

Chapter 1

Management's Discussion and Analysis



Photo Courtesy of NRC Photo Library

Watts Bar nuclear power plant is located just south of Watts Bar Reservoir on the Tennessee River near Spring City in east Tennessee. It is Tennessee Valley Authority's third nuclear power plant.



Photo Courtesy of NRC Photo Library

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

Introduction

The U.S. Nuclear Regulatory Commission (NRC) Performance and Accountability Report presents the agency's program performance and financial management information during fiscal year (FY) 2009. The annual report provides an opportunity for the public to assess how effectively the NRC uses its funds to achieve results. When preparing this report, the NRC staff followed the requirements of the Chief Financial Officers Act, as amended by the Reports Consolidation Act, Government Management Reform Act of 1994, and Government Performance Results Act of 1993. This Performance and Accountability Report covers activities from October 1, 2008, to September 30, 2009.

The NRC emphasizes keeping the public informed of its activities. Visit our Web site at <http://www.nrc.gov> to access this report and to learn more about who we are and what we do to serve the American public.

Chapter 1, "Management's Discussion and Analysis," provides an overview of the NRC and its accomplishments during FY 2009. Chapter 1 consists of the following six sections: "About the NRC" describes the agency's mission, organizational structure, and regulatory responsibility; "Program Performance Overview" summarizes the agency's success in achieving its strategic goals, which are further described in Chapter 2; "Program Performance Results" outlines the results of the agency's program performance; "Future Challenges" includes forward-looking information; "Financial Performance Overview" highlights the NRC's financial position and audit results contained in Chapter 3; and "Systems, Controls, and Legal Compliance" describes the agency's compliance with key legal and regulatory requirements.

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, as amended, and the Energy Reorganization Act, 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.

To fulfill its responsibility to protect public health and safety, the NRC performs the following three principal regulatory functions:

1. establishes standards and regulations
2. issues licenses for nuclear facilities and users of nuclear materials
3. inspects facilities and users of nuclear materials to ensure compliance with regulatory requirements

