule convenience for the learner.

During FY 2015, the NRC maintained its commitment to ensure a pipeline of highly qualified staff to fill supervisory and executive positions. To support these efforts, the agency established a leadership competency model to support the development of leadership skills at all levels. In addition, the NRC launched the non-competitive Aspiring Leaders Certificate Program (ALCP) to focus on building leadership competencies in non-supervisory GG 13 – 15 staff. The ALCP served as a precursor to the NRC's Leadership Potential Program, which is a competitive leadership development program for non-supervisors. The agency continued to offer courses to ensure that new supervisors receive the OPM-required supervisory training.

OUTREACH

The operating level priorities for Outreach in FY 2015 were as follows:

1. Continued focus on activities to ensure successful implementation of the management of the civil rights program, affirmative employment and diversity management program, outreach and compliance coordination program, and the small business program.
2. Continue effective administration of the minority serving institution (MSI) grants program and the Minority Serving Institutions Program to assist in efforts to develop a diverse skilled workforce to benefit the NRC, the industry, and nation.
3. More effectively explore and access the small business marketplace. Demonstrate leadership, teaming and support in achieving the agency's small business goals.
4. Effectively manage the equal employment opportunity complaints process in compliance with Equal Employment Opportunity Commission regulations to promptly address alleged discrimination, harassment, and retaliation in the workplace.
5. Continue to provide guidance and technical assistance in developing and executing strategies in support of the agency's Comprehensive Diversity Management Plan.

The Small Business Program's collaborative efforts with its internal and external partners resulted in the agency exceeding three out of five of its small business prime contract goals. This included the award of $19.5 million out of $73.8 million to small businesses. The agency's outreach events included presentations on how to conduct business with the NRC, small business counseling to companies, and contract connection sessions that matched business capabilities with agency requirements.

The Affirmative Employment & Diversity Management Program enhanced awareness of diversity and inclusion initiatives through activities and partnerships during FY 2015. These included the Commission briefing on equal opportunity and diversity at the NRC, establishment of the Veterans Employee Resource Group, a celebration of Native American Heritage Month, an NRC Veterans' Day celebration, and presentations on diversity and inclusion during agency refresher courses for managers and supervisors. The program also held celebration dinners for African American History Month, and Women's History Month and the agency hosted selected students from Gallaudet University.

The Outreach & Compliance Coordination Program completed resolution of stakeholder comments on draft Management Directive (MD) 10.164, "NRC Outreach and Compliance Coordination Program," and the Directive Handbook. This MD and other compliance directives and manuals play an important role by providing regulatory oversight and promoting nondiscrimination in NRC-conducted and Federal financial assistance programs and activities.

During FY 2015, the Civil Rights Program initiated five informal complaints and filed seven formal complaints. The agency filed one request for a hearing and settled one case. One prior dismissal was affirmed upon appeal to the Equal Employment Opportunity Commission.

The Outreach and Compliance Coordination Program facilitated a roundtable discussion between the NRC and U.S. Environmental Protection Agency staff related to Tribal outreach and training in and around New Mexico, and participated in the Tribal Policy Working Group of the Office of Nuclear Material Safety and Safeguards to complete the task assigned by the Executive Director for Operation related to the review of office guidance and procedures.

INFORMATION MANAGEMENT AND INFORMATION TECHNOLOGY

The operating level priorities for Information Management and Information Technology in FY 2015 were as follows:

1. Improve the business value of the NRC's IT solutions by providing automated processes, IT solutions, and mobile capabilities.
2. Better enable the NRC staff and stakeholders to easily find and use the information they need.

3. Improve the accessibility, delivery, and utility of the services needed by stakeholders
4. Provide the infrastructure to deliver consistent solutions to meet stakeholder needs
5. Maximize IT/IM resources by practicing IT portfolio management, planning, and best practices.
6. Implement an effective cybersecurity program for protection of the NRC's information technology assets and identification of attempts at compromise.

The agency has made great strides towards compliance with records management statutes and regulations and the Presidential Memorandum for Managing Government Records (M-12-18). The agency completed several priority projects during FY 2015 such as digitization of all Headquarters and Region III records for active dockets. The agency also developed business requirements and began assessing technical solutions for email management.

To enhance the user experience and improve employee productivity, the NRC upgraded and enhanced its telecommunications and internet services. The agency also upgraded infrastructure components in all regional offices and headquarters buildings.

In accordance with the Federal Data Center Consolidation Initiative (FDCCI), the NRC closed two non-core data centers in FY 2015. In addition, a private cloud was implemented in the NRC's core data center, which provided a virtualized/standardized hosting environment for agency business applications.

The NRC issued standards, processes, and templates providing consistent security practices, reducing system lifecycle costs, improving overall functionality, enabling agility, and addressing risk and security posture. The agency also developed and delivered an extension to the Incident Response Database to support the Physical Threat Assessment Team.

The federal government recently initiated a 30-day "Cybersecurity Sprint" exercise in 2015 that included seven cybersecurity actions to improve the security posture of federal systems, networks, and data. Among the most prominent actions was the mandatory use of personal identity verification (PIV) cards usage and personal identification numbers (PINs) for logging into agency computers and systems for 75 percent of all network accounts by July 15, 2015. The NRC met this action by successfully achieving 78 percent. Additionally, the agency as part of its security program was able to reduce the number of privileged network accounts by over 50 percent over the last several years. The agency's two-factor PIV strong authentication is at 97 percent for privileged and 93 percent for unprivileged network accounts. Furthermore, the agency developed and submitted its Cybersecurity Corrective Action Plan to the Office of Management and Budget on July 31, 2015, which includes the agency's strategy to achieve 100 percent PIV implementation for unprivileged and privileged network accounts and to review and validate high valued assets as it relates to cybersecurity and physical protection by the end of the calendar year 2015.

In FY 2015, the percentage of NRC employees who succumbed to the social engineering scenarios tests decreased by seven percentage points to nine percent.

The agency implemented an improved mobility solution as a replacement for the existing capabilities. Pilots are underway to use the new solution to satisfy a number of new mobility requirements, including adding new capabilities, such as intranet, SharePoint, and file access, and replacing older agency-provided devices with current and more effective models.

During FY 2015, the NRC completed agencywide deployments of several new software packages and upgrades to provide staff with new communication and collaboration capabilities including instant messaging, presence management, virtual meetings, video teleconferencing, and desktop sharing capabilities. In addition, a new hosted search site was implemented to provide users with a familiar interface and new search features such as thumbnail images, social media platforms, and new collection searches.

The NRC closed the final Freedom of Information Act (FOIA) requests relating to dam safety, covering more

than 10,000 pages of records. A new FOIA staff training plan has been implemented in accordance with audit findings. The use of a FOIA redaction tool is increasing, and the NRC has continued to shorten response times for requests and lowered the number of backlogged requests.

There were tremendous improvements in the Freedom of Information Act (FOIA) program within OIS and across the agency to improve efficiency and responsiveness to requestors. Average response time for simple requests was 10 days in FY 2015, a 23 percent decrease from FY 2014; Average response time for complex requests was 57 days, a 21 percent decrease from FY 2014. The agency ended FY 2015 with a backlog of eight cases, a 62 percent decrease from the FY 2014 backlog.

OTHER MANAGEMENT OBJECTIVES

ACQUISITIONS

The operating level priorities for Acquisitions in FY 2015 were as follows:

1. Continue collaboration with stakeholders to optimize agency procurement activities and ensure mission needs are met.
2. Ensure sourcing strategies are strategic and are executed with an agencywide view.
3. Demonstrate leadership in achieving the agency's small business goals.
4. Continue training and change management to ensure the success of acquisition centralization, implemented technologies, and the Business Advisory Center operations.

The agency made significant progress in refining the strategic sourcing of support for research and other technical assistance through the following:

1. The use of a Portfolio Council, comprised of agency subject matter experts, which identified the first set of unique capabilities and facilities of the DOE labs by issuing and evaluating responses to the first round of sources sought notices. The agency issued the second round of sources sought notices, and the responses will also be evaluated to validate the uniqueness of additional DOE lab capabilities and facilities. The results will be used to develop a strategy for sourcing the appropriate work to the DOE labs in a more efficient manner.
2. A joint effort by agency Acquisition, Small Business Program, and Technical Program office representatives to host a successful Industry Day for Technical Assistance and Research (TA&R) on June 9. The purpose of the event was to provide potential vendors the opportunity to gain a better understanding of the competencies that the NRC is seeking. The event will help the NRC continue to find additional opportunities to use commercial vendors rather than the DOE labs for TA&R work.

Business process changes have resulted in significant efficiency and standardization improvements in the agency's acquisition program. The streamlined and automated process, the Strategic Acquisition System (STAQS), eliminated paper and previous manual and decentralized tasks in the areas of workflow (including reviews and approvals), acquisition planning, and data analysis in the acquisition lifecycle (including contract closeouts). STAQS also eliminated manual and duplicative data entry and reconciliation and provided the ability to report accurately on commitment and obligation of agency funds for procuring goods and services. Program offices now have real-time access to reports that allow close monitoring and tracking of commitments and obligations that go through the procurement process. Data quality has significantly increased, and the agency can now perform spend analysis on a quarterly basis, saving the agency approximately $500,000 per year. Furthermore, STAQS provides the ability to meet the NRC's Open Government and other Federal reporting requirements on an automated basis, eliminating staff time in manual data collection and validation activities.

As part of agency efforts to leverage existing Government wide acquisition sources to streamline the agency process for the acquisition and provision of supplies and support services, while continuing to support small business

program goals, the agency began procurement of the following:

1. Domestic ground delivery services for the NRC's premium delivery service requirements under General Service Administration's (GSA's) Federal Strategic Sourcing Initiative domestic delivery services blanket purchase agreements.
2. Office supplies under the GSA's Federal Strategic Initiative for Office Supplies.

These two programs serve as a streamlined purchasing channel that helps the NRC achieve significant savings on office supplies and package delivery services.

In FY 2015, the agency developed a custom agencywide reporting on grants in response to the White House performance report on agency actions to assist minority-serving institutions.

ADMINISTRATIVE SERVICES

The operating level priorities for Administrative Services in FY 2015 were as follows:

1. Develop and implement an updated strategy for housing the agency for the long-term.
2. Continue implementation of a near-term NRC Housing and Parking strategy for the White Flint Campus.
3. Provide appropriate level of administrative support to the agency in a climate of declining budgets.

As part of agency efforts to enhance security preparedness at its headquarters campus, the NRC completed Phase 1 renovations of vehicle barrier replacements and conducted active shooter exercises, including training for NRC Headquarters occupants on active shooters.

As part of agency efforts to "reduce the footprint," the NRC completed the following office moves to support consolidation of headquarters staff at the three-building White Flint North complex:

- The Office of Nuclear Regulatory Research moved from the Church Street building to the Two White Flint North Building (TWFN).
- The Office of Nuclear Material Safety and Safeguards relocated from the Three White Flint North (3WFN) building to TWFN, including the high-performance computing system, thus releasing the agency's last satellite location.

These moves reduced the NRC's space footprint by 155,955 usable square feet. The NRC completed and submitted agency's "Reduce the Footprint" 5 Year Real Property Efficiency Plan to OMB and GSA.

The agency reduced overall energy consumption in FY 2015 by 35 percent compared to the FY 2010 baseline. This was due to several energy savings projects that the NRC undertook in FY 2015.

The agency met all major milestones and responded to correlating data calls related to the Revised Federal Investigative Standards, the National Security Adjudicators Training Requirements, and the government wide Periodic Reinvestigation Backlog effort.

FINANCIAL MANAGEMENT AND FINANCIAL STEWARDSHIP

The operating level priorities for Financial Management in FY 2015 were as follows:

1. Continue centralization of financial management processes and activities.
2. Strengthen fee policy and billing processes.
3. Enhance budget execution and analysis.
4. Transition to new and upgraded financial management, travel, time and labor, and acquisition systems.
5. Enhance financial management reporting capabilities.

The NRC completed a streamlined FY 2016 Congressional Budget Justification and the final phase of budget formulation centralization activities within the agency, and it implemented the new 2080 full-time equivalent (FTE) method to better align FTE results with the productive hour method. Also, the agency accomplished an end-of-year analysis of budget execution during this fiscal year.

The NRC also implemented five of nine process improvements designed to strengthen internal controls for its Management Directive (MD) system. The MD system contains a comprehensive set of publications that address all major regulatory and support activities of the agency. This business process improvement activity, scheduled for completion in FY 2016, stems from the September 15, 2014, OIG audit of the NRC's process for revising MDs.

The agency continued its centralization of timekeeping functions and management of cost accountability codes. In addition, the NRC worked on implementing cost accountability improvements.

The NRC published the FY 2015 Proposed Fee Rule in the *Federal Register*. The NRC Fee Recovery Schedules for FY 2015 are located at http://www.gpo.gov/fdsys/pkg/FR-2014-06-30/pdf/2014-15193.pdf. The agency issued 100 percent of all invoices on a timely basis for licenses under 10 CFR Part 171, "Annual Fees for Reactor Licenses and Fuel Cycle Licenses and Materials Licenses, including Holders of Certificates of Compliance, Registrations, and Quality Assurance Program Approvals and Government Agencies Licensed by the NRC." It also referred 100 percent of all eligible debt to the U.S. Treasury and wrote off 100 percent of all 2-year-old debt by the end of the calendar year.

The NRC undertook multiple efforts in FY 2015 to increase transparency in the fee calculations and processes. These have included:

- Developing enhanced explanations of fee calculations in the work papers.
- Convening a public meeting on fees.
- Contracting with an independent vendor to conduct a benchmarking study of our fee processes with those of similar agencies for best practices; and
- Initiating other outreach effort with stakeholders.

The agency has also undergone efforts to reduce overhead by reclassifying direct supervisory support to better align resources to mission program support; reduced full-time equivalents (FTEs); cut the information technology budget; and consolidated its headquarters facilities.

In February 2015, the NRC contracted with Ernst & Young (EY) to conduct a review of the agency's overhead functions and to identify ways to reduce costs with no impact on the agency's ability to carry out its mission. The EY review confirmed that there is no standard government-wide definition of overhead costs, but found that NRC overhead costs are roughly in line with peer agencies with respect to the standard corporate support cost categories used by the Federal Chief Executive Officers Council for acquisition, financial management, information technology, human capital, and real property. However, the review recommended the realignment of some resources currently categorized as overhead that provide direct support to the NRC's programmatic activities.

The April 30, 2015, EY report recommendations include but are not limited to the following:

- centralizing budget execution activities in order to increase efficiency and reduce staffing requirements.
- continuing an initiative to consolidate data centers to reduce housing costs.
- streamlining the size and deployment of security staffing at NRC facilities to reduce costs.
- reintegrating the International Activities Product Line back into the programmatic areas it supports.
- conducting a cost-benefit analysis on outsourcing transactional mission support processes to evaluate opportunities for cost reduction through the use of external shared service providers.

The agency is working to implement the recommendations in the EY report.

INTERNATIONAL ACTIVITIES

The operating level priorities for International Activities in FY 2015 were as follows:

1. Support new and continued commitment to improving nuclear regulatory infrastructure worldwide.

2. Promote U.S. national security interests and nuclear nonproliferation policy objectives through participation in negotiations and implementation of international treaties, conventions and other multilateral or bilateral agreements, including Atomic Energy Act Section 123 Agreements for Peaceful Nuclear Cooperation.

The NRC supports U.S. interests abroad in the safe and secure use of nuclear materials and in guarding against the spread of nuclear weapons. These activities involve all business lines under Nuclear Reactor Safety and Nuclear Materials and Waste Safety but are presented in this separate section, since these activities are at the Commission policymaking level. The agency actively participates in international working groups and provides advice and assistance to international organizations and foreign countries to develop effective regulatory organizations and enforce rigorous safety standards. The NRC is the U.S. licensing authority for exports and imports of nuclear materials and equipment.

The NRC's international work and engagements cover a wide variety of technical and policy issues in multiple venues. For example, the NRC supports U.S. Government commitments to the major safety, security, and safeguards treaties and conventions. The NRC has 45 information sharing agreements with different countries, Taiwan, and the European Atomic Energy Community to exchange information to benefit both foreign and domestic programs. The NRC engages with over 85 countries that have mature nuclear power or radioactive materials programs, focusing on sharing operational information and best practices. NRC-supported assistance is provided, both bilaterally and multilaterally, to approximately 140 countries through training, workshops, peer reviews of regulatory documents, working group meetings, and exchanges of technical information and specialists. The NRC also participates in cooperative research programs with 30 countries and Taiwan through approximately 100 multilateral agreements in order to share U.S. operating experience and to learn from the experiences of other countries.

In FY 2015, the Commission issued an International Policy Statement highlighting the importance of NRC engagement internationally and directing that these engagements include and support high-level strategic elements such as implementing obligations pursuant to international treaties and conventions, providing international assistance, and fostering international technical cooperation and collaborative research. These are elements within which international activities are examined, prioritized, and conducted as an integral component of the NRC's mission.

INTERNATIONAL TREATIES AND AGREEMENTS

The NRC supports many U.S. Government treaties and obligations. For example, in FY 2015, the NRC actively supported interagency preparations for, and attaining leadership positions at, the Conventions on Nuclear Safety (CNS) Diplomatic Conference. In addition, the NRC provided technical insights into the development of the Vienna Declaration, participated in consultancy meetings concerning the template for National Reports, and supported the interagency preparation for and participation in the 7th CNS Organizational meeting. The NRC also participated in interagency coordination and cooperation for the 5th Review cycle of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention), which included serving as officers for the Joint Convention, specifically as Country Group Vice-Chair and Rapporteur.

Also in FY 2015, the NRC reviewed the proposed U.S.–China Agreement for Cooperation on the Peaceful Uses of Nuclear Energy (123 Agreement). The Chairman's letter to the President dated March 19, 2015, conveyed the Commission's recommendation that the President make the requisite positive statutory determination, approve the proposed renewal of the U.S.–China 123 Agreement, and authorize its execution by the U.S. Department of State. The NRC also reviewed the proposed U.S.–Republic of Korea Agreement for Cooperation on the Peaceful Uses of Nuclear Energy. The Chairman's letter to the President dated May 21, 2015, conveyed the Commission's recommendation that the President make

the requisite positive statutory determination, approve the proposed renewal, and authorize its execution by the U.S. Department of State.

EXPORT AND IMPORT LICENSING

Through its export and import authority, the NRC upholds the U.S. Government goals of limiting the proliferation of materials that could be used in weapons and supports the safe and secure use of civilian nuclear and radioactive materials worldwide. The NRC continues to work to strengthen the export and import regulations of nuclear equipment and materials and to improve communication between domestic and international stakeholders.

In FY 2015, the NRC completed 84 specific export or import licensing actions; 12 reviews of 10 CFR Part 810, "Assistance to Foreign Atomic Energy Activities," authorization requests; and 5 subsequent arrangements requested by the Executive Branch. The NRC also participated in U.S. interagency bilateral physical protection visits to support export licensing. The NRC's export/import licensing reviews ensure that nuclear equipment and material are transferred to authorized parties in ways consistent with applicable U.S. law and international obligations. The NRC continued to monitor policy and technical changes at the Nuclear Suppliers Group for impacts on its export regulations.