Organization

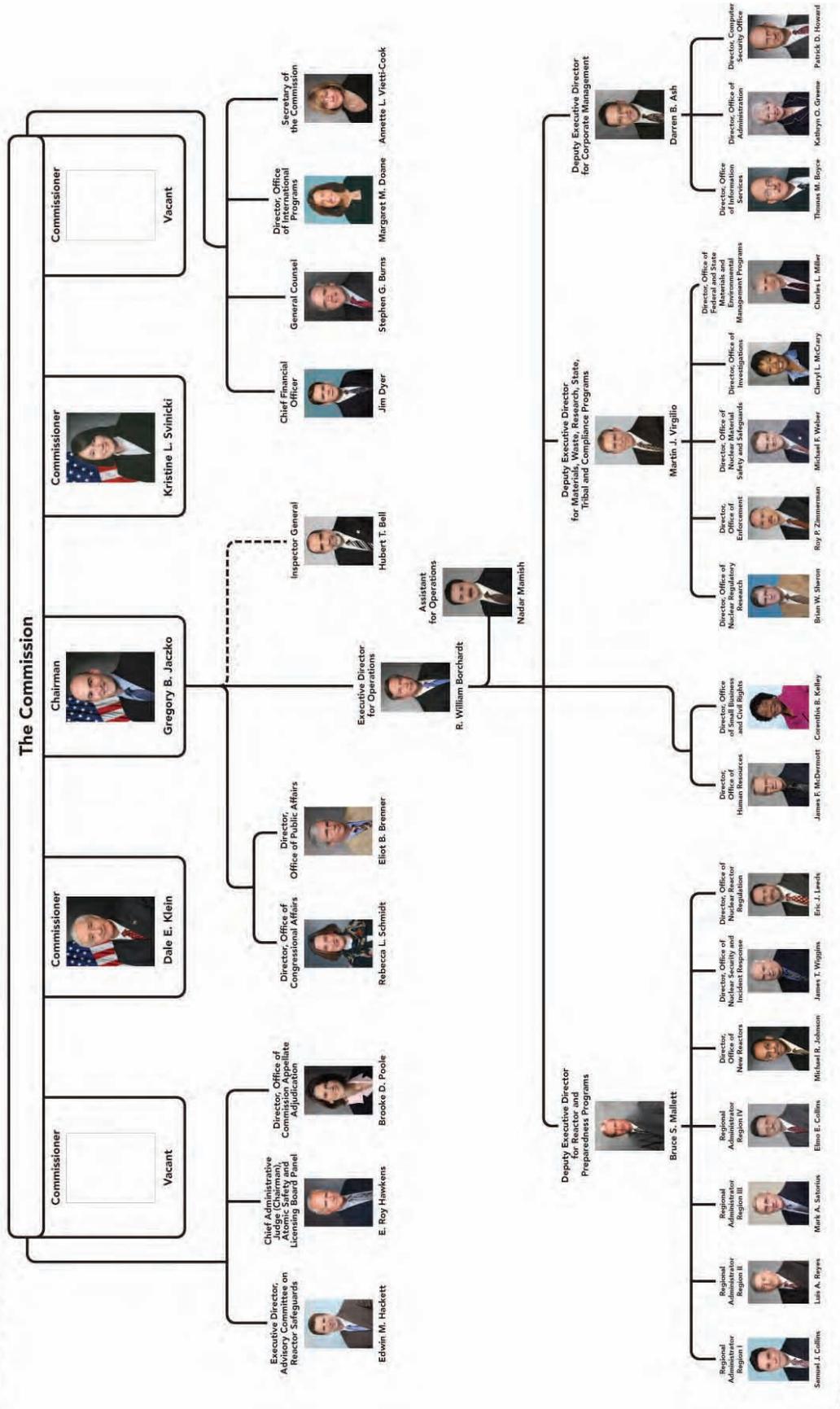
The NRC is headed by a Commission composed of five members, with one member designated by the President to serve as Chairman. With the advice and consent of the U.S. Senate, the President appoints each member to serve a 5-year term. The Chairman is the principal executive officer and official spokesman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

The NRC's headquarters is located in Rockville, MD. Four regional offices are located in King of Prussia, PA; Atlanta, GA; Lisle, IL; and Arlington, TX. The NRC's technical training center is located in Chattanooga, TN. The NRC also employs at least two resident inspectors at each of the Nation's nuclear power reactor sites. The NRC's Operations Center, located at the headquarters building in Rockville, MD,