INTERNATIONAL COOPERATION AND ASSISTANCE

The NRC has a robust relationship with both the Nuclear Energy Agency (NEA) in France and with the International Atomic Energy Agency (IAEA) in Austria. The NEA's membership comprises countries with mature nuclear programs and regulatory organizations, which facilitates beneficial dialogue on detailed technical topics. The NEA's research activities enable multiple countries to benefit from research conducted in a single location, which promotes cooperation and efficient use of limited resources. Due to the more comprehensive international membership of the IAEA, and its focus on safety, security, and safeguards, the NRC is engaged in a broader and more varied number of IAEA activities.

In FY 2015, the NRC continued to co-chair the NEA's Committee on Nuclear Regulatory Activities (CNRA). CNRA is the NEA committee responsible for facilitating cooperation among its member countries in regulation, licensing, and inspection of nuclear installations to improve safety. The NRC participated in all four NEA working groups and two senior level task groups under CNRA, and chaired one working group. The NRC also chairs the recently established NEA CNRA ad-hoc Group on the Safety of Advanced Reactors. The NRC also chairs the NEA's Committee on Safety of Nuclear Installations. Some of the most significant work is done in this group is with the Halden Reactor Project, a program of research covering a broad range of areas including fuels, materials, digital systems, human factors, and human reliability.

The NRC plays a leadership role in the Multinational Design Evaluation Program (MDEP), which facilitates cooperation among 14 countries in evaluating the designs for new nuclear power plants, including the AP1000, EPR, APR1400, and ABWR. The NRC Chairman participates in the MDEP Policy Group. The agency participated in seven working groups and led three of them.

At the IAEA, the NRC participates in the development of safety standards, the application of international safeguards in the United States and abroad, assistance to countries through the IAEA Technical Cooperation program, participation in the work of the Department of Nuclear Energy, and support for the IAEA's security activities. The NRC actively participates in each of the IAEA's safety standards committees and the Nuclear Security Guidance Committee and represents the U.S. Government in the Commission on Safety Standards. Of particular note is the increasing engagement of the NRC in the IAEA's many assessment missions, including those focused on national regulatory and security programs.

For example, the NRC is engaged both domestically and internationally in efforts to enhance nuclear safety and security through the regulatory oversight of radioactive sources. In FY 2015, the NRC participated

in numerous meetings of technical and legal experts on the IAEA's Code of Conduct for the Safety and Security of Radioactive Sources, both to ensure that its implementing guidance is clear and accurate and to encourage Member States that have not yet made a political commitment to implement the Code to do so.

The NRC also helped to establish an international regulatory forum for design review of small modular reactors at IAEA, and it provided primary support to implement the forum and multilateral cooperation in this area.

Under its assistance program, the NRC continued engagement on establishing basic regulatory infrastructure needed for oversight of a nuclear power program with countries in Africa, Europe, the Middle East, and Southeast Asia. The agency continued expanding its engagement with regulatory counterparts in Africa, Asia, and Latin America on establishing effective regulatory oversight of radioactive materials. The NRC participates in numerous IAEA-sponsored coordination, information exchange, and knowledge management forums. These include the Global Nuclear Safety and Security Network, the Asian Nuclear Safety Network, the Regulatory Cooperation Forum, the Technical Support Organization Forum, the Forum of Nuclear Regulatory Bodies in Africa, and the Arab Network of Nuclear Regulators.

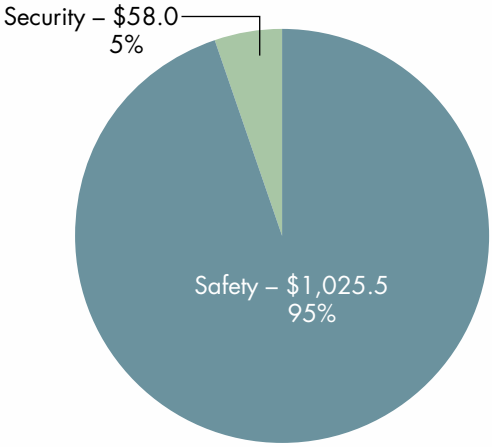
The NRC continues to work with its Japanese counterparts on lessons learned from the Fukushima Dai-chi accident and other safety and security related activities. The NRC and the Japan nuclear regulator, the Nuclear Regulatory Agency (NRA), held two Steering Committee meetings on nuclear security. The cooperative framework provides the basis for more structured bilateral cooperation between the NRC and the NRA. Additionally, the NRC held information exchanges with numerous other Japanese government agencies and non-government organizations.

The NRC continues to implement a strategic plan with China's regulatory authority, National Nuclear Safety Administration (NNSA), for cooperation on the regulatory oversight of the construction of AP1000 reactors in both countries. The plan includes exchange of inspectors, joint vendor inspections, information exchanges, and observations during the pre-operational testing phases. In FY 2015, the NRC held multiple meetings and discussions with China's NNSA on AP1000 regulation, resulting in additional information exchanges and multiple NRC staff trips to the Sanmen site to observe pre-operational and simulator testing.

COSTING TO GOALS

This year's PAR presents the full cost of achieving the Safety and Security goals for the NRC's major programs, Nuclear Reactor Safety and Nuclear Materials and Waste Safety. The total cost of achieving the agency's strategic goals was $1,083.5 million. The cost of achieving the agency's Safety goal was $1,025.5 million and the cost of achieving the agency's Security goal was $58.0 million (see Figure 19).

Figure 19 – NRC Safety and Security Costs *(in millions)*



PROGRAM EVALUATIONS

The NRC conducted several program evaluations of its regulatory operations during FY 2015. The evaluations were conducted for both the nuclear reactor and the nuclear materials programs.

CONSTRUCTION REACTOR OVERSIGHT PROCESS

Objective: The objectives of the annual cROP self-assessment are as follows:

1. To determine whether the ongoing program is effective in supporting the achievement of the performance goals and the agency's strategic goals.
2. To provide timely, objective information to inform program planning and to develop recommended improvements to the cROP.
3. To inform the Commission, NRC senior management, and the public of the results of the cROP self-assessment program, including any conclusions and resultant improvement actions.

Scope: The self-assessment includes the following:

1. Evaluations of the construction inspection program, the construction significance determination process, and the construction assessment and enforcement programs.
2. Discussions and assessments of cROP communications, performance metrics, and resource expenditures.
3. Updates on the ITAAC and construction experience programs.

Outcome: The CY 2014 self-assessment, issued May 1, 2015, concluded that the cROP met its program goals and the agency's strategic goals of ensuring safety and security through objective, risk-informed, understandable, and predictable oversight. All 11 performance metrics met predetermined criteria, demonstrating that the corrective action taken to resolve the one out-of-standard metric identified in CY 2013 was successful.

VENDOR INSPECTION PROGRAM (VIP)

Objective: The annual VIP self-assessment determines if the VIP is meeting the following objectives:

1. Verify that applicants and licensees are providing effective oversight of supply chain.
2. Effectively communicate with stakeholders.
3. Perform timely and adequate allegation follow-up.
4. Ensure that agency staff has necessary knowledge and skills.

Scope: The self-assessment evaluates performance metrics under each objective to demonstrate that overarching goals are being supported.

Outcome: The FY 2014 self-assessment, issued December 18, 2014, demonstrated the VIP met its program goals. Ten of 11 performance metrics met the predetermined criteria, and the agency identified corrective actions for the one that did not. Both of the out-of-standard metrics identified in FY 2013 were met in FY 2014, demonstrating that the corrective actions implemented last year were successful.

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAMS

During FY 2015, the NRC conducted Integrated Materials Performance Evaluation Program (IMPEP) reviews and corresponding Management Review Boards for the Commonwealth of Virginia, the State of Florida, State of Maine, State of New Jersey, State of North Dakota. IMPEP reviews were also conducted for the NRC's Region I materials program, and with respect to the regulation of nuclear material the NRC's sealed source and device evaluation program. These programs help to fulfill the NRC's mission to protect public health and safety, promote the common defense and security, and protect the environment. Additionally, the agency reviewed regulations for 20 different Agreement States to ensure compatibility with NRC regulations. During the reviews, the NRC determined that the performance of each program was adequate and helped to contribute to the successful completion of the NRC's mission.

ABNORMAL OCCURRENCES REPORTING CRITERIA

During FY 2015, the NRC conducted a review of the existing Abnormal Occurrence (AO) Reporting Criteria mandated under Section 208 of the *Energy Reorganization Act of 1974*, as amended (Public Law 93-438). The review

concluded that changes were needed to adopt current requirements, and clarify and restructure the existing criteria used by the NRC and Agreement States for determining whether to consider an incident or event as an AO. The proposed revisions to the policy statement will ensure consistency with current NRC guidance and regulations. The policy will reflect a range of health and safety concerns and applies to incidents and events involving a single individual, as well as those having an overall impact on the general public. The AO criteria use a high reporting threshold so that only those events considered significant from the standpoint of public health and safety are reported to Congress. In summary, the proposed changes were impacted by the changes to 10 CFR Part 37, clarification of the criteria for medical AOs, and other administrative clarifications.

DATA SOURCES, DATA QUALITY, AND DATA SECURITY

The NRC's data collection and analysis methods are driven largely by the regulatory mandate that Congress entrusted to the agency.

As part of the NRC's regulatory requirement under 10 CFR 20.2206, "Reports of Individual Monitoring," several NRC-regulated industries are required to submit occupational radiation exposure reports to the Radiation Exposure Information and Reporting System (REIRS) database. The agency analyzes these reports to ensure that licensees comply with the annual occupational dose limit of 50 millisieverts (5 rem). The agency uses the data in the following ways:

1. As a metric in the agency's ROP to evaluate the effectiveness of licensee programs used to keep occupational radiation doses as low as reasonably achievable and for inspection planning.
2. To assist in the evaluation of the radiological risk associated with certain categories of NRC-licensed activities and for comparative analysis of radiation protection performance.
3. To provide occupational radiation exposure history reports to individuals exposed to radiation or radioactive material at NRC-licensed facilities.
4. To provide facts for responding to Congressional and administration inquiries and to questions from the public regarding occupational radiation exposures at NRC-licensed facilities.

The agency publishes NUREG-0713, "Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities," annually. NUREG-0713, Volume 34, for CY 2012 was issued in April 2014. It is available on the agency's Web site: http://pbadupws.nrc.gov/docs/ML1412/ML14126A597.pdf. Section 208 of the *Energy Reorganization Act of 1974*, as amended, requires the NRC to inform Congress of incidents or events that the Commission determines to be significant from the standpoint of public health and safety. The agency developed the AO criteria to comply with the legislative intent of the *Energy Reorganization Act of 1974* to determine which events should be considered significant. Based on these criteria, the agency prepares an annual, "Report to Congress on Abnormal Occurrences," (NUREG-0090). One important characteristic of this report is that the data presented normally originate from external sources, such as Agreement States and NRC licensees. NUREG-0090, Volume 37, for FY 2014, issued in May 2015, is available on the agency's Web site: http://pbadupws.nrc.gov/docs/ML1514/ML15140A285.pdf.

The NRC finds these data sources credible for the following reasons:

1. Agency regulations require Agreement States, licensees, and other external sources to report the necessary information.
2. The NRC maintains an aggressive inspection program that, among other activities, includes auditing licensee programs and evaluating Agreement State programs to ensure that they are reporting the necessary information as required by the agency's regulations.

3. The NRC has established procedures for inspecting and evaluating licensees. The agency employs multiple database systems to support this process, including the licensee event report Search System, the Accident Sequence Precursor database, the Nuclear Materials Events Database, and the REIRS. In addition, nonsensitive reports submitted by Agreement States and NRC licensees are available to the public through ADAMS, accessible through the agency's Web site http://www.NRC.gov/reading-rm/adams.html.

The NRC verifies the reliability and technical accuracy of event information reported to the agency and periodically inspects licensees and reviews Agreement State programs.

In addition, NRC Headquarters, the regional offices, and Agreement States hold periodic conference calls to discuss event information. Events identified as meeting the AO criteria are validated and verified before being reported to Congress.

Additionally, the NRC is an active participant in data.gov, a Federal Web site designed to increase public access to high-value, machine-readable datasets generated by the Executive Branch. The NRC published its first dataset in October 2009, and, in response to the Open Government directive, published three additional datasets in January 2010, and as of the end of FY 2014, 33 datasets have been published.

The NRC launched its Master Data Management (MDM) Program in January 2015. The goal of the MDM Program is to ensure that mission critical systems and staff have timely access to data collected, stored, and processed across the enterprise. The Program will ensure that agency-wide data is accurate; reduce and/or eliminate the storage of duplicate information; provide controls to improve data quality; and provide a foundation for information sharing and exchange. MDM will also be an umbrella where more direct public digital services and their improvements, will be consolidated and integrated. The NRC will continue to encourage public feedback on its high-value information, and consistent with agency policy and guidance provided by data.gov, will continue to add new datasets to its high-value dataset publication plan.

INFORMATION SECURITY

The NRC's information security program performs the following functions:

1. Protect NRC and licensee information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction.
2. Protect electronic control functions from unauthorized access or manipulation.
3. Ensure that adequate controls for protecting security-related information are used in the conduct of NRC business.

The NRC information security program includes measures to accomplish the following:

1. Ensure that information security requirements, standards, and guidance are clear, concise, appropriate, and able to mitigate the potential adverse effects if sensitive information is compromised.
2. Ensure that security controls for information owned by or under the control of the NRC are consistent with established information security controls, operating as intended, and having the desired impact, as well as that similar controls for licensees regulated by the NRC are in compliance with NRC information security regulations.
3. Ensure that suspected or actual information security violations are evaluated and that appropriate sanctions are considered.
4. Ensure that the NRC has made sufficient preparations for information security-related emergencies and incidents.
5. Ensure that internal information security program components complement each other and are periodically evaluated and improved.

PERFORMANCE DATA COMPLETENESS AND RELIABILITY

The NRC assess the completeness and reliability of its performance data. Comparisons of actual performance with the projected levels are possible only if the data used to measure performance are complete and reliable. Consequently, the *Reports Consolidation Act of 2000* requires the NRC Chairman to assess the completeness and reliability of the performance data used in this report. The process for ensuring that the data are complete and reliable is based upon reporting by the applicable business line leaders at the agency's Quarterly Performance Review meetings. The report, "Data Collection Procedures for Verification and Validation of Performance Indicators," contains the processes the agency uses to collect, validate, and verify performance data. This report is on page 107 of the NRC's FY 2015 Congressional Budget Justification and is located on the NRC Web site at http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1100/v30/.

DATA COMPLETENESS

The NRC considers data to be complete if the agency reports actual performance data for every performance goal and indicator in the annual plan. Actual performance data include all data that are available when the agency sends its report to the President and Congress. The agency has reported actual data for every strategic and performance goal indicator. In addition, all of the data are reported for each indicator. As a result, the data presented in this report meet the requirements for data completeness.

DATA RELIABILITY

The NRC considers data to be reliable when agency managers and decisionmakers use the data in carrying out their responsibilities. The data presented in this report meet this requirement for data reliability because NRC managers and senior leaders regularly use the reported data in the course of their duties.

CHAPTER 3

FINANCIAL STATEMENTS AND AUDITORS' REPORT

UNITED STATES NUCLEAR REGULATORY COMMISSION

A MESSAGE FROM THE CHIEF FINANCIAL OFFICER

I am pleased to present the financial statements for the U.S. Nuclear Regulatory Commission (NRC) Fiscal Year (FY) 2015 Performance and Accountability Report. An independent auditor has rendered an unmodified opinion on the NRC financial statements for the twelfth consecutive year. The auditor has also rendered an unqualified opinion on our internal control over financial reporting, concluding that the NRC is compliant with pertinent provisions of laws and regulations.

During FY 2015, the agency began implementation of its Project Aim 2020 initiative to improve efficiency, effectiveness, and agility for responding to a range of possible futures while fulfilling the NRC's mission in the present and well into the future. NRC staff has been exploring opportunities to improve through examination of what work the agency has been doing and what work should be continued and/or discontinued. The Office of the Chief Financial Officer has been supporting this initiative through development of Cost Activity Codes to enhance information on labor and contract costs. I am confident that the expertise and creativity of NRC staff will ensure that the agency efficiently accomplishes its safety and security mission.

FY 2015 saw continued progress within the agency's accounting and financial management systems. This included a system upgrade for its core general ledger system, the Financial Accounting and Integrated Management Information System, which allows the required functionality to incorporate the U.S. Treasury Government·wide Treasury Accounting Symbol reporting mandate. A pilot program was launched for the NRC's Budget Formulation System for interactive reporting to enhance and centralize the agency's resource planning and forecasting business process. The agency has successfully migrated to the E-Gov Travel Service 2 system in May 2015. The Human Resource Management System, formerly known as Time and Labor Modernization, has completed the planned upgrade and begun the migration to the new release to address legislative requirements, add new capabilities and strengthen controls.

The NRC performed a fee revenue comparative analysis study in FY 2015 to determine best practices among fee setting Federal agencies requirements in an effort to streamline Fee Policy activities and shorten the Fee Rule development window. To enhance transparency, the agency held a public outreach meeting on the FY 2015 Proposed Fee Rule to discuss the rule in detail and solicit comments from stakeholders. The NRC improved the clarity of the FY 2015 Fee Rule work papers and posted them on-line for public access.

The agency also continued to streamline and improve its Programmatic Internal Control Framework to align with GAO's updated Standards for Internal Control in the Federal Government, improve processes, reduced administrative burden on technical staff, increase management accountability, and provide a more interdependent approach to ensure the effectiveness and efficiency of agency operations. The NRC remains committed to its mission of ensuring the safety and security of the Nation's civilian use of radioactive materials in the most effective and efficient manner. The regulation of the Nation's nuclear industries during times of fiscal and regulatory challenges requires careful stewardship of limited agency resources and demands superior financial performance. I am gratified that we have continued using sound business practices to accomplish our regulatory mission and am confident that we will continue such improvements in the future.

Maureen E. Wylie
Chief Financial Officer
November 9, 2015

FINANCIAL STATEMENTS

BALANCE SHEET *(IN THOUSANDS)*

As of September 30,	2015	2014
Assets		
Intragovernmental		
Fund balance with Treasury (Note 2)	**$ 353,838**	$ 377,391
Accounts receivable (Note 3)	**11,095**	26,395
Advances and prepayments	**11,269**	8,056
Total intragovernmental	**376,202**	411,842
Cash and other monetary assets	**-**	-
Accounts receivable, net (Note 3)	**84,944**	85,172
Property and equipment, net (Note 4)	**79,056**	90,280
Other	**19**	20
Total Assets	**$ 540,221**	$ 587,314
Liabilities		
Intragovernmental		
Accounts payable	**$ 13,645**	$ 12,472
Other (Note 5)	**5,215**	4,687
Total intragovernmental	**18,860**	17,159
Accounts payable	**23,366**	25,713
Federal employee benefits (Note 6)	**6,040**	6,669
Other (Note 5)	**79,700**	74,729
Total Liabilities	**127,966**	124,270
Net Position		
Unexpended appropriations	**283,151**	306,226
Cumulative results of operations (Note 8)	**129,104**	156,818
Total Net Position	**412,255**	463,044
Total Liabilities and Net Position	**$ 540,221**	$ 587,314

The accompanying notes to the financial statements are an integral part of this statement.

STATEMENT OF NET COST *(IN THOUSANDS)*

For the fiscal years ended September 30,	2015	2014
Nuclear Reactor Safety		
Gross costs	**$ 838,682**	$ 817,279
Less: Earned revenue	**(814,280)**	(815,037)
Total Net Cost of Nuclear Reactor Safety (Note 9)	**24,402**	2,242
Nuclear Materials and Waste Safety		
Gross costs	**244,777**	239,305
Less: Earned revenue	**(86,554)**	(81,515)
Total Net Cost of Nuclear Materials and Waste Safety (Note 9)	**158,223**	157,790
Net Cost of Operations	**$ 182,625**	$ 160,032

The accompanying notes to the financial statements are an integral part of this statement.

STATEMENT OF CHANGES IN NET POSITION *(IN THOUSANDS)*

For the fiscal years ended September 30,	2015	2014
Cumulative Results of Operations		
Beginning Balance	**$ 156,818**	$ 160,637
Budgetary Financing Sources		
Appropriations used (Note 11)	**126,879**	121,099
Nonexchange revenue (Note 11)	**373**	165
Other Financing Sources		
Imputed financing from costs absorbed by others (Note 11)	**28,032**	35,114
Other	**(373)**	(165)
Total Financing Sources	**154,911**	156,213
Net Cost of Operations	**(182,625)**	(160,032)
Net Change	**(27,714)**	(3,819)
Cumulative Results of Operations	**$ 129,104**	$ 156,818
Unexpended Appropriations		
Beginning Balance	**$ 306,226**	$ 242,640
Budgetary Financing Sources		
Appropriations received	**103,804**	184,685
Appropriations used (Note 11)	**(126,879)**	(121,099)
Other adjustments	**-**	-
Total Budgetary Financing Sources	**(23,075)**	63,586
Total Unexpended Appropriations	**283,151**	306,226
Net Position	**$ 412,255**	$ 463,044

The accompanying notes to the financial statements are an integral part of this statement.

STATEMENT OF BUDGETARY RESOURCES *(IN THOUSANDS)*

For the fiscal years ended September 30,	2015	2014
Budgetary Resources		
Unobligated balance brought forward, October 1	**$ 53,464**	$ 42,779
Recoveries of unpaid prior-year obligations		
Actual	**5,047**	10,600
Unobligated balance from prior-year budget authority, net	**58,511**	53,379
Appropriations	**1,015,301**	1,055,895
Spending authority from offsetting collections	**8,001**	9,802
Total Budgetary Resources	**$ 1,081,813**	$ 1,119,076
Status of Budgetary Resources		
Obligations incurred (Note 12)	**$ 1,053,813**	$ 1,065,612
Unobligated balance, end of year		
Apportioned	**23,259**	48,479
Exempt from apportionment	**2,837**	4,816
Unapportioned	**1,904**	169
Total unobligated balance, end of year	**28,000**	53,464
Total Status of Budgetary Resources	**$ 1,081,813**	$ 1,119,076
Change in Obligated Balance		
Unpaid obligations		
Unpaid obligations brought forward, October 1	**$ 325,876**	$ 278,812
Obligations incurred (Note 12)	**1,053,813**	1,065,612
Outlays (gross)	**(1,046,990)**	(1,007,948)
Recoveries of prior-year unpaid obligations	**(5,047)**	(10,600)
Unpaid obligations, end of year	**$ 327,652**	$ 325,876
Uncollected payments		
Uncollected payments, Federal sources, brought forward, October 1	**$ (1,949)**	$ (3,517)
Change in uncollected payments, Federal sources	**135**	1,568
Uncollected payments, Federal sources, end of year	**$ (1,814)**	$ (1,949)
Memorandum entries:		
Obligated balances, start of year	**$ 323,927**	$ 275,295
Obligated balances, end of year	**$ 325,838**	$ 323,927
Budget Authority and Outlays, Net		
Budget Authority, gross	**$ 1,023,302**	$ 1,065,697
Actual offsetting collections	**(8,136)**	(11,201)
Change in uncollected payments, Federal sources	**135**	1,568
Budget Authority, Net	**$ 1,015,301**	$ 1,056,064
Outlays, gross	**$ 1,046,990**	$ 1,007,948
Actual offsetting collections	**(8,136)**	(11,201)
Outlays, net	**1,038,854**	996,747
Distributed offsetting receipts	**(911,501)**	(871,206)
Agency Outlays, Net	**$ 127,353**	$ 125,541

The accompanying notes to the financial statements are an integral part of this statement.

NOTES TO THE FINANCIAL STATEMENTS

(All tables are presented in thousands)

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. REPORTING ENTITY

The NRC is an independent regulatory agency of the Federal Government that the U.S. Congress created to regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of the public health and safety, to promote the common defense and security, and to protect the environment. Its purposes are defined by the *Energy Reorganization Act of 1974*, as amended, along with the *Atomic Energy Act of 1954*, as amended, which provide the foundation for regulating the Nation's civilian use of nuclear materials.

The NRC operates through the execution of its congressionally approved appropriations for Salaries and Expenses (which includes funds derived from the NWF) and the OIG. In addition, the U.S. Agency for International Development (USAID) has provided a transfer of funds to develop nuclear safety, regulatory authorities, and independent oversight of nuclear reactors in Russia, Ukraine, Kazakhstan, Georgia, and Armenia.

B. BASIS OF PRESENTATION

These financial statements report the financial position and results of operations of the NRC as required by the *Chief Financial Officers Act of 1990* and the *Government Management Reform Act of 1994*. These financial statements were prepared from the books and records of the NRC in conformance with generally accepted accounting principles (GAAP) of the United States and the form and content for entity financial statements specified by the OMB in Circular No. A-136, "Financial Reporting Requirements." The GAAP for Federal entities are the standards prescribed by the Federal Accounting Standards Advisory Board, which is the official body for setting the accounting standards of the U.S. Government. These statements are, therefore, different from the financial reports, also prepared by the NRC pursuant to OMB directives, which are used to monitor and control the NRC's use of budgetary resources.

The NRC has not presented a Statement of Custodial Activity because the amounts involved are immaterial and incidental to its operations and mission.

Budgetary information for small budget accounts is aggregated by major budget accounts for purposes of the Required Supplementary Information.

C. BUDGETS AND BUDGETARY ACCOUNTING

Budgetary accounting measures appropriation and consumption of budget spending authority or other budgetary resources and facilitates compliance with legal constraints and controls over the use of Federal funds. Under budgetary reporting principles, budgetary resources are consumed at the time of purchase. Assets and liabilities, which do not consume current budgetary resources, are not reported, and only those liabilities for which valid obligations have been established are considered to consume budgetary resources.

In FY 2014, Congress passed the *Consolidated Appropriations Act, 2014* that funded the NRC's full budget request of $1.04 billion for FY 2014. Not more than $9.5 million of the budget may be made available for the Office of the Commission as a 2-year appropriation that is available for obligation by the NRC through September 30, 2015. Additionally, Congress enacted a 2-year appropriation of $12.0 million for the OIG, which is available for obligation by the NRC through September 30, 2015. Congress passed the *Consolidated Appropriations Act, 2015* that funded the NRC's budget request of $1.00 billion for FY 2015. Not more than $7.5 million of the budget may be made available for the Office of the Commission as a 2-year appropriation that is available for obligation by the NRC through September 30, 2016. Additionally, Congress enacted a 2-year appropriation of $12.1 million for the OIG, which is available for obligation by the NRC through September 30, 2016.

D. BASIS OF ACCOUNTING

These financial statements reflect both accrual and budgetary accounting transactions. Under the accrual method, revenues are recognized when earned and expenses are recognized when a liability is incurred, without regard to receipt or payment of cash. Budgetary accounting is also used to record the obligation of funds prior to the accrual-based transaction. The SBR presents budgetary resources available to the NRC and changes in

obligations during the year. Interest on borrowings of the Treasury is not included as a cost to the NRC programs and is not included in the accompanying financial statements.

E. REVENUES AND OTHER FINANCING SOURCES

The NRC is required to offset its appropriations by revenue received during the FY from the assessment of fees. The NRC assesses two types of fees to recover its budget authority:

1. Fees assessed under 10 CFR Part 170, "Fees for Facilities, Materials, Import and Export Licenses, and Other Regulatory Services under the *Atomic Energy Act of 1954*, as Amended," for licensing, inspection, and other services under the authority of the *Independent Offices Appropriation Act of 1952* to recover the NRC's costs of providing individually identifiable services to specific applicants and licensees.

2. Annual fees assessed for nuclear facilities and materials licensees under 10 CFR Part 171, "Annual Fees for Reactor Licenses and Fuel Cycle Licenses and Materials Licenses."

Licensing revenues are recognized on a straight-line basis over the licensing period. The annual licensing period for reactor and materials fees begins October 1 and ends September 30. Annual fees for reactors are invoiced in four quarterly installments, before the end of each quarter. The NRC invoices licensees for materials annual fees in the month the license was originally issued. Inspection fees are recorded as revenues when the services are performed.

For accounting purposes, appropriations are recognized as a financing source (appropriations used) at the time goods and services are received. Periodically during the FY, appropriations recognized are reduced by the amount of assessed fees collected during the FY to the extent of new budget authority for the year. Collections that exceed the new budget authority are held to offset subsequent years' appropriations. Appropriations expended for property and equipment are recognized as expenses when the asset is consumed in operations as reflected by the depreciation and amortization expense.

F. FUND BALANCE WITH TREASURY

The NRC's cash receipts and disbursements are processed by the Treasury. The Fund Balance with Treasury is primarily appropriated funds and license fee collections that are available to pay current liabilities and to finance authorized purchase commitments. Fund Balance with Treasury represents the NRC's right to draw on the Treasury for allowable expenditures.

G. ACCOUNTS RECEIVABLE

Accounts receivable consist of amounts that other Federal agencies and the public owe to the NRC. Amounts due from the public are presented net of an allowance for uncollectible accounts. The allowance is determined based on the age of the receivable and allowance rates established from historical experience. Receivables from Federal agencies are expected to be collected; therefore, there is no allowance for uncollectible accounts for Federal agencies.

H. NON-ENTITY ASSETS

Non-entity assets consist of miscellaneous penalties and interest due from the public, which, when collected, must be transferred to the Treasury.

I. PROPERTY AND EQUIPMENT

Property and equipment consist primarily of typical office furnishings, leasehold improvements, nuclear reactor simulators, and computer hardware and software. The costs of internal use software include the full cost of salaries and benefits for agency personnel involved in software development. The NRC has no real property. The land and buildings in which the NRC operates are provided by the GSA, which charges the NRC rent that approximates the commercial rental rates for similar properties.

Property with a cost of $50 thousand or more per unit and a useful life of 2 years or more is capitalized at cost and depreciated using the straight-line method over the useful life. Other property items are expensed when purchased. Normal repairs and maintenance are charged to expense as incurred.

J. ACCOUNTS PAYABLE

The NRC uses an estimation methodology to calculate the accounts payable balance, which represents costs for billed and unbilled goods and services received prior to year end that are unpaid. The NRC had previously used an estimation methodology to calculate the accounts payable balance based on a review of the sample obligations from the total open obligations balances. For FY 2015, the NRC calculates the accounts payable amount using an average based on the historical trend of validated accruals. The estimation methodology is validated quarterly.

K. LIABILITIES NOT COVERED BY BUDGETARY RESOURCES

Liabilities represent the amount of monies or other resources that are likely to be paid by the NRC as the result of a transaction or event that has already occurred. No liability can be paid by the NRC absent an appropriation. Liabilities for which an appropriation has not been enacted are classified as "Liabilities Not Covered by Budgetary Resources." Also, the NRC liabilities arising from sources other than contracts can be abrogated by the Government acting in its sovereign capacity.

Intragovernmental

The NRC records a liability to the DOL for *Federal Employees Compensation Act* (FECA) benefits paid by DOL on behalf of the NRC.

Federal Employee Benefits

Federal employee benefits represent the actuarial liability for estimated future FECA disability benefits. The future workers' compensation estimate was generated by DOL from an application of actuarial procedures developed to estimate the liability for FECA, which includes the expected liability for death, disability, medical, and miscellaneous costs for approved compensation cases. The liability is calculated using historical benefit payment patterns related to a specific incurred period to predict the ultimate payments related to that period.

Other

Accrued annual leave represents the amount of annual leave earned by the NRC employees but not yet taken.

L. CONTINGENCIES

Contingent liabilities are those for which the existence or amount of the liability cannot be determined with certainty pending the outcome of future events. The uncertainty should ultimately be resolved when one or more future events occur or fail to occur. Accounting treatment of the contingency depends on if the likely outcome is considered probable, reasonably possible, or remote.

A contingency is considered probable when the future confirming event or events are more likely than not to occur, with the exception of pending or threatened litigation and unasserted claims. This type of contingency is recorded in the financial statements as a contingent liability (included in Other Liabilities) and as an expense, and should be recorded when a past event or exchange transaction has occurred, a future outflow or othe sacrifice of resources is probable and the future outflow or sacrifice of resources is measurable.

A contingency is considered reasonably possible when the chance of the future confirming event or events occurring is more than remote but less than probable. This type of contingency is disclosed in the notes to the financial statements (Note 17) if any of the conditions for liability recognition are not met and there is at least a reasonable possibility that a loss or an additional loss may have been incured.

A contingency is considered remote when the chance of the future event or events occurring is slight. This type of contingency is not recognized as a liability and as an expense in the financial statements, nor disclosed in the notes when the chance of the future event or events occurring is remote.

M. ANNUAL, SICK, AND OTHER LEAVE

Annual leave is accrued as it is earned and the accrual is reduced as leave is taken. Each year, the balance in the accrued annual leave liability account is adjusted to reflect current pay rates. To the extent that current or prior-year funding is not available to cover annual leave earned but not taken, funding will be obtained from future financing sources. Sick leave and other types of nonvested leave are expensed as taken.

N. RETIREMENT PLANS

The NRC employees belong to either the Federal Employees Retirement System (FERS) or the Civil Service Retirement System (CSRS).

The NRC does not report on its financial statements FERS and CSRS assets, accumulated plan benefits, or unfunded liabilities, if any, applicable to its employees. Reporting such amounts is the responsibility of the OPM. The portion of the current and estimated future outlays for FERS and CSRS not paid by the NRC is included in NRC's financial statements as an imputed financing source in the Statement of Changes in Net Position and as program costs on the Statement of Net Cost.

The NRC employees make mandatory contributions through payroll deductions to their retirement plan as required by law. For employees belonging to FERS and receiving an appointment prior to January 1, 2013, the NRC withheld 0.8 percent of base pay earnings and provided 13.2 percent in 2015 and 11.7 in 2014 for the employer contribution. Per Public Law 112-96, Section 5001 of the *Middle Class Tax Relief and Job Creation Act of 2012*, employees hired after January 1, 2013, as Federal Employees Retirement System - Revised Annuity Employees (FERS- RAE) must pay 3.1 percent of their salary to retirement contributions with an 11.1 percent in 2015 and 9.6 in 2014 for employer matching contribution. The sum is transferred to the Federal Employees Retirement Fund. For employees covered by CSRS, the NRC withholds 7 percent of base pay earnings. The NRC matched this withholding with a 7 percent contribution in FY 2015 and FY 2014.

The Thrift Savings Plan (TSP) is a retirement savings and investment plan for employees belonging to either FERS or CSRS. The maximum percentage of base pay that an employee participating in FERS or CSRS may contribute is unlimited, subject to the maximum contribution of $18.0 thousand in 2015 and $17.5 thousand in 2014. For employees participating in FERS, the NRC automatically contributes 1 percent of base pay to their account and matches contributions up to an additional 4 percent. For employees participating in CSRS, there is no NRC matching of the contribution. The sum of the employees' and the NRC's contributions is transferred to the Federal Retirement Thrift Investment Board.

O. LEASES

The NRC's capital leases are for personal property consisting of reproduction equipment that is installed at the NRC Headquarters.

Capital leases are leases that transfer substantially all the benefits and risks of ownership to the lessee. Capital leases are reported in the Balance Sheet as an asset under Property and Equipment and a liability (Other Liabilities). If at its inception, a lease meets one or more of the following four criteria, the lease should be classified as a capital lease by the lessee:

1. The lease transfers the ownership of the property to the lessee by the end of the lease term.
2. The lease contains an option to purchase the leased property at a bargain price.
3. The lease term is equal or greater than 75 percent of the estimated economic life of the leased property.
4. The present value of rental or other minimum lease payments, excluding that portion of the payments representing executor cost, equals or exceeds 90 percent of the fair value of the leased property.

The FASAB defines an operating lease as a lease in which the Federal entity does not assume the risks of ownership of the property, plant, and equipment (PP&E). It is an agreement conveying the right to use property for a limited time in exchange for periodic rental payments.

Operating leases at the NRC consist of real property leases with GSA. The leases are for the NRC's Headquarters and regional offices. The GSA charges the NRC lease rates that approximate commercial rates for comparable space.

P. PRICING POLICY

The NRC provides nuclear reactor and materials licensing and inspection services to the public and other Government entities. In accordance with OMB Circular No. A-25, "User Charges," and the *Independent Offices Appropriation Act of 1952*, the NRC assesses fees under 10 CFR Part 170 for licensing and inspection activities to recover the full cost of providing individually identifiable services.

The NRC's policy is to recover the full cost of goods and services provided to other Government entities where the services performed are not part of its statutory mission and the NRC has not received appropriations for those services. Fees for reimbursable work are assessed at the 10 CFR Part 170 rate with minor exceptions for programs that are nominal activities of the NRC.

Q. NET POSITION

The NRC's net position consists of unexpended appropriations and cumulative results of operations. Unexpended appropriations represent appropriated spending authority that is unobligated and has not been withdrawn by the Treasury, and unliquidated obligations and expenditures not yet disbursed. Cumulative results of operations represent the excess of financing sources over expenses since inception.

R. USE OF MANAGEMENT ESTIMATES

The preparation of the accompanying financial statements in accordance with Generally Accepted Accounting Principles requires management to make certain estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses. Actual results could differ from those estimates.

S. TRANSFERS

The NRC is a party to nonexpenditure transfers of funds with the USAID as a receiving entity. These transfers are for the international development of nuclear safety and regulatory authorities in Russia, Ukraine, Kazakhstan, Georgia, and Armenia for the startup, operation, shutdown, and decommissioning of Soviet-designed nuclear power plants; the safe and secure use of radioactive materials; and the accounting for and protection of nuclear materials. Transfers are legal delegations by one agency of its authority to obligate budget authority and outlay funds to another agency.