NRC Organizational Chart

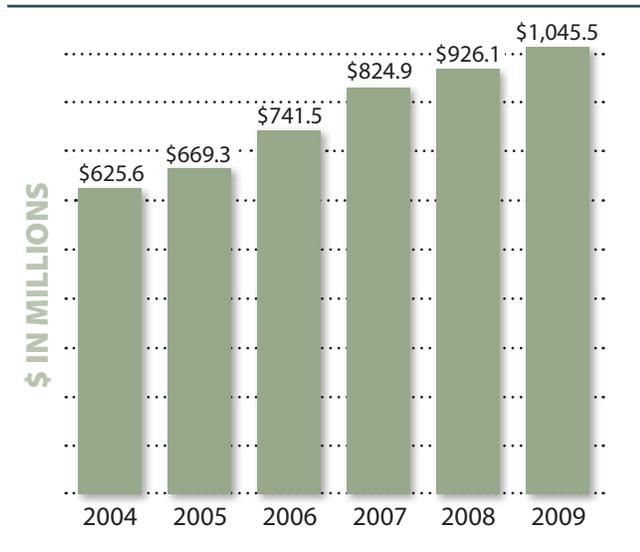


U.S. Nuclear Regulatory Commission



October 16, 2009

Figure 1
NRC BUDGETARY AUTHORITY, FY 2004–2009



Source: NRC Performance Budget Fiscal Year 2010

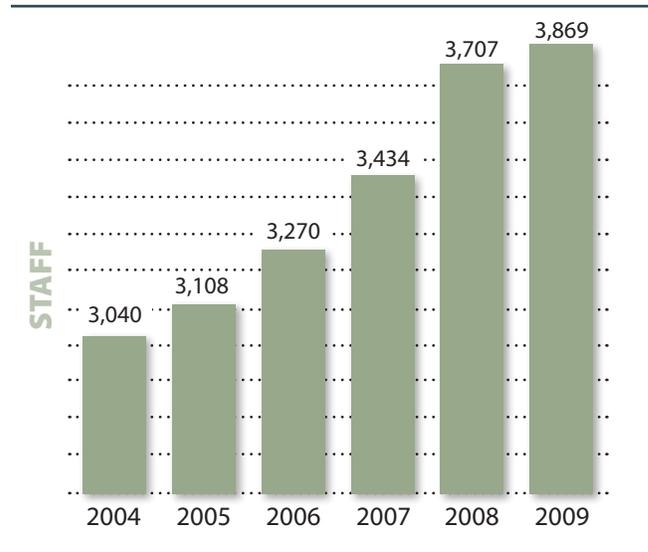
is the focal point for the agency's communications with its licensees, State agencies, and other Federal agencies concerning operating events in the commercial nuclear sector. NRC operations officers staff the Operations Center 24 hours a day. Please refer to the NRC organizational chart on the previous page.

The NRC's budget for FY 2009 was \$1,045.5 million (see Figure 1) with 3,869 full-time equivalent staff (see Figure 2). The NRC recovers approximately 90 percent of its appropriations from fees paid by NRC licensees.

The Nuclear Industry

The NRC regulates the commercial use of radioactive materials. The nuclear material cycle begins with the mining and production of nuclear fuel, continues with the use of nuclear fuel to power the Nation's 104 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. Under the NRC's Agreement State program, 37 States have assumed primary regulatory responsibility over the industrial, medical, and other users of nuclear

Figure 2
NRC PERSONNEL CEILING, FY 2004–2009



Source: NRC Performance Budget Fiscal Year 2010

materials in their States. The NRC works closely with these States to ensure that the States maintain public safety. To address safety and security issues, the NRC has developed regulatory practices, knowledge, and expertise specific to each activity in the nuclear material cycle.

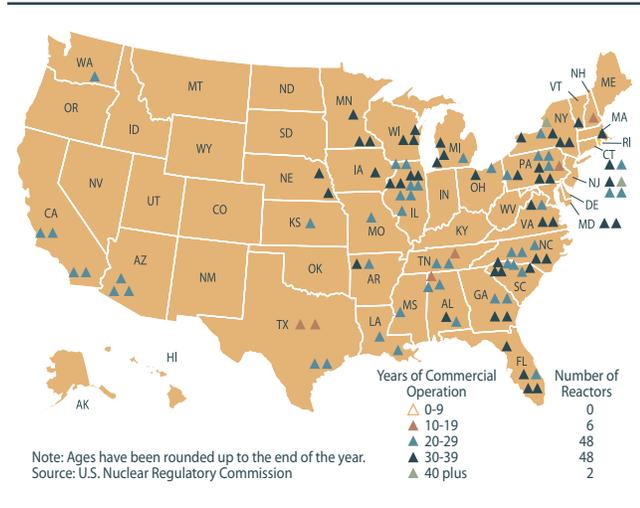
Approximately 20 percent of the Nation's electricity is generated by the 104 NRC-licensed commercial nuclear reactors operating in 31 States (see Figure 3). The NRC oversees 3,000 licenses for medical, academic, industrial, and general uses of nuclear materials (see Figure 4). The agency conducts approximately 1,200 health and safety inspections of its nuclear materials licensees annually. In addition, the 37 Agreement States oversee 19,800 licensees.

The NRC, Agreement States, and their licensees share a common responsibility to protect public health and safety.

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

Figure 3
U.S. COMMERCIAL NUCLEAR POWER REACTORS

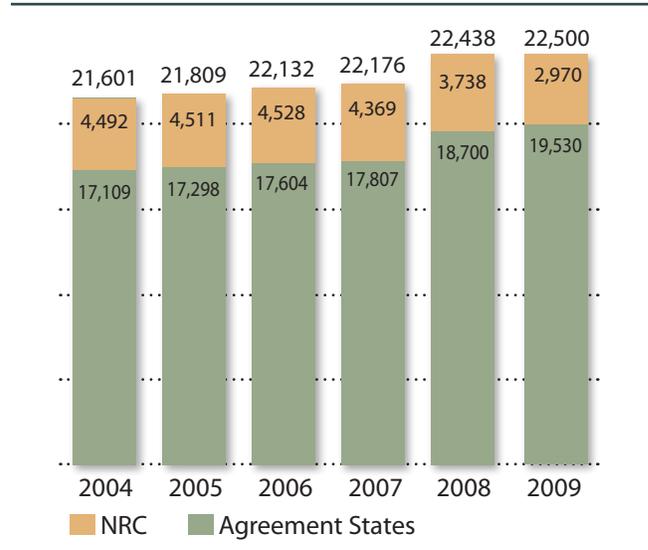


special facility, the yellow cake is converted into uranium hexafluoride gas and loaded into cylinders. The cylinders are sent to a gaseous diffusion plant, where uranium is enriched for use as reactor fuel. The enriched uranium is then converted into oxide powder, fabricated into fuel pellets (each 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, nonpower research reactor facilities, and naval propulsion reactors for use as fuel. 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

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. A nuclear power plant converts heat

Figure 4
U.S. MATERIALS LICENSEES



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. There is no 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. The radiation energy can be hazardous, and facilities take special precautions to protect people and the environment from these hazards.

Because the fission reaction produces potentially 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 potentially 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.