T. STATEMENT OF NET COST

The programs as presented on the Statement of Net Cost are based on the annual performance budget and are described as follows:

The Nuclear Reactor Safety program encompasses all the NRC efforts to ensure that civilian nuclear power reactor facilities and research and test reactors are licensed and operated in a manner that adequately protects the public health and safety, and the environment, and protects against radiological sabotage and theft or diversion of special nuclear materials. The Nuclear Reactor Safety program contains the following activities: operating reactors and new reactors.

The Nuclear Materials and Waste Safety program encompasses all the NRC efforts to protect the public health and safety and the environment and ensures the secure use and management of radioactive materials. The Nuclear Materials and Waste Safety program contains the following activities: fuel facilities, nuclear materials users, decommissioning and low-level waste, spent fuel storage and transportation, and high-level waste repository.

For intragovernmental gross costs and revenue, the buyers and sellers are Federal entities. For earned revenues from the public, the buyers of the goods or services are non-Federal entities.

NOTE 2 – FUND BALANCE WITH TREASURY

As of September 30,	2015	2014
Fund Balances		
Appropriated funds	**$ 350,368**	$ 371,197
Nuclear Waste Fund	**3,470**	6,191
Other fund types	**-**	3
Total	**$ 353,838**	$ 377,391
Status of Fund Balance with Treasury		
Unobligated balance		
Available		
Appropriated funds	**$ 26,096**	$ 53,295
Unavailable		
Unapportioned	**1,904**	169
Obligated balance not yet disbursed	**325,838**	323,927
Total	**$ 353,838**	$ 377,391

The Fund Balance with Treasury consists of the unobligated and obligated budgetary account balances, to include NWF activity. The NWF unobligated balance is $2.8 million and $4.8 million as of September 30, 2015, and 2014, respectively.

Other fund types in the Fund Balance with Treasury represents license fee collections used to offset the NRC current-year budget authority, miscellaneous collections, and adjustments which will offset revenue in the following FY.

NOTE 3 – ACCOUNTS RECEIVABLE

As of September 30,	2015	2014
Intragovernmental		
Fee receivables and reimbursements	**$ 11,095**	$ 26,395
Receivables with the Public		
Materials and facilities fees-billed	**$ 7,049**	$ 17,054
Materials and facilities fees-unbilled	**79,913**	72,351
Other	**161**	187
Total Receivables with the Public	**87,123**	89,592
Less: Allowance for uncollectible accounts	**(2,179)**	(4,420)
Total Receivables with the Public, Net	**$ 84,944**	$ 85,172
Total Accounts Receivable	**$ 98,218**	$ 115,987
Less: Allowance for uncollectible accounts	**(2,179)**	(4,420)
Total Accounts Receivable, Net	**$ 96,039**	$ 111,567

NOTE 4 – PROPERTY AND EQUIPMENT, NET

As of September 30,				2015	2014
Fixed Assets Class	**Service Years**	**Acquisition Value**	**Accumulated Depreciation and Amortization**	**Net Book Value**	**Net Book Value**
Equipment	5-8	$ 9,461	$ (8,381)	**$ 1,080**	$ 1,114
Leased equipment	5-8	1,462	(790)	**672**	91
IT software	5	56,162	(47,824)	**8,338**	13,160
IT software under development	-	4,596	-	**4,596**	396
Leasehold improvements	20	111,933	(55,048)	**56,885**	71,004
Leasehold improvements in progress	-	7,485	-	**7,485**	4,515
Total		$ 191,099	$ (112,043)	**$ 79,056**	$ 90,280

In FY 2009, the NRC signed an Interagency Agreement with the GSA to fund the buildout of the NRC office space for the new Three White Flint North (3WFN) office building. The NRC capitalized the cost of the buildout as a leasehold improvement, original total cost $51.7 million. However, to comply with the OMB's Freeze the Footprint initiative, the U.S. Congress determined that the NRC should only occupy 6 of the 14 floors of the 3WFN office building.

Subsequently, the GSA has leased 8 of the 14 floors to the U.S. Food and Drug Administration (FDA). The FDA occupied 4 floors during the 4th quarter of FY 2014, and 4 additional floors as well as the cafeteria space during the 3rd quarter of FY 2015. Accordingly, the NRC recognized a loss on the impaired asset for the remaining net realizable value of the buildout cost for the 3WFN office space now occupied by the FDA of $12.4 million and $11.2 million as of September 30, 2015, and 2014, respectively.

In accordance with SFFAS No. 44 Accounting for Impairment of General Property, Plant, and Equipment Remaining in Use, the NRC repairs or replaces capital assets as required and does not recognize any other impairment losses at this time.

NOTE 5 – OTHER LIABILITIES

As of September 30,	2015	2014
Intragovernmental		
Liability to the U.S. Treasury General Fund for miscellaneous receipts	**$ 35**	$ 70
Liability for advances from other agencies	**15**	7
Accrued workers' compensation	**1,522**	1,601
Accrued unemployment compensation	**18**	11
Employee benefit contributions	**3,625**	2,998
Total Intragovernmental Other Liabilities	**$ 5,215**	$ 4,687
Other Liabilities		
Accrued annual leave	**$ 46,491**	$ 46,923
Accrued salaries and benefits	**14,058**	12,330
Contract holdbacks, advances, capital lease liability, and other	**7,008**	6,319
Contingent Liabilities	**-**	-
Grants Payable	**12,143**	9,157
Total Other Liabilities	**$ 79,700**	$ 74,729
Total Intragovernmental and Other Liabilities	**$ 84,915**	$ 79,416

Other liabilities are current except for capital lease liability (Note 7).

NOTE 6 – LIABILITIES NOT COVERED BY BUDGETARY RESOURCES

As of September 30,	2015	2014
Intragovernmental		
FECA paid by DOL	**$ 1,522**	$ 1,601
Accrued unemployment compensation	**18**	11
Federal Employee Benefits		
Future FECA	**6,040**	6,669
Other		
Accrued annual leave	**46,491**	46,923
Contingent Liabilities	-	-
Total Liabilities Not Covered by Budgetary Resources	**54,071**	55,204
Total Liabilities Covered by Budgetary Resources	**73,895**	69,066
Total Liabilities	**$ 127,966**	$ 124,270

Liabilities not Covered by Budgetary Resources represents the amount of future funding needed to pay the accrued unfunded expenses as of September 30, 2015, and 2014. These liabilities are not funded from current or prior-year appropriations and assessments, but rather should be funded from future appropriations and assessments. Accordingly, future funding requirements have been recognized for the expenses that will be paid from future appropriations.

The projected annual benefit payments for FECA are discounted to present value. For FY 2015, projected annual payments were discounted to present value based on the OMB's interest rate assumptions, which were interpolated to reflect the average duration in years for income payments and medical payments. The interest rate assumptions used for FY 2015 discounting were 3.46 percent in year 1 and 3.46 percent in year 2 for wage benefits; and 2.86 percent in year 1 and 2.86 percent in year 2 for medical benefits.

NOTE 7 – LEASES

As of September 30,	2015	2014
Assets under capital leases:		
Copiers and booklet maker	**$ 1,462**	$ 1,806
Accumulated depreciation	**(790)**	(1,715)
Net assets under capital leases	**$ 672**	$ 91

As of September 30,				2015	2014
Future Lease Payments Due:	**Fiscal Year**	**Capital**	**Operating**		
	2014	$ -	$ -	**$ -**	$ 8
	2015	24	-	**24**	46,455
	2016	201	39,727	**39,928**	43,141
	2017	204	39,058	**39,262**	42,497
	2018	207	35,504	**35,711**	37,778
	2019 and thereafter	52	158,227	**158,279**	158,227
	Total Lease Liability	688	272,516	**273,204**	328,106
Subtract: Imputed Interest		(19)	-	**(19)**	(1)
Total Future Lease Payments		$ 669	$ 272,516	**$ 273,185**	$ 328,105

The Capital Lease Liability of $688 thousand for reproduction equipment is included in Other Liabilities (Note 5). For Future Lease Payments, the NRC calculates the Capital Lease Liability and subtracts the imputed interest to arrive at the Total Future Lease Payments. The reproduction equipment is depreciated over 5 years using the straight-line method with no salvage value.

The land and buildings in which the NRC operates are leased through the GSA. The NRC Headquarters complex consists of three office buildings and a warehouse located in Rockville, MD, with one of the headquarters office buildings jointly leased with the FDA. The NRC has four regional offices located in King of Prussia, PA, Atlanta, GA, Lisle, IL, and Arlington, TX. In addition, the NRC operates and maintains a Technical Training Center (TTC) located in Chattanooga, TN.

The NRC leases for land and buildings do not have renewal options or contingent rental restrictions. The joint lease for the headquarters office building with the FDA and the leases for the four regional office buildings have escalation clauses. The leases for the two remaining office buildings at headquarters, the warehouse, and the TTC do not have escalation clauses.

NOTE 8 – CUMULATIVE RESULTS OF OPERATIONS

As of September 30,	2015	2014
Liabilities not covered by budgetary resources (Note 6)	**$ (54,071)**	$ (55,204)
Investment in property and equipment, net (Note 4)	**79,056**	90,280
Contributions from foreign cooperative research agreements	**4,833**	4,306
Nuclear Waste Fund	**3,470**	6,191
Accounts receivable - fees	**95,814**	111,114
Fee Collection Revenue Not Transferred	**-**	3
Other	**2**	128
Cumulative Results of Operations	**$ 129,104**	$ 156,818

NOTE 9 – STATEMENT OF NET COST

For the fiscal years ended September 30,	2015	2014
Nuclear Reactor Safety		
Intragovernmental gross costs	**$ 243,406**	$ 234,636
Less: Intragovernmental earned revenue	**(57,412)**	(55,733)
Intragovernmental net costs	**185,994**	178,903
Gross costs with the public	**595,276**	582,643
Less: Earned revenues from the public	**(756,868)**	(759,305)
Net costs with the public	**(161,592)**	(176,662)
Total Net Cost of Nuclear Reactor Safety	**$ 24,402**	$ 2,241
Nuclear Materials and Waste Safety		
Intragovernmental gross costs	**$ 64,238**	$ 63,614
Less: Intragovernmental earned revenue	**(7,122)**	(5,947)
Intragovernmental net costs	**57,116**	57,667
Gross costs with the public	**180,539**	175,691
Less: Earned revenues from the public	**(79,432)**	(75,567)
Net costs with the public	**101,107**	100,124
Total Net Cost of Nuclear Materials and Waste Safety	**$ 158,223**	$ 157,791

NOTE 10 – EXCHANGE REVENUES

For the fiscal years ended September 30,	2015	2014
Fees for licensing, inspection, and other services	**$ 896,184**	$ 891,446
Revenue from reimbursable work	**4,650**	5,106
Total Exchange Revenues	**$ 900,834**	$ 896,552

NOTE 11 – FINANCING SOURCES OTHER THAN EXCHANGE REVENUE

For the fiscal years ended September 30,	2015	2014
Appropriations Used		
Collections are used to reduce the fiscal year's appropriations recognized:		
Funds consumed	**$ 1,041,101**	$ 999,612
Less: Collection of fees assessed	**(911,501)**	(871,206)
Less: Nuclear Waste Funding Expense	**(2,721)**	(7,307)
Total Appropriations Used	**$ 126,879**	$ 121,099

Funds consumed include $50.7 million and $42.9 million through September 30, 2015, and 2014, respectively, of available funds from prior years.

For the fiscal years ended September 30,	2015	2014
Non-Exchange Revenue		
Civil penalties	**$ 195**	$ 45
Miscellaneous receipts	**178**	120
Non-Exchange Revenue	**373**	165
Contra-Revenue	**(373)**	(165)
Total Non-Exchange Revenue, Net of Funds Returned to the U.S. Treasury General Fund	**$ -**	$ -

For the fiscal years ended September 30,	2015	2014
Imputed Financing		
Civil Service Retirement System	**$ 10,259**	$ 18,038
Federal Employee Health Benefit	**17,686**	16,954
Federal Employee Group Life Insurance	**87**	89
Judgments/Awards	**-**	33
Total Imputed Financing	**$ 28,032**	$ 35,114

NOTE 12 – TOTAL OBLIGATIONS INCURRED

For the fiscal years ended September 30,	2015	2014
Direct Obligations		
Category A	**$ 1,046,459**	$ 1,052,034
Exempt from Apportionment	**2,295**	8,391
Total Direct Obligations	**1,048,754**	1,060,425
Reimbursable Obligations	**5,059**	5,187
Total Obligations Incurred	**$ 1,053,813**	$ 1,065,612

Obligations exempt from apportionment are the result of funds derived from the NWF. Category A Obligations consist of the NRC appropriations only.

NOTE 13 – UNDELIVERED ORDERS AT THE END OF THE PERIOD

For the fiscal years ended September 30,	2015	2014
Undelivered Orders - Unpaid		
Nuclear Waste Fund	**$ 633**	$ 1,378
Salaries and Benefits	**257,171**	260,402
Inspector General	**1,517**	592
Total Undelivered Orders - Unpaid	**$ 259,321**	$ 262,372
Undelivered Orders - Paid		
Nuclear Waste Fund	**$ -**	$ -
Salaries and Benefits	**10,885**	7,712
Inspector General	**384**	344
Total Undelivered Orders - Unpaid	**$ 11,269**	$ 8,056
Total Undelivered Orders	**$ 270,590**	$ 270,428

NOTE 14 – NUCLEAR WASTE FUND

For FY 2015 and FY 2014, the NRC's budget did not include funds from the NWF. The funding provided to the NRC prior to FY 2013 and carried forward to subsequent years was for the purpose of performing activities associated with the U.S. Department of Energy's (DOE) application for a high-level waste repository at Yucca Mountain, NV.

The SFFAS No. 43 "Funds from Dedicated Collections: Amending SFFAS 27, Identifying and Reporting Earmarked Funds," lists three defining criteria for funds from dedicated collections. Generally, funds from dedicated collections must have at least one source of funds external to the Federal Government, and the statute provides explicit authority to retain current, unused revenues for future use. Also, the law includes a requirement to account for and report on the receipt and use of the financing sources as distinguished from general revenues.

In 1982, Congress passed the *Nuclear Waste Policy Act of 1982* (Public Law 97-425) establishing the NWF to be administered by DOE (42 U.S.C. 10222). For the NRC, the NWF transfer is a source of financing from other than non-Federal sources. The NRC collects no revenue on behalf of the NWF and has no administrative control over it. Furthermore, the Treasury has no separate fund symbol for the NWF under the NRC's agency location code. The receipt and expenditure of NWF money is reported to Treasury under the NRC's primary Salaries and Expenses fund (X0200).

Based on these facts, the NWF is not a fund from dedicated collections from the NRC's perspective. In order to provide additional information to the users of these financial statements, enhanced disclosure of the fund is presented below.

The NWF amounts received, expended, obligated, and unobligated balances as of September 30, 2015, and 2014, are shown in the following table:

For the fiscal years ended September 30,	2015	2014
Appropriations Received	**$ -**	$ -
Expended Appropriations	**$ 2,722**	$ 7,307
Obligations Incurred	**$ 2,295**	$ 8,391
Unobligated Balances (includes recoveries of prior-year obligations)	**$ 2,836**	$ 4,813

NOTE 15 – EXPLANATION OF DIFFERENCES BETWEEN THE STATEMENT OF BUDGETARY RESOURCES AND THE BUDGET OF THE U.S. GOVERNMENT

SFFAS No. 7, "Accounting for Revenue and Other Financing Sources," requires the NRC to reconcile the budgetary resources reported on the SBR to the actual budgetary resources presented in the President's Budget and explain any material differences.

The NRC does not have any material differences between the budgetary resources reported on the SBR for FY 2014 and the President's Budget for FY 2014. The reconciliation was based on FY 2014 results because the Budget of the United States (also known as the President's Budget), with actual numbers for FY 2015, was not published at the time that these financial statements were issued.

The FY 2015 actual budgetary resources numbers will be available in the FY 2017 President's Budget which is expected to be published in February 2016, and can be located at the OMB Web site http://www.whitehouse.gov/cmb and will be available from the U.S. Government Printing Office.

NOTE 16 – RECONCILIATION OF NET COST OF OPERATIONS TO BUDGETARY RESOURCES

For the fiscal years ended September 30,	2015	2014
Budgetary Resources Obligated		
Obligations incurred (Note 12)	**$ 1,053,813**	$ 1,065,612
Less: Spending authority from offsetting collections and recoveries	**(13,048)**	(20,233)
Less: Distributed offsetting receipts, current year	**(885,339)**	(871,206)
Less: Distributed offsetting receipts, prior year	**(26,162)**	-
Net Obligations	**129,264**	174,173
Other Resources		
Imputed financing from costs absorbed by others	**28,032**	35,114
Non-Exchange Revenue	**373**	165
Funds returned to U.S. Treasury General Fund	**(373)**	(165)
Net Other Resources Used to Finance Activities	**28,032**	35,114
Total Resources Used to Finance Activities	**157,296**	209,287
Resources Used to Finance Items Not Part of the Net Cost of Operations	**(3,208)**	(44,118)
Total Resources Used to Finance the Net Cost of Operations	**154,088**	165,169
Components of the Net Cost of Operations that will not require or generate resources in the current period	**28,537**	(5,137)
Net Cost of Operations	**$ 182,625**	$ 160,032

Distributed offsetting receipts collected and transferred to the Treasury in FY 2015 consisted of $885.3 million to offset the FY 2015 appropriation and $26.2 million to offset the FY 2014 appropriation.

NOTE 17 – CONTINGENCIES

The NRC is subject to potential liabilities in various administrative proceedings, legal actions, environmental suits, and claims brought against it. In the opinion of the NRC's management and legal counsel, the ultimate resolution of these proceedings, actions, suits, and claims will not materially affect the financial position or net costs of the NRC.

Reasonably Possible Likelihood of an Adverse Outcome:

As of September 30, 2015, the NRC was a party to a case in which an adverse outcome was reasonably possible. The upper range of the loss on the potential liability is $21.3 million as of the end of FY 2015.

REQUIRED SUPPLEMENTARY INFORMATION

COMBINING STATEMENT OF BUDGETARY RESOURCES *(IN THOUSANDS)*

For the fiscal years ended September 30, 2015	Salaries and Expenses	Office of Inspector General	Nuclear Facility Fees	Total
Budgetary Resources				
Unobligated balances, brought forward, October 1	$ 50,843	$ 2,618	$ 3	**$ 53,464**
Recoveries of prior-year obligations				
Actual	5,036	11	-	**5,047**
Unobligated balance from prior-year budget authority, net	55,879	2,629	3	**58,511**
Appropriations	1,003,233	12,071	(3)	**1,015,301**
Spending authority from offsetting collections	7,991	10	-	**8,001**
Total Budgetary Resources	$ 1,067,103	$ 14,710	$ -	**$ 1,081,813**
Status of Budgetary Resources				
Obligations incurred (Note 12)	$ 1,041,381	$ 12,432	$ -	**$ 1,053,813**
Unobligated balance, end of period				
Apportioned	20,985	2,274	-	**23,259**
Exempt from apportionment	2,837	-	-	**2,837**
Unapportioned	1,900	4	-	**1,904**
Unobligated balance, end of period	25,722	2,278	-	**28,000**
Total Status of Budgetary Resources	$ 1,067,103	$ 14,710	$ -	**$ 1,081,813**
Change in Obligated Balance				
Unpaid obligations				
Unpaid obligations, brought forward, October 1	$ 324,913	$ 963	$ -	**$ 325,876**
Obligations incurred (Note 12)	1,041,381	12,432	-	**1,053,813**
Outlays, gross	(1,035,454)	(11,536)	-	**(1,046,990)**
Recoveries of prior-year unpaid obligations	(5,036)	(11)	-	**(5,047)**
Total unpaid obligations, end of period	$ 325,804	$ 1,848	$ -	**$ 327,652**
Uncollected payments				
Uncollected customer payments from Federal sources, brought forward, October 1	$ (1,949)	$ -	$ -	**$ (1,949)**
Change in uncollected customer payments, from Federal sources	135	-	-	**135**
Total uncollected customer payments, from Federal sources	$ (1,814)	$ -	$ -	**$ (1,814)**
Memorandum entries:				
Obligated balances, start of year	$ 322,964	$ 963	$ -	**$ 323,927**
Obligated balances, end of period	$ 323,990	$ 1,848	$ -	**$ 325,838**
Budget Authority and Outlays, Net				
Budget Authority, gross	$ 1,011,224	$ 12,081	$ (3)	**$ 1,023,302**
Actual offsetting collections	(8,126)	(10)	-	**(8,136)**
Change in uncollected customer payments, from Federal sources	135	-	-	**135**
Budget Authority, Net	$ 1,003,233	$ 12,071	$ (3)	**$ 1,015,301**
Outlays, gross	$ 1,035,454	$ 11,536	$ -	**$ 1,046,990**
Actual offsetting collections	(8,126)	(10)	-	**(8,136)**
Outlays, net	1,027,328	11,526	-	**1,038,854**
Distributed offsetting receipts	-	-	(911,501)	**(911,501)**
Agency Outlays, Net	$ 1,027,328	$ 11,526	$ (911,501)	**$ 127,353**

COMBINING STATEMENT OF BUDGETARY RESOURCES *(IN THOUSANDS)*

For the fiscal years ended September 30, 2014	Salaries and Expenses	Office of Inspector General	Nuclear Facility Fees	Total
Budgetary Resources				
Unobligated balances, brought forward, October 1	$ 41,411	$ 1,368	$ -	**$ 42,779**
Recoveries of prior-year obligations				
Actual	10,223	377	-	**10,600**
Unobligated balance from prior-year budget authority, net	51,634	1,745	-	**53,379**
Appropriations	1,043,937	11,955	3	**1,055,895**
Spending authority from offsetting collections	9,800	2	-	**9,802**
Total Budgetary Resources	$ 1,105,371	$ 13,702	$ 3	**$ 1,119,076**
Status of Budgetary Resources				
Obligations incurred (Note 12)	$ 1,054,528	$ 11,084	$ -	**$ 1,065,612**
Unobligated balance, end of period				
Apportioned	45,861	2,618	-	**48,479**
Exempt from apportionment	4,813	-	3	**4,816**
Unapportioned	169	-	-	**169**
Unobligated balance, end of period	50,843	2,618	3	**53,464**
Total Status of Budgetary Resources	$ 1,105,371	$ 13,702	$ 3	**$ 1,119,076**
Change in Obligated Balance				
Unpaid obligations				
Unpaid obligations, brought forward, October 1	$ 278,098	$ 714	$ -	**$ 278,812**
Obligations incurred (Note 12)	1,054,528	11,084	-	**1,065,612**
Outlays, gross	(997,490)	(10,458)	-	**(1,007,948)**
Recoveries of prior-year unpaid obligations	(10,223)	(377)	-	**(10,600)**
Total unpaid obligations, end of period	$ 324,913	$ 963	$ -	**$ 325,876**
Uncollected payments				
Uncollected customer payments from Federal sources, brought forward, October 1	$ (3,517)	$ -	$ -	**$ (3,517)**
Change in uncollected customer payments, from Federal sources	1,568	-	-	**1,568**
Total uncollected customer payments, from Federal sources	$ (1,949)			**$ (1,949)**
Memorandum entries:				
Obligated balances, start of year	$ 274,581	$ 714	$ -	**$ 275,295**
Obligated balances, end of period	$ 322,964	$ 963	$ -	**$ 323,927**
Budget Authority and Outlays, Net				
Budget Authority, gross	$ 1,053,737	$ 11,957	$ 3	**$ 1,065,697**
Actual offsetting collections	(11,199)	(2)	-	**(11,201)**
Change in uncollected customer payments, from Federal sources	1,568	-	-	**1,568**
Budget Authority, Net	$ 1,044,106	$ 11,955	$ 3	**$ 1,056,064**
Outlays, gross	$ 997,490	$ 10,458	$ -	**$ 1,007,948**
Actual offsetting collections	(11,199)	(2)	-	**(11,201)**
Outlays, net	986,291	10,456	-	**996,747**
Distributed offsetting receipts	-	-	(871,206)	**(871,206)**
Agency Outlays, Net	$ 986,291	$ 10,456	$ (871,206)	**$ 125,541**

DEFERRED MAINTENANCE AND REPAIRS

DEFERRED MAINTENANCE AND REPAIRS FOR GENERAL PROPERTY, PLANT, AND EQUIPMENT (PP&E)

Deferred maintenance and repairs information is a requirement under SFFAS No. 42, Deferred Maintenance and Repairs (DM&R).

The SFFAS No. 42 defines DM&R as "maintenance and repairs that were not performed when they should have been or were scheduled to be and which are put off or delayed for a future period." Maintenance and repairs (M&R) are defined as activities directed toward keeping fixed assets in an acceptable condition. Activities include preventive maintenance; replacement of parts, systems, or components; and other activities needed to preserve or maintain the asset. M&R, as distinguished from capital improvements, exclude activities directed towards expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, its current use.

DM&R should include funded and unfunded M&R activities that have been delayed to a future period. DM&R on inactive and/or excess general property, plant, and equipment (G-PP&E) should be included to the extent that it is required to maintain inactive or excess G-PP&E in acceptable condition.

The NRC has performed an evaluation of DM&R activities for leased facilities, the multiple components of the agency IT infrastructure, and individual capital asset purchases with a cost equal to or greater than $50,000. The NRC did not include noncapitalized PP&E with a cost of less than $50,000, which are deemed immaterial.

DEFERRED MAINTENANCE AND REPAIRS FOR THE NRC FACILITIES, OTHER STRUCTURES, AND CAPITAL EQUIPMENT

The NRC has no DM&R for the NRC facilities, other structures, and equipment for the years ending September 30, 2015 and 2014.

DEFINING AND IMPLEMENTING M&R POLICIES IN PRACTICE

For the NRC leased facilities and capital equipment purchases, the NRC typically does not have any deferred maintenance or repairs. The NRC had no DM&R for Facilities, Other Structures, and Capital Equipment in FY 2015 and FY 2014.

For the Headquarters facilities, the NRC uses the GSA guidelines for maintenance activities along with industry best practices to determine the preventative maintenance activities to perform and the schedule for those activities. For the building structures and systems, the maintenance contractor performs all required periodic maintenance to keep the systems and buildings in a good state of repair. The contractor is held to a 98 percent scheduled completion rate with all the preventative maintenance completed within a reasonable time. When equipment reaches the end of its useful life, it is generally replaced with like kind or upgraded equipment. For any type of an emergent failure to facilities, the NRC would request additional funding, as needed, for repairs or replacement to structures and equipment.

For the regional offices, the building management (lessor) is responsible for performing all required periodic maintenance to keep the systems and buildings in a good state of repair. Generally, fixed assets are contained within the regional leases, including equipment purchased to support the operations of our leased space, such as diesel generators and chillers for the Incident Response Center (IRC), and the Local Area Network (LAN) and power cooling. Equipment requiring repair results in a service repair call. For those instances where equipment is purchased to support the NRC regional operations, maintenance contracts are put in place to provide periodic service and maintenance on the equipment. When equipment reaches the end of its useful life, it is generally replaced with like kind or with upgraded equipment. For any type of an emergent failure, the NRC would request additional funding, as needed, for repairs or replacement of equipment.

The TTC facility and associated systems are leased and maintained by the lessor. This includes any emergent repairs that may occur, as well as any scheduled

maintenance. Assets within the TTC are predominantly maintained by facilities personnel or in some cases, such as simulator systems, contractor personnel perform all required emergent and periodic maintenance to keep the simulator systems in a good state of repair. When equipment reaches the end of its useful life, it is replaced with like kind or upgraded equipment.

RANKING AND PRIORITIZATION OF M&R ACTIVITIES

Personnel safety is a priority at the NRC leased facilities. Maintenance activity, such as fire alarms and emergency exits, are given top priority. If a preventative maintenance activity must be deferred, which is typically only for 2 to 4 weeks, the impact to personnel safety and building functionality are considered during the review. Other maintenance and repair activities are executed as required so that there is no disruption to the NRC operations and the TTC training schedules.

FACTORS CONSIDERED IN DETERMINING ACCEPTABLE CONDITION

The NRC has a Facilities Management Branch at the headquarters facilities to perform the daily inspections and maintenance of the buildings and major systems. The NRC internally reviews planned maintenance activity records and historical logs of maintenance and repairs to monitor condition information on equipment. Based on the information gathered, the NRC will determine if planning for replacement or upgrade is needed. Additionally, the GSA conducts onsite inspections every 3 to 5 years at the headquarters facilities to assess the overall condition of the buildings and to determine when major systems and components need to be scheduled for replacement. For the TTC and regional offices, the NRC has a Facilities Management staff person onsite to work with the GSA to manage the buildings with support from the lessors. As a result, the GSA performs more frequent onsite inspections of the facilities. The NRC works in close coordination with GSA to ensure maintenance and repair activities are performed on a timely basis to all NRC-occupied facilities.

DEFERRED MAINTENANCE AND REPAIRS FOR INFORMATION TECHNOLOGY (IT) INFRASTRUCTURE AND SYSTEMS

The NRC IT infrastructure is a network of multiple equipment, software, and service components, taken as a whole, which provides the critical communication network that allows the NRC to accomplish its mission. The NRC IT infrastructure encompasses the following:

- End-User Systems and Support and End User hardware includes desktop, laptop, handheld devices, peripherals (local printers, shared printers), software (personal computer operating systems, office automation suites, messaging, and groupware), and hardware and software for help desks. Also included are network operations command centers, wire closets, and cable management. For regional offices, this includes regional end-user support similar to that provided by the Customer Support Center at Headquarters, including contract support and FTE.
- Telecommunications Services includes data networks and telecommunications (including wireless, multimedia, and local and long distance telephony); hardware and software operations; licenses; maintenance; and backup, continuity of operations, and disaster recovery. For regional offices, this includes local telecommunications, including contract support and FTE.
- Production Operations includes mainframes and servers (including Web hosting, but not Web content development and management); hardware and software operations; licenses; maintenance; and backup, continuity of operations, and disaster recovery. Also included are Homeland Security Presidential Directive-12 resources, which requires all Federal Executive Departments and Agencies to implement a governmentwide standard for secure and reliable forms of identification for access to Federal facilities and information systems.

The NRC relies on the asset Project and Program Managers to execute the maintenance budget and to establish and modify the M&R schedule as needed. Ranking factors that may impact the M&R schedule include personnel safety, age of the asset, scheduled replacement date, budget constraints, and unforeseen or unexpected events.

Additionally, for IT systems, whether computer-off-the-shelf or internally developed software, the NRC relies on the Project Manager and Program office to establish an M&R budget and schedule. Minor repairs, enhancements, and upgrades are completed internally through the regular M&R operations process. For major upgrades and replacement systems, the Project Manager must submit a request to perform the work to the appropriate IT governance boards for their approval.

DEFINING AND IMPLEMENTING M&R POLICIES IN PRACTICE

All of the NRC IT infrastructure M&R activities are performed under various contracts. For example, the main IT infrastructure and support services contract (ITISS) includes leasing of servers, computers, printers, and software; and provides provisions for periodic monitoring, maintenance, and repairs. Replacement of miscellaneous equipment components and software are scheduled for replacement as needed when the equipment reaches the end of its useful life and before the equipment and software become obsolete. Desktops and laptops are upgraded on a 3-year rolling schedule such that they do not become obsolete.

RANKING AND PRIORITIZATION OF M&R ACTIVITIES

The NRC program managers determine the requirements for ranking, scheduling, and performing IT infrastructure M&R activities and include them in the contractor statement of work. For the critical ITISS contract, the main ranking factor is the age of the asset (e.g. desktop, laptop, printer, BlackBerry, etc.), followed by cost/budget constraints. However, when applicable, personnel safety is considered and is the highest priority.

FACTORS CONSIDERED IN DETERMINING ACCEPTABLE CONDITION

In determining acceptable condition, the NRC mainly considers the asset's age, remaining useful life, and compatibility with current and required software.

INSPECTOR GENERAL'S LETTER TRANSMITTING INDEPENDENT AUDITORS' REPORT

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

OFFICE OF THE
INSPECTOR GENERAL

November 13, 2015

MEMORANDUM TO: Chairman Burns

FROM: Hubert T. Bell **/RA/**
Inspector General

SUBJECT: RESULTS OF THE AUDIT OF THE UNITED STATES NUCLEAR REGULATORY COMMISSION'S FINANCIAL STATEMENTS FOR FISCAL YEARS 2015 AND 2014 (OIG-16-A-04)

The Chief Financial Officers Act of 1990, as amended (CFO Act), requires the Inspector General (IG) or an independent external auditor, as determined by the IG, to annually audit the United States Nuclear Regulatory Commission's (NRC) financial statements in accordance with applicable standards. In compliance with this requirement, the Office of the Inspector General (OIG) retained CliftonLarsonAllen, LLP (CLA), to conduct this annual audit. Transmitted with this memorandum are the following CLA reports:

- Opinion on the Principal Statements.
- Opinion on Internal Control.
- Compliance with Laws and Regulations.

NRC's Performance and Accountability Report includes comparative financial statements for FY 2015 and FY 2014.

Objective of a Financial Statement Audit

The objective of a financial statement audit is to determine whether the audited entity's financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall financial statement presentation.

CLA's audit and examination were made in accordance with auditing standards generally accepted in the United States of America; standards applicable to the financial audits, contained in *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*. The audit included, among other things, obtaining an understanding of NRC and its operations, including internal control over financial reporting; evaluating the design and operating effectiveness of internal control and assessing risk; and testing relevant internal controls over financial reporting. Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal control to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies, or procedures may deteriorate.

FY 2015 Audit Results

The results are as follows:

Financial Statements

- Unmodified opinion.

Internal Controls

- Unqualified opinion.

Compliance with Laws and Regulations

- No reportable instances of noncompliance/no substantial noncompliance noted.

Office of the Inspector General Oversight of CLA Performance

To fulfill our responsibilities under the CFO Act and related legislation for ensuring the quality of the audit work performed, we monitored CLA's audit of NRC's FY 2015 and FY 2014 financial statements by:

- Reviewing CLA's audit approach and planning.
- Evaluating the qualifications and independence of CLA's auditors.
- Monitoring audit progress at key points.
- Examining the working papers related to planning and performing the audit and assessing NRC's internal controls.

- Reviewing CLA's audit reports to ensure compliance with *Government Auditing Standards* and OMB Bulletin No. 15-02.
- Coordinating the issuance of the audit reports.
- Performing other procedures deemed necessary.

CLA is responsible for the attached auditor's reports, dated November 6, 2015, and the conclusions expressed therein. OIG is responsible for technical and administrative oversight regarding the firm's performance under the terms of the contract. Our oversight, as differentiated from an audit in conformance with *Government Auditing Standards*, was not intended to enable us to express, and accordingly we do not express, an opinion on:

- NRC's financial statements.
- The effectiveness of NRC's internal control over financial reporting.
- NRC's compliance with laws and regulations.

However, our monitoring review, as described above, disclosed no instances where CLA did not comply, in all material respects, with applicable auditing standards.

Meeting with the Chief Financial Officer

At the exit conference on November 9, 2015, representatives of the Office of the Chief Financial Officer, OIG, and CLA discussed the results of the audit.

Comments of the Chief Financial Officer

In her response, the Chief Financial Officer (CFO) agreed with the report. The full text of the CFO's response follows this report.

We appreciate NRC staff's cooperation and continued interest in improving financial management within NRC.

Attachment: As stated

cc: Commissioner Svinicki
Commissioner Ostendorff
Commissioner Baran
M. Wylie, OCFO
F. Brown, OEDO
B. Pham, OEDO
H. Rasouli, OEDO
J. Jolicoeur, OEDO
EDO_ACS Distribution
RidsOCFOMailCenter Resource

INDEPENDENT AUDITORS' REPORT

CliftonLarsonAllen LLP

www.cliftonlarsonallen.com

INDEPENDENT AUDITORS' REPORT

Inspector General
United States Nuclear Regulatory Commission

Chairman
United States Nuclear Regulatory Commission

Report on the Financial Statements

We have audited the accompanying financial statements of the United States Nuclear Regulatory Commission (NRC), which comprise the balance sheets as of September 30, 2015 and 2014, and the related statements of net cost, changes in net position, and budgetary resources for the years then ended, and the related notes to the financial statements (financial statements).

Management's Responsibility for the Financial Statements

NRC management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America (U.S.); this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibilities

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of the financial statements in accordance with auditing standards generally accepted in the U.S., the standards applicable to the financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and Office of Management and Budget (OMB) Bulletin No. 15-02, *Audit Requirements for Federal Financial Statements* (OMB Bulletin 15-02). Those standards and OMB Bulletin 15-02 require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit of financial statements also involves evaluating the appropriateness of the accounting policies used and the reasonableness of significant accounting

INDEPENDENT AUDITORS' REPORT, CONTINUED

estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion on the Financial Statements

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the United States Nuclear Regulatory Commission as of September 30, 2015 and 2014, and its net costs, changes in net position, and budgetary resources for the years then ended, in accordance with accounting principles generally accepted in the U.S.