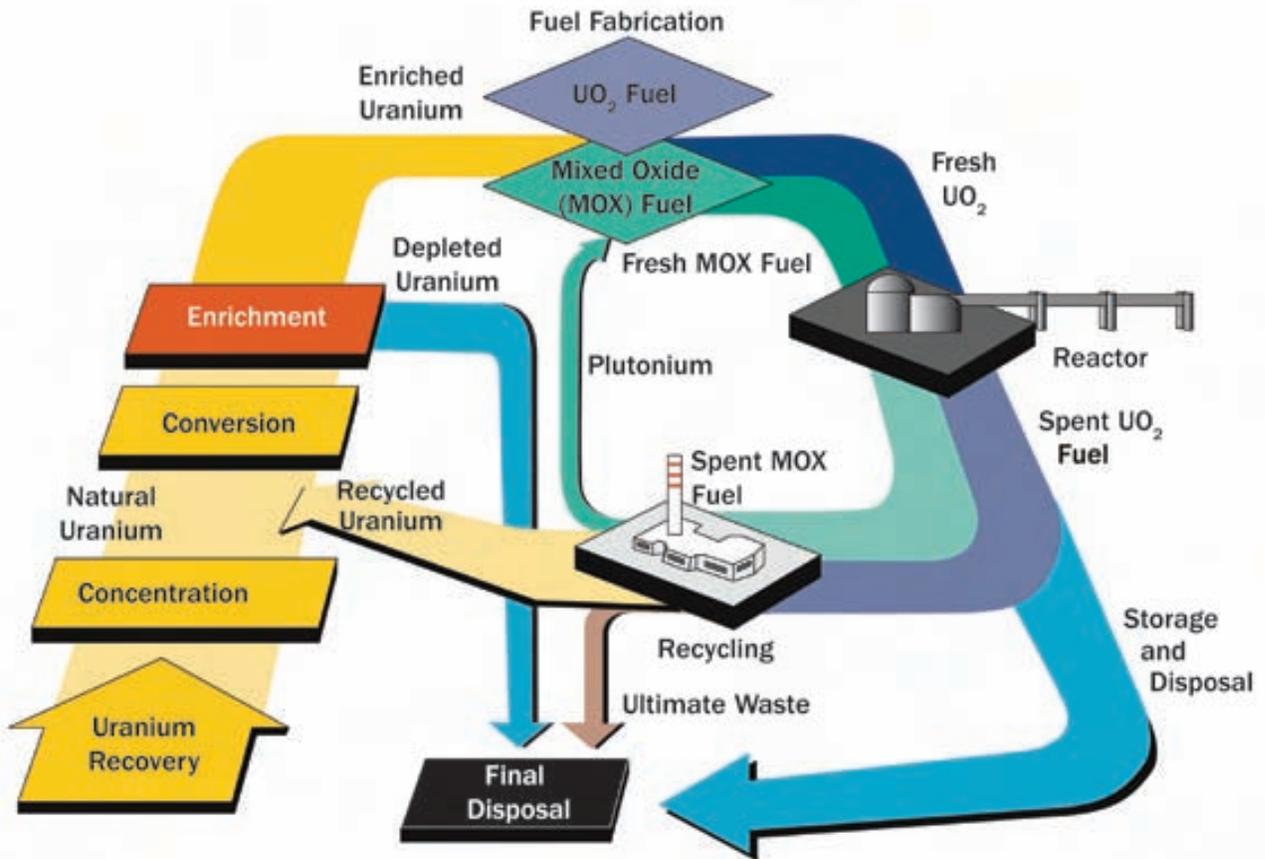
Materials Users

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.

Figure 5

SCHEMATIC OF THE NUCLEAR FUEL CYCLE



Source: U.S. Nuclear Regulatory Commission

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 these cells or damage them so they can no longer reproduce.

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 the following two types of radioactive waste: high-level waste, which consists of used fuel (usually called spent fuel), and low-level 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.

Currently most spent fuel in the United States remains stored at individual plants. Permanent disposal of spent fuel from nuclear power plants requires a disposal facility that can provide reasonable assurance that the waste will remain isolated for thousands of years. The U.S. Department of Energy (DOE) submitted an application for a permanent, spent fuel disposal facility at Yucca Mountain, NV. This application is docketed and under review.

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. 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. Generally, Class A waste contains lower concentrations of radioactive material than Class B and Class C wastes. Two low-level disposal facilities accept a broad range of low-level wastes. They are located in Barnwell, SC, and Richland, WA.

Program Performance Overview

The NRC's FY 2008–2013 Strategic Plan determines the agency's long-term goals and strategic direction. The agency has two strategic goals: safety and security. To achieve its goals, the agency is organized into two major programs: the Nuclear Reactor Safety Program and the Nuclear Materials and Waste Safety Program.