Other Matters

Required Supplementary Information
Accounting principles generally accepted in the U.S. issued by the Federal Accounting Standards Advisory Board (FASAB) require that NRC's Management Discussion and Analysis (MD&A), and other Required Supplementary Information (RSI) including the Combining Statement of Budgetary Resources, and Deferred Maintenance and Repairs, be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by FASAB, which considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the MD&A and other RSI in accordance with auditing standards generally accepted in the U.S., which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the RSI because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information
Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The FY 2015 Performance and Accountability Report contains other information including the cover, table of contents, Message from the Chairman, Chapter 2 (Program Performance), Message from the Chief Financial Officer, the Inspector General's letter transmitting the Independent Auditors' Report, management's response to the audit report, and Chapter 4 (Other Information). This information is presented for purposes of additional analysis and is not a required part of the financial statements or RSI. This other information has not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Report on Internal Control Over Financial Reporting

We have audited NRC's internal control over financial reporting as of September 30, 2015, based on criteria established under 31 U.S.C. 3512 (c), (d), commonly known as the Federal Managers' Financial Integrity Act of 1982 (FMFIA) and OMB Circular A-123, *Management's Responsibility for Internal Control*, as amended (OMB Circular A-123).

Management's Responsibility for Internal Control

NRC management is responsible for maintaining effective internal control over financial reporting and for its statement of assurance on the effectiveness of internal control over financial reporting.

INDEPENDENT AUDITORS' REPORT, CONTINUED

Auditors' Responsibilities

Our responsibility is to express an opinion on NRC's internal control over financial reporting based on our audit. We conducted our audits of internal control over financial reporting in accordance with attestation standards established by the American Institute of Certified Public Accountants and contained in *Government Auditing Standards*.

An audit of internal control over financial reporting includes obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and evaluating the design, and testing the operating effectiveness of internal control over financial reporting based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances.

Definition and Inherent Limitations of Internal Control Over Financial Reporting

An entity's internal control over financial reporting is a process effected by those charged by governance, management, and other personnel, designed to provide reasonable assurance that (1) transactions are properly recorded, processed, and summarized to permit the preparation of financial statements in accordance with accounting principles generally accepted in the U.S.; (2) assets are safeguarded against loss from unauthorized acquisition, use, or disposition; and (3) transactions are executed in accordance with laws governing the use of budget authority and other applicable laws, regulations, contracts, and grant agreements that could have a direct and material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent, or detect and correct, misstatements due to fraud or error. We also caution that projecting our audit results to future periods is subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with controls may deteriorate.

Opinion on Internal Control Over Financial Reporting

In our opinion, NRC maintained, in all material respects, effective internal control over financial reporting as of September 30, 2015, based on criteria established under FMFIA and OMB Circular A-123.

Report on Compliance Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards*

Compliance With Laws, Regulations, Contracts and Grant Agreements

As part of obtaining reasonable assurance about whether NRC's financial statements are free from material misstatement, we performed tests of NRC's compliance with certain provisions of laws, regulations, contracts, and grant agreements consistent with our professional responsibilities discussed below. The results of our tests for the year ended September 30, 2015, disclosed no instances of noncompliance that are required to be reported in accordance with *Government Auditing Standards.*

Systems Compliance With the Federal Financial Management Improvement Act (*FFMIA) Requirements*

Under FFMIA, we are required to report whether the financial management systems used by NRC substantially comply with the (1) Federal financial management systems requirements, (2) applicable

INDEPENDENT AUDITORS' REPORT, CONTINUED

Federal accounting standards, and (3) the United States Standard General Ledger (USSGL) at the transaction level. To meet this requirement, we performed tests of compliance with FFMIA Section 803(a) requirements. However, providing an opinion on compliance with FFMIA was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests of FFMIA disclosed no instances in which NRC's financial management systems did not substantially comply with (1) Federal financial management systems requirements, (2) applicable Federal accounting standards, or (3) the USSGL at the transaction level.

Management's Responsibility for Compliance

Management is responsible for ensuring NRC's financial management systems are in substantial compliance with FFMIA requirements, and ensuring compliance with other applicable laws, regulations, contracts, and grant agreements.

Auditors' Responsibilities

We are responsible for testing compliance with certain provisions of laws, regulations, contracts and grants that could have a direct effect on the financial statements.

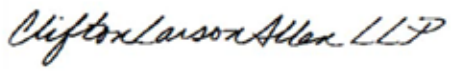
We did not test compliance with all laws, regulations, contracts, and grant agreements applicable to NRC. We limited our tests of compliance to certain provisions of laws, regulations, contracts, and grant agreements that could have a direct effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audits, and accordingly, we do not express such an opinion. We caution that noncompliance with laws, regulations, contracts, and grants may occur and not be detected by these tests and that such testing may not be sufficient for other purposes. Also, our work on FFMIA would not necessarily disclose all instances of noncompliance with FFMIA requirements.

Purpose of the Report on Compliance

The purpose of the Report on Compliance is solely to describe the scope of our testing of compliance with laws, regulations, contracts, and grants and the result of that testing, and not to provide an opinion on NRC's compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering NRC's compliance. Accordingly, this report is not suitable for any other purpose.

Management's Response to the Independent Auditors' Report

Management's response to our report is presented in the Performance and Accountability Report. We did not audit NRC's response and, accordingly, we express no opinion on it.



CliftonLarsonAllen LLP

Arlington, Virginia
November 6, 2015

MANAGEMENT'S RESPONSE TO THE INDEPENDENT AUDITORS' REPORT ON THE FINANCIAL STATEMENTS

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

November 9, 2015

CHIEF FINANCIAL OFFICER

MEMORANDUM TO: Stephen D. Dingbaum
Assistant Inspector General for Audits
Office of the Inspector General

FROM: Maureen E. Wylie
Chief Financial Officer

SUBJECT: AUDIT OF THE FISCAL YEAR 2015 AND 2014 FINANCIAL STATEMENTS

We appreciate the collaborative relationship between the Office of the Inspector General, the auditors, and the Office of the Chief Financial Officer in supporting our continuing effort to improve financial reporting. We have reviewed the Independent Auditor's Report of the Agency's Fiscal Year 2015 and 2014 financial statements and are in agreement with it.

cc: V. McCree, EDO
F. Brown, AO/OEDO
A. Valentin, Acting AO/OEDO
B. Pham, DAO/OEDO
H. Rasouli, DAO/OEDO
J. Arildsen, OEDO
J. Jolicoeur, OEDO
Y. Chen, OEDO
M. Schofer, OEDO

UNITED STATES NUCLEAR REGULATORY COMMISSION

CHAPTER 4

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UNITED STATES NUCLEAR REGULATORY COMMISSION

CHAPTER 4

INSPECTOR GENERAL'S ASSESSMENT OF THE MOST SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGES FACING THE NRC

CHAPTER 4 ▪ INSPECTOR GENERAL'S ASSESSMENT OF THE MOST SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGES FACING THE NRC

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

OFFICE OF THE
INSPECTOR GENERAL

October 1, 2015

MEMORANDUM TO: Chairman Burns

FROM: Hubert T. Bell ***/RA/***
Inspector General

SUBJECT: INSPECTOR GENERAL'S ASSESSMENT OF THE MOST SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGES FACING THE NUCLEAR REGULATORY COMMISSION (OIG-16-A-01)

In accordance with the Reports Consolidation Act of 2000, I am providing what I consider to be the most serious management and performance challenges facing the U.S. Nuclear Regulatory Commission (NRC) in FY 2016.

INTRODUCTION

NRC is an independent Federal agency established to license and regulate the Nation's civilian use of radioactive materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.

NRC performs critical functions to ensure the safe and secure use of radioactive materials in the United States and to protect both the public and radiation workers from radiation hazards that could result from the use of radioactive materials. NRC provides licensing and oversight activities for 99 commercial nuclear power reactors.

NRC's principal regulatory functions are to establish regulatory requirements and conduct confirmatory research to support requirements; issue licenses to facility operators and owners, possessors, and users of nuclear materials; oversee these licensees to ensure they are in compliance with NRC requirements and operate safely

and securely; and respond to emergencies involving regulated activities. NRC also participates in international work that is integral to the agency's mandate to protect public health and safety and promote the common defense and security. To carry out its mission, NRC's proposed FY 2016 budget is $1,032.2 million, including 3,754 full-time equivalent positions.

Based on NRC's mission and objectives, the Office of the Inspector General (OIG) annually identifies what it considers to be the most serious management and performance challenges facing NRC. Our goal is to focus attention on these issues to enhance the effectiveness of NRC programs and operations.

MANAGEMENT CHALLENGES

The FY 2016 management and performance challenges are directly related to NRC's mission areas (commercial nuclear reactors and nuclear materials), security, information technology and information management, financial programs and administrative functions. Our work in these areas indicates that while program improvements are needed, NRC is continually making progress to address OIG recommendations and improve the efficiency and effectiveness of its programs. The FY 2016 management and performance challenges are as follows:

1. Regulation of nuclear reactor safety programs.
2. Regulation of nuclear materials and radioactive waste programs.
3. Management of security over internal infrastructure (personnel, physical, and cyber security) and nuclear security.
4. Management of information technology and information management.
5. Management of financial programs.
6. Management of administrative functions.

These challenges represent what OIG considers to be inherent and continuing program challenges relative to maintaining effective and efficient oversight and internal controls. As a result, it is likely they will continue to be challenges from year to year. Challenges do not necessarily equate to problems.

Attached is a brief synopsis of each management and performance challenge along with summaries of OIG reports that inform the decision process. A complete list of reports can be found at http://www.nrc.gov/reading-rm/doc-collections/insp-gen/.

1. Regulation of nuclear reactor safety programs.

NRC is responsible for maintaining an established regulatory framework for the safe and secure use of civilian nuclear reactors, including commercial nuclear power plants as well as research, test, and training reactors. There are currently 99 nuclear power plants licensed to operate in the United States, which generate about 20 percent of the Nation's electrical use, as well as 5 plants under construction (Vogtle 3 and 4, Summer 2 and 3, Watts Bar 2). There are also 31 licensed research and test reactors. NRC's regulatory oversight responsibilities in the reactor arena include developing policy and rulemaking; licensing and inspecting reactors; licensing reactor operators; and enforcing regulations. The agency implements the nuclear reactor safety program with approximately 77 percent ($810 million) of its total budget authority and 76 percent (2,900 full-time equivalent employees) of its total staff. Thus, it is of paramount importance that the agency implement these programs as effectively and efficiently as possible.

Key reactor safety oversight challenges for NRC include the following:

- Ensuring an adequate and efficient reactor and operator licensing process, accounting for safety impacts of major changes to plant configuration, and sufficiently evaluating older plants for license extensions.
- Providing an adequate number of trained inspectors for sufficient oversight, and ensuring inspection procedures are adequate and are being followed.
- Ensuring adequate construction oversight of new power reactors, adequately reviewing and approving design changes that are occurring concurrent with the construction, and verifying whether plants are built in accordance with the intended design.
- Ensuring appropriate and reasonable application of the agency's Reactor Oversight Process, Construction Reactor Oversight Process, Significance Determination Process for determining regulatory violation severity, safety culture policy, and Alternative Dispute Resolution.
- Incorporating operational experience from the domestic and international nuclear industries into NRC's regulatory program, including lessons learned from Fukushima and other events.

The following audit report synopses are examples of work that OIG has completed or is ongoing pertaining to nuclear reactor safety programs.

Audit of NRC's Task Interface Agreement Process
OIG-15-A-05, November 25, 2014

NRC's Office of Nuclear Reactor Regulation (NRR) is responsible for a broad range of regulatory activities in the licensing and oversight of commercial nuclear power reactors to protect public health and safety and the environment. NRR works with the NRC regions and other offices to accomplish its mission, including providing technical assistance to the regions and other offices. A Task Interface Agreement (TIA) is one such form of technical assistance that NRR provides the regions and other offices. A TIA is a request for NRR technical assistance from other NRC organizations and contains questions on subjects involving regulatory or policy interpretations, specific plant events, or inspection findings. Ensuring that adequate, appropriate, and timely feedback is provided to the requesting organization is central to the agency's mission to protect public health and safety and the environment.

Our review found that NRC regional and office staff requesting technical assistance from NRR are generally satisfied with the technical content provided through the TIA process. However, there are concerns regarding the efficiency of the process and, conceivably, long overdue TIAs could be regarded as eroding overall effectiveness of the TIA process. Roughly one-third of TIA requests are not resolved and communicated in a timely manner because NRC lacks controls to ensure TIA timeliness performance measures are met. Failure to meet timeliness performance measures degrades the agency's safety oversight mission as well as overall program effectiveness and accountability. The agency agreed with the report's findings and recommendations and is in the process of developing new performance measures that will serve as internal controls to ensure TIA timeliness.

The full report is available at: http://pbadupws.nrc.gov/docs/ML1432/ML14329A081.pdf

Audit of NRC's Construction Reactor Oversight Process
OIG-15-A-14, June 16, 2015

NRC licenses and oversees new nuclear power reactor construction. Four reactors are being built under combined licenses issued in accordance with Title 10, Code of Federal Regulations, Part 52, Licenses, Certifications, and Approvals for Nuclear Power Plants. Two of the new reactors are in Georgia (Vogtle) and two in South Carolina (Summer). A fifth reactor, Watts Bar 2 is being built under the regulations for 10 CFR Part 50. NRC uses the Construction Reactor Oversight Process (cROP), a matrix-based tool for evaluating the quality of construction, to oversee construction of new nuclear power reactors licensed under Part 52. The audit objective was to assess the efficiency and effectiveness of NRC's Construction Reactor Oversight Process.

Our review found that NRC needs to improve efficiency when adjusting to construction inspection schedules and revising inspection guidance. In Fiscal Year 2014, regional construction inspection staff spent approximately 60 percent of time on administrative program support activities such as adjusting to licensee construction schedules and revising SmartPlans rather than conducting inspections. NRC relies on Construction inspection staff for monitoring and adjusting to construction schedule changes because schedules provided by licensees do not contain real-time information as originally envisaged. Further, the process for approving SmartPlan revisions is dominated by multiple levels of review by individuals who do not necessarily need to participate in the review. Agency efforts to identify process inefficiencies are not comprehensive and has left the agency unable to identify process and functional redundancies, overlap, and gaps. As the pace of new reactor construction increases, unaddressed administrative inefficiencies could affect future cROP effectiveness. The agency agreed with the report's findings and recommendations and plans to assess its inspection planning and scheduling processes and monitor these programs for further inefficiencies.

The full report is available at: http://pbadupws.nrc.gov/docs/ML1516/ML15167A491.pdf

Audit of NRC's Operator Licensing Program for the AP1000 Power Reactor (Ongoing Audit)

Pursuant to the Atomic Energy Act of 1954, as amended, Title 10, Code of Federal Regulations, Part 55 establishes procedures and criteria for the issuance of operator licenses to persons who operate commercially owned nuclear power reactors in the United States. The AP1000 power reactor is a newly designed system that will be incorporated in four nuclear power reactor units currently under construction. Specifically, units 3 and 4 at the Vogtle plant in Georgia and units 2 and 3 at the V.C. Summer plant in South Carolina, are scheduled to be operational around the 2019–2020 timeframe.

The new AP1000 power reactor design will require operators to be trained, licensed, and qualified to take the controls in accordance with 10 CFR Part 55 when the reactors become operational. Each new reactor should have an onsite functional control room simulator for training and testing operators that must duplicate the plant as designed and built; however, some aspects of the AP1000 designs are incomplete. Consequently, the control room simulators may be insufficient for operator licensing when the new nuclear power reactor units are expected to be operational.

OIG's audit objective is to determine if NRC's program for licensing AP-1000 reactor operators is efficiently and effectively implemented.

2. Regulation of nuclear materials and radioactive waste programs.

NRC is responsible for maintaining an established regulatory framework for the safe and secure use of nuclear materials; medical, industrial, and academic applications; uranium recovery, conversion and enrichment activities; fuel fabrication and development; and, high-level and low-level radioactive waste. NRC is authorized to grant licenses for the possession and use of radioactive materials and establish regulations to govern the possession and use of those materials. Upon a State's request, NRC may enter into an agreement to relinquish its authority to the State to regulate certain radioactive materials and limited quantities of special nuclear material. The State must demonstrate that its regulatory program is adequate to protect public health and safety and the environment, and compatible with NRC's program. The States that enter into an agreement assuming this regulatory authority from NRC are called Agreement States. Currently, there are 37 Agreement States.

NRC regulates high-level radioactive waste generated from commercial nuclear power reactors. High-level radioactive waste is either spent (used) reactor fuel when it is accepted for disposal or waste material remaining after spent fuel is reprocessed. Since radioactive waste becomes harmless only through decay (which may take hundreds of thousands of years for high-level waste), the material must be stored and ultimately disposed of in a manner that provides adequate protection of the public for a very long time.

Low-level radioactive waste (LLRW) is typically produced at nuclear power reactors, hospitals, research facilities, and clinics from the use of nuclear materials for industrial and medical purposes. NRC regulates the management, storage, and disposal of radioactive waste produced as a result of NRC-licensed activities. LLRW includes contaminated protective clothing, equipment and tools, medical supplies, and laboratory animal tissues.

Key nuclear materials and radioactive waste oversight challenges for NRC include the following:

- Ensuring that licensing activities are conducted consistent with NRC requirements.

- Providing an adequate number of trained inspectors for sufficient oversight, providing adequate inspector training and assessing whether inspection procedures are adequate and are being followed.
- Providing effective oversight of licensees' radioactive materials programs to preclude loss or theft.
- Ensuring that Agreement State programs are adequate to protect public health and safety and the environment, and are compatible with NRC's program.
- Providing effective oversight for the safe and secure interim storage of increasing quantities of high-level radioactive waste until a permanent repository for high-level radioactive waste is operational.
- Providing effective oversight of licensee programs for the safe storage and disposal of low-level radioactive waste produced as a result of NRC-licensed activities.

The following audit report synopses are examples of work that OIG has completed or is ongoing pertaining to nuclear materials and radioactive waste programs.

Audit of NRC's Oversight of Spent Fuel Pools
OIG-15-A-06, February 10, 2015

There are a total of 93 spent fuel pools for both operating and permanently shutdown nuclear power plants in the United States that currently store spent fuel. Recent NRC staff studies demonstrating the safety of spent fuel pools and the safety of continued storage of spent fuel at reactor sites highlight the need to ensure the safety of pool operations for longer periods than originally envisioned. The audit objective was to determine whether NRC's oversight of spent fuel pools and the nuclear fuel they contain provides adequate protection for public health and safety, and the environment.

Our review revealed that regulatory uncertainty exists in NRC's evaluation of spent fuel pool criticality safety analyses. In addition, there are gaps in NRC's spent fuel pool inspection program as inspections of spent fuel pools greatly vary between licensee sites and are limited in scope. To fulfill its responsibility to protect public health and safety, NRC must inspect and assess licensee operations and facilities to ensure compliance with its regulatory requirements. NRC should also regulate in a manner that clearly communicates requirements and ensures that regulations are consistently applied and are practical. An absence of effective spent fuel pool criticality analyses guidance for both licensees and NRC staff may lead to a reduction in program efficiency and effectiveness. The agency agreed with the report's findings and recommendations.

The full report is available at: http://pbadupws.nrc.gov/docs/ML1504/ML15041A567.pdf

Audit of NRC's Oversight of Medical Uses of Nuclear Material
(Ongoing Audit)

Nuclear medicine is the use of radioactive material to provide information about the functioning of a person's specific internal organs (diagnostic) or to treat a disease (therapeutic). NRC is responsible for overseeing the medical uses of nuclear material through its licensing, inspection, and enforcement programs. NRC issues medical use licenses to medical facilities, develops guidance and regulations for use by licensees, and maintains a committee of medical experts and health care professionals to obtain advice about the use of byproduct materials in medicine.

NRC regulations aim to assure radioactive material is used properly in medical diagnosis, treatment, and research. The regulations are also meant to assure the safety of patients, medical workers, and the public, as well as to protect the environment. These regulations require licensees to report any event which fits the definition of a "medical event." Medical events refer to a potential problem with how a medical facility uses radioactive material. These events may involve doses to a patient of the wrong amount, the wrong radioactive drug, incorrect administration of a drug, or dose to the wrong patient or wrong part of the body. On average, there are approximately 40 reported medical events per year out of hundreds of thousands of medical procedures involving radioactive material.

3. Management of security over internal infrastructure (personnel, physical, and cyber security) and nuclear security.

NRC must remain vigilant with regard to the security of its infrastructure and that of nuclear facilities and nuclear materials. NRC must continue to use robust, proactive measures to protect its infrastructure – the buildings, personnel, and information – from both internal and external threats. Moreover, as the nature of the threat continues to evolve, NRC faces challenges with oversight of protecting nuclear facilities and materials, the sharing of sensitive information, as well as emergency preparedness and incident response.

Key security oversight challenges for NRC include the following:

- Ensuring that cyber security protective measures keep pace with the growing threat. Recently, the data breach at OPM that affected NRC employees, targeted spear phishing attempts, credential harvesting and attacks of NRC's public Web site have highlighted the importance of protecting these systems as well as the difficulty and diligence required to guard against such intrusions.

- Establishing the insider threat prevention and detection program for detecting, deterring, and mitigating insider threats to address safeguarding of classified information from exploitation, compromise or unauthorized disclosure.

- Continuing to pursue the need for new regulations focused on unique requirements of decommissioned nuclear power plants, which present different safety and security considerations than operating plants.

- Ensuring effective oversight of physical and personnel security at nuclear power plants.

- Executing the Federal Information Security Management Act (FISMA) Modernization Act of 2014, to strengthen the security of computer networks.

The following audit report synopses are examples of work that OIG has completed in the security programs.

Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act for Fiscal Year 2014
OIG-15-A-02 November 13, 2014

NRC has continued to make improvements in its information technology security program and progress in implementing the recommendations resulting from previous FISMA evaluations. However, we found that continuous monitoring is not performed as required. Specifically, we found that annual risk management activities in support of continuous monitoring were either delayed or not performed at all. In addition, system security plans, including the NRC Information Security Program Plan (ISPP), were not updated to reflect changes to National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53, *Security and Privacy Controls for Federal Information Systems and Organizations*, with the issuance of Revision 4 in April 2013. As a result, NRC cannot ensure the effectiveness of information security controls for NRC systems and cannot identify and control risk.

To improve the agency's implementation of FISMA, we made a recommendation to develop a plan and schedule for updating system security plans, as well as the ISPP, to reflect NIST SP 800-53. We also identified two repeat findings from previous FISMA evaluations. These included that configuration management procedures are still not consistently implemented and plans of action and management still needs improvement. The agency agreed with our findings and recommendations and is working towards implementing the recommendations to strengthen FISMA compliance.

The full report is available at http://pbadupws.nrc.gov/docs/ML1432/ML14323A321.pdf

Audit of NRC's Communications Security (COMSEC) Program
OIG-14-A-21 September 29, 2014

COMSEC equipment at NRC is used to communicate sensitive and classified information and is a vital link for secure communication. NRC headquarters, region offices, and resident inspectors use a mix of classified and unclassified COMSEC equipment. As of August 2014, NRC had 696 COMSEC items in its inventory. In Fiscal Year 2013 (the most current year for which data were available during this audit), NRC spent $3,622,500 on classified information systems, which included COMSEC equipment.

The Office of the Inspector General evaluated NRC staff's management of the COMSEC program in accordance with Federal and agency policies. Based on this work, auditors did not identify instances where staff mismanaged the COMSEC program, or classified and sensitive information was disclosed to unauthorized personnel. However, opportunities exist to improve the COMSEC emergency plans and management of equipment maintenance contracting.

COMSEC Emergency Plans: Federal Government COMSEC policy states that emergency plans must be documented and maintained, and that staff must be aware of plans for the accounting and protection of COMSEC materials during emergencies. NRC has not fully complied with Federal Government COMSEC emergency planning requirements. This occurs because of inconsistent management emphasis on updating plans and informing personnel of their responsibilities. As a result, NRC staff who manage and use COMSEC equipment may not be prepared to uphold their COMSEC responsibilities during emergency situations such as natural disasters or hostile actions against their facilities.

Inadequate Maintenance: Federal and NRC guidance provides criteria for procurement and resource management that emphasizes efficient and effective resource use. Although NRC has a contract in place for secure fax maintenance, auditors observed a 60-percent malfunction rate across the agency's inventory of secure fax machines. The high malfunction rates of NRC's secure fax machines are attributable to a lack of performance-based contract terms that reflect the agency's equipment readiness requirements.

While no NRC staff faced immediate harm because of malfunctioning secure fax machines, the quarterly testing and compensating maintenance work performed by staff on these machines is an inefficient use of agency resources. The agency agreed with the report's findings and recommendations and is working to fix the identified vulnerabilities.

The full report is available at: http://pbadupws.nrc.gov/docs/ML1427/ML14272A359.pdf

4. Management of information technology and information management.

Technology advances rapidly. New technologies such as cloud, virtualization, and mobility are tools that can be implemented. The challenge is deciding which of these new technologies will work to the best interest of NRC now.

The mission of NRC's information technology/information management (IT/IM) program is to manage information and employ information technology to enhance information access and strengthen agency performance. The most important goal of NRC's IT/IM program is effective information access—enabling both NRC staff and the public to quickly and easily obtain the information they need. This goal reflects NRC's commitment to openness and is essential for effective agency operations.

Key information technology and information management challenges for NRC include the following:

- Ensuring that information is protected and meets user requirements.
- Implementing and optimizing technology across NRC such as mobile computing, Web-based applications, and IT security.
- Implementing The Federal Information Technology Acquisition Reform Act of 2014, which enhances the Chief Information Officers authorities.

The following audit report synopses are examples of work that OIG has completed or is ongoing pertaining to the IT/IM programs.

Audit of Web Based Licensing System
OIG-15-A-17 June 29, 2015

The Web Based Licensing (WBL) system is a materials licensing system that supports the U.S. Nuclear Regulatory Commission (NRC) in managing the licensing information of regulated entities that use radioactive materials. It was deployed in August 2012. Designed to maintain information on materials licensees, WBL supports the entry of licensing information and license images that enables managing the licensing life cycle from initial application through license issuance, amendment, reporting, and termination.

Use of WBL can be improved to better support effective and efficient operations. Specifically, OIG found that varied use of WBL among the NRC regions, outdated business processes, and lack of standardization hinder efficiency and effectiveness. OIG concluded that full implementation of WBL's capabilities can unify NRC's oversight of materials licensees and support national efforts to monitor and secure radioactive materials. Management stated their general agreement with the findings and recommendations in this report.

The full report is available at: http://pbadupws.nrc.gov/docs/ML1518/ML15180A203.pdf

Audit of NRC's IT Procurement Process
OIG15-A-09 February 10, 2015

Cost-effective information technology (IT) procurement is critical as the Nuclear Regulatory Commission (NRC) aims to provide staff with technology that helps them perform their mission and manage information security risk, while also maintaining fiscal discipline in the face of declining resources. The need to "innovate with less" is reinforced by trends in NRC's annual IT spending, which decreased from approximately $165 million in fiscal year (FY) 2011 to approximately $152 million in FY 2015. This spending supports mission and management data systems, such as NRC's incident response, official agency recordkeeping, and core financial accounting systems. Infrastructure services and support—which includes maintenance of NRC computer and telecommunication networks across agency headquarters, regional, and resident inspector offices—accounts for the largest single line item at $71 million, or 46 percent of NRC's total FY 2015 IT budget.

NRC IT governance groups do not consistently apply investment criteria in reviewing and approving staff requests for new technology. Specifically, OIG found cases dating from 2010 to the present in which NRC purchased items to meet specific customer needs without establishing standardized selection criteria or applying such criteria to business case justifications for the procurements. Additionally, staff interviews and internal agency analysis corroborate a need for better coordination of IT procurement planning, budgeting, and prioritization. Management stated their general agreement with the finding and recommendations in this report.

The full report is available at http://pbadupws.nrc.gov/docs/ML1504/ML15042A355.pdf

Audit of NRC's Network Security Operations Center (Ongoing Audit)

The Network Security Operations Center (SOC) is responsible for monitoring, detecting, and isolating incidents and the management of the organization's security products, network devices, end-user devices, and systems. This function is performed seven days a week, 24 hours per day. Basically the SOC, is a centralized facility responsible for every aspect of security in an organization.

In July 2015, OIG initiated an audit of NRC's network Security Operations Center (SOC). The audit objective is to determine whether the SOC meets its operational requirements, and to assess the effectiveness of SOC coordination with organizations that have a role in securing NRC's network.

5. Management of financial programs.

NRC is required by the Omnibus Budget Reconciliation Act of 1990 to collect fees totaling approximately 90 percent of its annual budget authority. The agency's budget authority for FYs 2013 and 2014 was $985.6 million and $1,055.9 million, respectively. NRC estimated that $859.6 million for FY 2013 and $916.7 million for FY 2014 should be recovered from invoiced fees. NRC is required to establish a schedule of charges that fairly and equitably assess the fees to license holders and license applicants. In recent years, multiple external stakeholders have questioned NRC's budget and fees structure. To maintain transparency, NRC must continue to implement solid internal controls over financial management and reporting.

Key financial management and reporting challenges include the following:

- Developing and implementing the agency's budget in accordance with Federal laws, regulations and guidelines.
- Maintaining a fee structure in accordance with laws and regulations and that is fair to agency licensees.
- Improving controls over license fee billing.
- Maintaining effective controls over financial reporting, contracts, and grants.

The following audit report synopses are examples of work that OIG has completed or is ongoing pertaining to financial programs.

Audit of NRC's Internal Controls Over Fee Revenue
OIG-15-A-12 March 19, 2015

The agency needs to establish more effective internal controls over the recordation of fee revenue. The procedures to identify and capture fee billable staff time and reimbursable contractor costs are ineffective and inefficient. Also, the process for validating the accuracy of the charges is labor intensive, difficult, and challenging. Controls for setting up timekeeping codes and their definitions are inconsistent and not standardized making it difficult for staff to identify the correct code for charging time. In addition, controls to prevent errors in selecting timekeeping codes for charging staff time can be improved.

Similarly, the overhead cost allocation process also needs improvement. The allocation calculation uses data that is unreliable and could produce inaccurate invoices to NRC licensees and applicants.

In addition, NRC validation reports and invoices sent to licensees and license applicants do not have adequate contractor details regarding services provided and related reimbursable costs. Lack of contractor detail in NRC validation reports and invoices sent to licensees and applicants increases the risk of billing errors. The agency agreed with the report's findings and recommendations.

The full report is available at: http://pbadupws.nrc.gov/docs/ML1507/ML15078A321.pdf

Audit of NRC's Decommissioning Funds Program (Ongoing Audit)

Under 10 CFR Part 50.75, NRC must receive reasonable assurances from nuclear reactor licensees that funds will be available for the decommissioning process. As of the prior biennial reporting and review period (as of December 31, 2012), the Decommissioning Trust Funds dedicated to NRC requirements for decommissioning and radiological decontamination totaled $45.7 billion. The agency began reviewing biennial decommissioning reports submitted by licensees that include information as of December 31, 2014, in the spring of calendar year 2015.

It is important to understand NRC actions to ensure that the licensees have reasonable plans in place to make up any shortfalls that exist between the current funded amount and the amount estimated as needed by NRC's two-tiered formula. (The formula can be found in 10 CFR 50.75(c).) The first tier computes the minimum amount, in 1986 dollars, needed at the time of permanent cessation of operations based on reactor type and power level of the reactors. The second tier adjusts the amount computed in the first tier, from 1986 dollars to current year dollars, based on escalation factors of labor, energy, and burial. OIG and the Government Accountability Office previously reported that NRC's decommissioning formula was developed in 1986 and may not reliably estimate adequate decommissioning costs (see Audit Report OIG-06-A-07, dated February 6, 2006, http://pbadupws.nrc.gov/docs/ML0603/ML060370376.pdf and GAO-12-258, dated April 2012). The audit objectives are to identify opportunities for program improvement and determine the adequacy of NRC's processes for coordinating with licensees to address possible shortfalls.

6. Management of administrative functions.

NRC should continue exploring ways to reduce administrative inefficiencies while maintaining the appropriate corporate support to carry out agency operations. During FY 2015, NRC workforce totaled approximately 3,700 staff positions. To support the agency's technical staff, NRC provides corporate support services such as contract support and multiple human resource programs. Although NRC has implemented multiple programs to support agency staff, NRC continues to operate in a Federal Government environment of stagnant or reduced agency budgets, and increasing pressure to reduce corporate support costs. Because of this, the agency needs to have an adequate balance between administrative functions and technical needs. In addition, NRC must be able to effectively recruit, train and transfer knowledge to new hires. This includes maintaining up-to-date guidance to effectively transfer knowledge and train current staff.

Key NRC corporate support function challenges include the following:

- Reducing related costs while continuing to provide essential administrative functions that help the agency carry out its mission.
- Maintaining agency headquarters operations while complying with Federal space utilization guidelines and carbon footprint reduction targets.
- Recruiting, training and effectively transferring knowledge to NRC new hires.
- Providing current staff with the training and tools to maintain and/or improve the skills needed to effectively perform their jobs.
- Keeping NRC policies and procedures current.

The following audit report synopses are examples of work that OIG has completed that pertain to NRC's administrative functions.

Audit of NRC's Regulatory Analysis Process
OIG-15-A-15 June 24, 2015

The Atomic Energy Act of 1954, as amended (42 U.S.C. 2011), and Energy Reorganization Act of 1974, authorize the Nuclear Regulatory Commission (NRC) to develop regulations that licensees must follow to protect public health and safety and the environment, and to promote the common defense and security. NRC is authorized to establish by rule, regulation, or order, such standards and instructions to govern the possession and use of special nuclear, source, and byproduct material. NRC uses regulatory analyses to evaluate proposed rulemaking actions to protect public health and safety.

OIG found that the NRC's knowledge management techniques for regulatory analysis need improvement and the agency does not consistently document stakeholder input prior to the proposed rule stage. The agency agreed with the report's findings and recommendations.

The full report is available at: http://pbadupws.nrc.gov/docs/ML1517/ML15175A344.pdf

Audit of NRC's Process for Revising Management Directives
OIG-14-A-19 September 15, 2014

Federal regulations provide that Federal agencies should strive to (1) convey written instructions and document agency policies and procedures through effective directives management and (2) provide agency personnel with information needed in the right place, at the right time, and in a useful format. At NRC, management directives are issued to (1) promulgate internal policies and procedures of agencywide interest or application that concern a high profile, mission-critical agency function or program and (2) impose substantive requirements on more than one NRC office. Management directives do not propose new policy; instead, directives reflect policy decisions already made and provide the process and guidance for implementing that policy. NRC Management Directive (MD) 1.1, *NRC Management Directives System*, issued March 18, 2011, describes the process for issuing and revising directives. These directives are to be reviewed and reissued or certified as relevant at least every 5 years (the 5-Year Plan).

Although the agency strives for compliance with MD 1.1, NRC generally is not in compliance with keeping MDs accurate and up-to-date. Therefore, opportunities exist to improve program efficiency and increase compliance with MD 1.1 by (A) issuing MDs timely and (B) centralizing authoritative guidance. The agency agreed with the report's findings and recommendations.

The full report is available at: http://pbadupws.nrc.gov/docs/ML1425/ML14258A612.pdf

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COMMENTS AND SUGGESTIONS

If you wish to provide comments on this report, please email OIG using this link.

In addition, if you have suggestions for future OIG audits, please provide them using this link.

CHAPTER 4

SUMMARY OF FINANCIAL STATEMENT AUDIT AND MANAGEMENT ASSURANCES

UNITED STATES NUCLEAR REGULATORY COMMISSION

Summary of Financial Statement Audit for FY 2015					
Audit Opinion	Unmodified				
Restatement	No				

Material Weaknesses	Beginning Balance	New	Resolved	Consolidated	Ending Balance
None	0	0	0	0	0
Total Material Weaknesses	0	0	0	0	0

Summary of Management Assurances for FY 2015					
Effectiveness of Internal Control over Financial Reporting (FMFIA § 2)					
Statement of Assurance	Unqualified				

Material Weaknesses	Beginning Balance	New	Resolved	Consolidated	Ending Balance
None	0	0	0	0	0
Total Material Weaknesses	0	0	0	0	0
Effectiveness of Internal Control over Operations (FMFIA § 2)					
Statement of Assurance	Unqualified				

Material Weaknesses	Beginning Balance	New	Resolved	Consolidated	Ending Balance
None	0	0	0	0	0
Total Material Weaknesses	0	0	0	0	0
Conformance with Financial Management System Requirements (FMFIA § 4)					
Statement of Assurance	Systems conform to financial management system requirements				

Nonconformances	Beginning Balance	New	Resolved	Consolidated	Ending Balance
None	0	0	0	0	0
Total Nonconformances	0	0	0	0	0
Compliance with Federal Financial Management Improvement Act (FFMIA)					

		Agency	**Auditor**
1. Systems Requirements		No Lack of Substantial Compliance Noted	No Lack of Substantial Compliance Noted
2. Accounting Standards		No Lack of Substantial Compliance Noted	No Lack of Substantial Compliance Noted
3. U.S. Standard General Ledger at the Transaction Level		No Lack of Substantial Compliance Noted	No Lack of Substantial Compliance Noted

UNITED STATES NUCLEAR REGULATORY COMMISSION

CHAPTER 4

REQUIRED IMPROPER PAYMENTS REPORTING DETAILS

IMPROPER PAYMENTS INFORMATION ACT OF 2002 REPORTING DETAILS

RISK ASSESSMENT

The NRC is required to complete assessments to determine if any programs were susceptible to making significant improper payments in accordance with the IPIA as amended by the IPERA and the IPERIA. The NRC was not required to complete a risk assessment in FY 2015 because the results of prior assessments allow the agency to conduct risk assessments on a triennial basis. In the NRC's FY 2014 PAR, the NRC reported on the results of the improper payment risk assessment completed that year. The FY 2014 results are also included in the following paragraphs.