| FY 2009 Safety Goal | | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| Performance Measures | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Number of new conditions evaluated as red by the Reactor Oversight Process is ≤ 3 . | 1 | 0 | 0 | 0 | 0 | 0 |
| Number of significant accident sequence precursors of a nuclear reactor accident is 0. | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of operating reactors with integrated performance that entered the Manual Chapter 0350 process, the multiple/repetitive degraded cornerstone column, or the unacceptable performance column of the Reactor Oversight Process Action Matrix, with no performance exceeding Abnormal Occurrence Criterion I.D.4, is ≤ 4 . | 1 | 0 | 0 | 1 | 0 | 0 |
| Number of significant adverse trends in industry safety performance, with no trend exceeding Abnormal Occurrence Criterion I.D.4, is ≤ 1 . | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of events with radiation exposures to the public and occupational workers that exceed Abnormal Occurrence Criterion I.A is: | | | | | | |
| Reactors: 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Materials: ≤ 3 | 0 | 1 | 0 | 0 | 0 | 0 |
| Waste: 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of radiological releases to the environment that exceed applicable regulatory limits is: | | | | | | |
| Reactor: ≤ 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Materials: ≤ 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| Waste: 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FY 2009 Security Goal | | | | | | |
| Performance Measures | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Number of unrecovered losses or thefts of risk-significant radioactive sources is 0. | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of substantiated cases of theft or diversion of licensed, risk-significant radioactive sources or formula quantities of special nuclear material or number of attacks that result in radiological sabotage, is 0. | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of substantiated losses of formula quantities of special nuclear material or substantiated inventory discrepancies of formula quantities of special nuclear material that are caused by theft or diversion or by substantial breakdown of the accountability system sabotage is 0. | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of substantial breakdowns of physical security or material control that significantly weaken the protection against theft, diversion, or sabotage is < 1 . | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of significant, unauthorized disclosures of classified and/or safeguards information is 0. | 0 | 0 | 0 | 0 | 0 | 0 |

Nuclear Reactor Safety Program

The Nuclear Reactor Safety Program encompasses all 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, preserves the environment, and protects against radiological sabotage and theft or diversion of special nuclear material.

Nuclear Materials and Waste Safety Program

The Nuclear Materials and Waste Safety Program focuses on the safe and secure use of remaining radioactive materials. The Nuclear Materials and Waste Safety Program regulates fuel facilities, medical and industrial nuclear materials users, the disposal of both high-level and low-level waste, the decommissioning of power plants, and the storage and transportation of spent nuclear fuel.

NRC PERFORMANCE MEASURE RESULTS



Program Performance Results

STRATEGIC GOAL 1: SAFETY

Ensure Adequate Protection of Public Health and Safety and the Environment

Safety is the primary goal of the NRC. The agency achieves this goal by ensuring that the performance of licensees is at or above acceptable safety levels. NRC safety programs work in conjunction with our licensees in a partnership. The NRC licensees are responsible for designing, constructing, and operating nuclear facilities safely. The NRC is responsible for regulatory oversight of the licensees. The NRC designed its safety goal activities to achieve the following strategic outcomes:

Strategic Outcomes

- Prevent the occurrence of any nuclear reactor accidents.
- Prevent the occurrence of any inadvertent criticality events.
- Prevent the occurrence of any acute radiation exposures resulting in fatalities.
- Prevent the occurrence of any releases of radioactive materials that result in significant radiation exposures.
- Prevent the occurrence of any releases of radioactive materials that cause significant adverse environmental impacts.

FY 2009 Results

In FY 2009, the NRC achieved all five of its safety goal strategic outcomes. The NRC also uses six performance measures to determine whether it has met its safety goal. The agency met all six performance measure targets in FY 2009.

Three of the performance measures focus on performance at individual nuclear power plants. Inspection results show that all of the nuclear power

plants are operating safely. The fourth measure tracks the trends of several key indicators of nuclear power plant safety. This measure is the broadest measure of the safety of nuclear power plants, incorporating the performance results from all plants to determine industry average results. The measure results show that there were no statistically significant adverse trends in any of the indicators in FY 2009.

The last two safety performance measures track harmful radiation exposures to the public and occupational workers and radiation exposures that harm the environment. None of these measures exceeded their targets in FY 2009.

STRATEGIC GOAL 2: SECURITY

Ensure Adequate Protection in the Secure Use and Management of Radioactive Materials

The NRC must remain vigilant in ensuring the security of nuclear facilities and materials in an elevated threat environment. The agency achieves its common defense and security goal using licensing and oversight programs similar to those employed in achieving its safety goal. The NRC has designed its strategic goal activities to achieve the following strategic outcome:

Strategic Outcome

- Prevent any instances in which licensed radioactive materials are used domestically in a manner hostile to the security of the United States.