The NRC performed a risk assessment as of September 30, 2014, to determine which programs would require improper payment testing using a statistically valid sample. Prior to the passing of IPERIA, which further amended IPIA, agencies were not required to review intra-governmental transactions or payments to employees. IPERIA now requires agencies to review payments to employees as well as Government charge card transactions. Intra-governmental transactions remain the lone exception to IPERIA requirements. Therefore, management identified commercial payments, grants payments, employee payments, payroll, and Government charge cards as potential areas to test pending results of an IPIA risk assessment. In FY 2014, the NRC reviewed FY 2013 disbursements of selected programs to determine the appropriate threshold to conduct a risk assessment and possible testing. For FY 2013, total commercial payments were $230,153,040.29; total grants payments were $22,035,829.01; total employee payments were $24,089,080.17; and total payroll payments were $470,363,997.02. The NRC did not conduct a risk assessment over its purchase card (total disbursements of $3,337,043.45) and travel card (total disbursements of $6,386,480.57) since disbursement totals for each were below $10 million. Conducting a risk assessment over those two programs would not produce an error rate that would meet the minimum threshold set by OMB ($10 million and 1.5% of total program payments).

As part of our qualitative and quantitative risk assessment, the NRC used its best judgement to select samples from each program under review, based on the universe of payments, which were reconciled to the general ledger. This sample was not meant to be statistically valid, as testing was performed to support the risk assessment process versus conducting full IPIA testing for high-risk programs. The testing was further refined through the identification of select attributes for each program to determine if the right recipient received the right payment amount for the right goods or services at the right time.

The results of the FY 2014 risk assessment did not identify any programs that are susceptible to making significant improper payments. While the results of the FY 2014 risk assessment identified programs as low risk, the NRC will continue to monitor payment processes, in addition to conducting periodic reviews of key controls for IPIA programs identified by management. The NRC will continue to conduct risk assessments on a triennial basis, in accordance with the IPIA, as amended by IPERA and IPERIA as well as OMB guidance. The next IPIA risk assessment will take place in FY 2017. However, the NRC will conduct risk assessments, as needed, if there are material changes in the way programs operate or if new programs are established.

RECAPTURE OF IMPROPER PAYMENTS REPORTING

A risk assessment was conducted in FY 2014 and no improper payments were discovered. Therefore, it was determined that recovery or recapture audits continue to not be cost effective. Risk assessments

are conducted every 3 years by the NRC as required by IPERIA. The FY 2014 risk assessment information and conclusions were reported to the OMB in October 2015.

IMPROPER PAYMENT RECAPTURES WITHOUT AUDIT PROGRAMS

Results for fiscal year 2015	Overpayments Recaptured outside of Payment Recapture Audits	
Program or Activity	Amount Identified	Amount Recaptured
Nuclear Regulatory Commission – 31000001	$0.03 million	$0.03 million
Total	$0.03 million	$0.03 million

AGENCY REDUCTION OF IMPROPER PAYMENTS WITH THE DO NOT PAY INITIATIVE

The NRC uses the Treasury's Do Not Pay (DNP) automated tools to monitor and reduce improper payments. This process has not resulted in capturing any improper payments.

The improper payments are being captured through the NRC's internal controls. The NRC uses the Federal Awardees Performance and Integrity Information System and other data systems such as the Excluded Parties List System (EPLS) and financial reports to establish whether a contractor has the integrity and business ethics to receive a Federal contract and is otherwise responsible, which is consistent with applicable statutes and regulations.

To date, the NRC grants are awarded only to educational institutions and other entities. The NRC does not award grants to individuals. The NRC uses EPLS and other data systems to ensure that only responsible and otherwise eligible applicants receive NRC grants. The same monitoring practices are used for both grantees and commercial vendors. The NRC continues to follow the lead of the Office of Federal Procurement Policy (OFPP) on who receives awards and continues to implement any changes directed by OFPP policy. The NRC will also continue to use DNP to review and monitor improper payments.

RESULTS OF THE DO NOT PAY INITIATIVE IN PREVENTING IMPROPER PAYMENTS

Results for fiscal year 2015	Number (#) of payments reviewed for possible improper payments	Dollars ($) of payments reviewed for possible improper payments	Number (#) of payments stopped	Dollars ($) of payments stopped	Number (#) of potential improper payments reviewed and determined accurate	Dollars($) of potential improper payments reviewed and determined accurate
Reviews with the IPERIA specified databases	59,577	$ 258 million	0	$ 0 million	0	$ 0 million
Reviews with databases not listed in IPERIA	0	$ 0 million	0	$ 0 million	0	$ 0 million

UNITED STATES NUCLEAR REGULATORY COMMISSION

CHAPTER 4

COMBINED SCHEDULE OF SPENDING

COMBINED SCHEDULE OF SPENDING

The Combined Schedule of Spending (SOS) is a summary and comparison of how the NRC spent money during FY 2015 and FY 2014. The Combined SOS presents all budgetary resources and obligations incurred for the NRC. The data used to populate the Combined SOS comes from the NRC's core accounting system and is the same data that the NRC uses to populate the SBR.

In the Combined SOS and the SBR, obligations incurred include personnel compensation and benefits, contracts, agreements between Federal agencies, travel, training, grants, and bankcard purchases below the micro-purchase threshold. The "Total Amounts Agreed To Be Spent" line of each section of the Combined SOS agrees with the "Obligations Incurred" line in the SBR.

The NRC also reports obligation information through the Web site USASpending.gov. The information reported by the NRC in USASpending.gov includes only contract obligations, which is a subset of the NRC's total obligations.

WHAT MONEY IS AVAILABLE TO SPEND?

This section presents total budgetary resources that are reported in the SBR.

Total Resources refers to budgetary resources approved for spending by law.

Amounts Not Agreed To Be Spent represents amounts that the NRC was allowed to spend but did not take action on by the end of the FY.

Amounts Not Available To Be Spent represents amounts that the NRC was not approved to spend during the current FY.

Total Amounts Agreed To Be Spent represents spending actions by the NRC, including payroll and benefits, travel, training, contracts, orders, grants, and other legally binding agreements to pay for goods or services.

HOW WAS THE MONEY SPENT?

This section presents the value of goods and services that the NRC obligated for each of the NRC's two major programs: Nuclear Reactor Safety and Nuclear Materials and Waste Safety.

For the purposes of this section, the breakdown of "How was the Money Spent?" is based upon the OMB budget object class definitions in the OMB Circular A-11.

Payroll represents compensation, including benefits directly related to duties performed for the Government by Federal civilian employees.

Contracts represents purchases of contractual services and supplies.

Grants represents contributions to States, local governments, foreign governments, corporations, associations (domestic and international), and individuals in compliance with programs allowed by law for distributing funds in this manner.

Travel represents the NRC's payment for transportation, sustenance, and miscellaneous expenses for employees/persons on official business.

Rent, Communications, and Utilities represents purchases of contractual services for the NRC's offices.

Structures and Equipment represents purchases of capital equipment and leasehold improvements.

WHO DID THE MONEY GO TO?

This section identifies the recipient of the money, by Federal and non-Federal entities. Amounts in this section reflect "amounts agreed to be spent."

COMBINED SCHEDULE OF SPENDING *(IN THOUSANDS)*

For the fiscal years ended September 30,	2015	2014
WHAT MONEY IS AVAILABLE TO SPEND?		
Total Resources	**$ 1,081,813**	$ 1,119,076
Less Amount Available but Not Agreed To Be Spent	**(26,096)**	(53,295)
Less Amount Not Available To Be Spent	**(1,904)**	(169)
Total Amounts Agreed To Be Spent	**$ 1,053,813**	$ 1,065,612
HOW WAS THE MONEY SPENT?		
Spending within NRC Major Programs		
Nuclear Reactor Safety		
Payroll	**$ 470,846**	$ 461,430
Contracts	**251,724**	256,573
Grants	**15,333**	22,388
Travel	**21,430**	18,994
Rent, Communications, and Utilities	**43,087**	44,794
Structures and Equipment	**13,338**	20,180
Total money spent for Nuclear Reactor Safety	**$ 815,758**	$ 824,359
Nuclear Materials and Waste Safety		
Payroll	**$ 137,400**	$ 135,041
Contracts	**73,466**	75,093
Grants	**4,475**	6,552
Travel	**6,254**	5,559
Rent, Communications, and Utilities	**12,574**	13,109
Structures and Equipment	**3,886**	5,899
Total money spent for Nuclear Materials and Waste Safety	**$ 238,055**	$ 241,253
Total Amounts Agreed To Be Spent	**$ 1,053,813**	$ 1,065,612
WHO DID THE MONEY GO TO?		
For Profit	**$ 238,366**	$ 244,248
Individuals	**511,032**	498,583
Federal	**280,623**	287,892
State & Local Government	**18,828**	17,872
Other	**4,964**	17,017
Total Amounts Agreed To Be Spent	**$ 1,053,813**	$ 1,065,612

In accordance with OMB Circular A-136, Section 11.5.1, the Combined SOS is not a required part of the Financial Statements and, therefore, it is not audited.

UNITED STATES NUCLEAR REGULATORY COMMISSION

CHAPTER 4

FREEZE THE FOOTPRINT

UNITED STATES NUCLEAR REGULATORY COMMISSION

COMBINED FREEZE THE FOOTPRINT BASELINE COMPARISON

	FY 2012 Baseline	FY 2015	Change (FY 2012 Baseline – 2015)
Square Footage (SF in millions)	1.170	1.134	(0.036)

REPORTING OF O&M COST – OWNED AND DIRECT LEASE BUILDINGS

	FY 2012 Reported Cost	2015	Change (FY 2012 Baseline – 2015)
Operation and Maintenance Costs ($ in millions)	N/A*	N/A*	N/A*

**The NRC does not directly lease or own any space, but has occupancy agreements with GSA.*

At the beginning of the FY 2016 – FY 2020 planning period, the NRC's portfolio will be 1,134,030 USF (97 percent of the agency's FY 2012 Freeze the Footprint baseline of 1,170,242 USF). The agency will target a reduction of the portfolio to 1,065,908 USF (91 percent of the Freeze the Footprint baseline) by the end of FY 2020 by renovating, reconfiguring, and releasing 68,122 USF of office space at its Rockville, MD, headquarters and two regional office locations. This space, which is provided by occupancy agreements with GSA, will be backfilled by other Federal agencies. Implementing the reductions at headquarters and the regions will be challenging due to budget limitations and the lengths and non-cancelable terms of the leases GSA has in place. The limited amount of physical swing space available to support the renovation/reconfiguration activities at headquarters will also be a challenge.

UNITED STATES NUCLEAR REGULATORY COMMISSION

CHAPTER 4

CIVIL MONETARY PENALTY ADJUSTMENT FOR INFLATION

UNITED STATES NUCLEAR REGULATORY COMMISSION

CIVIL MONETARY PENALTY ADJUSTMENT FOR INFLATION

In 2012, the NRC's Office of the General Counsel performed the review and determined the percentage change in inflation was not large enough to meet the statutory criteria for adjusting the NRC's civil monetary penalties. The next review/adjustment should be done in 2016.

Penalty (Name of Penalty)	Authority	Date of Previous Adjustment	Date of Current Adjustment*	Current Penalty Level ($ Amount)
Base civil penalties – power reactors and gaseous diffusion plants	Atomic Energy Act of 1954, as amended	November 2004	November 2008	$140,000
Base civil penalty – fuel fabricators authorized to possess Category I or II quantities of SNM	Atomic Energy Act of 1954, as amended	November 2004	November 2008	$70,000
Base civil penalty – fuel fabricators, industrial processors, and independent spent fuel and monitored storage installation	Atomic Energy Act of 1954, as amended	November 2004	November 2008	$35,000
Base civil penalty – test reactors, mills, and uranium conversion facilities, contractors, waste disposal licensees, industrial radiographers, and other large material users	Atomic Energy Act of 1954, as amended	November 2004	November 2008	$14,000
Base civil penalty – research reactors, academic, medical, or other small material users	Atomic Energy Act of 1954, as amended	November 2004	November 2008	$7,000
Base civil penalty - loss, abandonment, or improper transfer or disposal of a sealed source or device, regardless of the use or type of licensee: Sources or devices with a total activity greater than 3.7 × 10 4 MBq (1 Curie), excluding hydrogen-3 (tritium)	Atomic Energy Act of 1954, as amended	November 2004	November 2008	$54,000
Base civil penalty - loss, abandonment, or improper transfer or disposal of a sealed source or device, regardless of the use or type of licensee: Other sources or devices containing the materials and quantities listed in 10 CFR 31.5(c)(13)(i)	Atomic Energy Act of 1954, as amended	November 2004	November 2008	$17,000
Base civil penalty - loss, abandonment, or improper transfer or disposal of a sealed source or device, regardless of the use or type of licensee: Sources and devices not otherwise described above	Atomic Energy Act of 1954, as amended	November 2004	November 2008	$7,000

** Federal Register, Vol. 73, No. 230, Friday, November 28, 2008, 72529*

UNITED STATES NUCLEAR REGULATORY COMMISSION

CHAPTER 4

ACRONYMS AND ABBREVIATIONS

ACRONYM	
10 CFR	Title 10 of the *Code of Federal Regulations*
ABWR	advanced boiling-water reactor
ADAMS	Agencywide Documents Access and Management System
AGA	Association of Government Accountants
ALC	agency location code
AO	Abnormal Occurrence
ASME	American Society of Mechanical Engineers
ASP	Accident Sequence Precursor
BWR	Boiling-Water Reactor
CCDP	conditional core damage probability
CFR	*Code of Federal Regulations*
CNRA	Committee on Nuclear Regulatory Activities
CNS	Convention on Nuclear Safety
CoC	Certificate of Compliance
COL	combined license
cROP	Construction Reactor Oversight Process
CRT	Contingency Response Tool
CSRS	Civil Service Retirement System
DC	design certification
DHS	U.S. Department of Homeland Security
DOE	U.S. Department of Energy
DOL	U.S. Department of Labor
DOT	U.S. Department of Transportation
DSRS	design specific review standards
ECIC	Executive Committee on Internal Control
ELAP	extended loss of alternating power
ELPS	Excluded Parties List System
EPR™	Evolutionary Power Reactor
EPRI	Electric Power Research Institute
ESP	early site permit
FAPIIS	Federal Awardees Performance and Integrity Information System
FDA	U.S. Food and Drug Administration
FECA	*Federal Employees Compensation Act of 1993*
FERS	Federal Employees Retirement System
FEVS	Federal Employee Viewpoint Survey

ACRONYM	
FFMIA	*Federal Financial Management Improvement Act of 1996*
FMFIA	*Federal Managers' Financial Integrity Act of 1982*
FOIA	*Freedom of Information Act of 1966*
FSER	final safety evaluation report
FTE	full-time equivalent
FY	fiscal year
GAAP	Generally Accepted Accounting Principles
GAO	Government Accountability Office
GSA	U.S. General Services Administration
HRA	human reliability analysis
IAEA	International Atomic Energy Agency
IG	Inspector General
IM	information management
IMC	Inspection Manual Chapter
IMPEP	Integrated Materials Performance Evaluation Program
INPO	Institute for Nuclear Power Operations
Integrity Act	*Federal Managers' Financial Integrity Act of 1982*
IP	Inspection Procedure
IPERA	*Improper Payments Elimination and Reporting Act of 2012*
IPERIA	*Improper Payment Elimination and Recovery Improvement Act of 2012*
IPIA	*Improper Payments Information Act of 2002*
IRC	Incident Response Center
IRP	Integrated Response Program
ISG	interim staff guidance
ISFSI	independent spent fuel storage installation
ISMP	Integrated Source Management Portfolio
IT	information technology
ITAAC	inspections, tests, analyses, and acceptance criteria
IT/IM	Information Technology and Information Management
KM	knowledge management
LAN	Local Area Network
LLW	low-level waste

ACRONYM	
LWR	light-water reactor
MD	Management Directive
MDEP	Multinational Design Evaluation Program
MSI	minority serving institution
MWe	Megawatt electric
MWt	Megawatt thermal
NDAA	*Ronald W. Reagan National Defense Authorization Act for 2005*
NDE	nondestructive examination
NEA	Nuclear Energy Agency
NIST	National Institute of Standards and Technology
NNSA	National Nuclear Security Administration
NPP	nuclear power plant
NRA	Nuclear Regulatory Agency
NRC	U.S. Nuclear Regulatory Commission
NRO	Office of New Reactors
NSTS	National Source Tracking System
NTAS	National Terrorism Advisory System
NUREG	Nuclear Regulatory Commission document identifier
NWF	Nuclear Waste Fund
OBRA-90	*The Omnibus Budget Reconciliation Act of 1990*
OCFO	Office of the Chief Financial Officer
OIG	Office of the Inspector General
OMB	Office of Management and Budget
OPM	U.S. Office of Personnel Management
PAR	Performance and Accountability Report

ACRONYM	
PIV	personal identification verification
PNNL	Pacific Northwest National Laboratory
PRA	probabilistic risk assessment
PWR	pressurized water reactor
REIRS	Radiation Exposure Information and Reporting System
REM	roentgen equivalent man
RIC	Regulatory Information Conference
ROP	Reactor Oversight Process
SAT	Senior Assessment Team
SBR	Statement of Budgetary Resources
SCCS	Safety Culture and Climate Survey
SDP	Significance Determination Process
SFFAS	Statement of Federal Financial Accounting Standards
SGI	Safeguards Information
SMR	small modular reactor
SNM	special nuclear material
SOARCA	State-of-the-Art Reactor Consequence Analyses
SOS	Schedule of Spending
SRP	Standard Review Plan
TTC	Technical Training Center
TVA	Tennessee Valley Authority
UF_6	uranium hexafluoride
UO_2	uranium dioxide
UR	uranium recovery
USAID	U.S. Agency for International Development
WBL	Web-based Licensing
WIR	Waste Incidental to Reprocessing

UNITED STATES NUCLEAR REGULATORY COMMISSION

CHAPTER 4

BIBLIOGRAPHIC DATA SHEET

UNITED STATES NUCLEAR REGULATORY COMMISSION

NRC FORM 335 (12-2010) NRCMD 3.7

U.S. NUCLEAR REGULATORY COMMISSION

BIBLIOGRAPHIC DATA SHEET

(See instructions on the reverse)

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(Assigned by NRC, Add Vol., Supp., Rev., and Addendum Numbers, if any.)
NUREG-1542, Vol. 21

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Office of the Chief Financial Officer
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

9. SPONSORING ORGANIZATION - NAME AND ADDRESS *(If NRC, type "Same as above", if contractor, provide NRC Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address)*
Same as above

10. SUPPLEMENTARY NOTES

11. ABSTRACT *(200 words or less)*

The Fiscal Year 2015 Performance and Accountability Report (PAR) presents the agency's program performance and financial management information in compliance with the Government Performance and Results Modernization Act of 2010. The PAR gives the President, Congress, and the American public the opportunity to assess the agency's perfomance in achieving its mission and the stewardship of its resources.

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CHAPTER 4

AVAILABILITY OF REFERENCE MATERIALS IN NRC PUBLICATIONS

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