FY 2009 Results

In FY 2009, the NRC achieved its security goal strategic outcome. The NRC also uses five security goal performance measures to determine whether the agency has met its security goal. The agency met all five performance measure targets in FY 2009. The first performance measure tracks unrecovered losses or thefts of risk-significant radioactive sources. The measure ensures that those radioactive sources that the agency has determined to be risk-significant to the public health and safety are accounted for at all times. The ability to account for these sources is critical to

secure the nation from “dirty bomb” attacks or other means of radiation dispersal.

The second, third, and fourth performance measures evaluate the number of significant security events and incidents that occur at NRC-licensed facilities. These measures determine whether nuclear facilities maintain adequate protective forces to prevent theft or diversion of nuclear material or sabotage; whether systems in place at licensee plants accurately account for the type and amount of materials processed, utilized, or stored; and whether the facilities account for special nuclear material at all times with no losses of this material. No events met the conditions for this measure in FY 2009.

The last security measure tracks significant unauthorized disclosures of classified or safeguards information that may cause damage to national security or public safety. This measure focuses on whether classified information or safeguards information is stored and utilized in such a way as to prevent its disclosure to the public, terrorist organizations, other Nations, or personnel without a need to know. Unauthorized disclosures can harm national security or compromise public health and safety. The measure also focuses on whether controls are in place to maintain and secure the various devices and systems (electronic or paper based) which the agency and its licensees use to store, transmit, and utilize this information. No documented disclosures of this type of information occurred during FY 2009.

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. The agency also considers the data in this report reliable and relevant because the data have been validated and verified. “Verification and Validation of NRC’s Performance Measures,” contains the processes the agency uses to collect, validate, and verify performance data in this report. Please visit <http://www.nrc.gov/about-nrc/fy2009-par-verification.pdf> to view this report in its entirety.

Future Challenges

The NRC ensures that the health and safety of the American public and the environment are adequately protected from any harmful effects of using nuclear materials. The industry has experienced a substantial improvement in safety at nuclear power plants over the past 20 years as both the nuclear industry and the NRC have gained substantial experience in the operation and maintenance of nuclear power facilities. However, despite the excellent safety and security record of the industry, the agency cannot rest on its achievements. The primary challenges the agency faces are the large number of new nuclear plants that have applied for licenses, the safe disposal of high-level nuclear waste, and the need to ensure security at nuclear facilities.

New Nuclear Power Plants

With increased concerns about the continued availability and cost of oil, as well as concerns over the environmental damage caused by coal-burning electrical plants, the amount of electricity supplied by nuclear power is likely to increase substantially in the future. The NRC last issued a nuclear power plant construction permit in 1977. To date, the agency has docketed a total of 18 combined operating license (COL) applications for sites across the country. The agency's primary challenge is to license new reactors to ensure that they will operate safely as they provide electricity required by the Nation for economic growth. However, before licensing any new nuclear reactor, the agency requires a detailed analysis of new reactor designs. This analysis includes a study of the reactor's vulnerability to accidents and security compromises. It also includes the development of inspection procedures, tests, analyses, and acceptable criteria for construction. The NRC is also evaluating commercial gas centrifuge facilities that utilize new methods of enriching nuclear fuel for reactors.

Safe Disposal of High-Level Waste

Safely disposing of the waste from nuclear power plants is vital to protecting public health and the environment. In FY 2008, DOE filed a license application to establish the Nation's first repository for high-level radioactive waste at Yucca Mountain,

NV. The NRC accepted and docketed the application. The agency has begun a review to evaluate a wide range of technical and scientific issues and will attempt to resolve regulatory concerns. Most nuclear waste is now safely and securely stored at reactor sites. In addition to the storage of nuclear waste, safely transporting spent nuclear fuel is a significant issue for the public and the agency. More than 1,300 spent fuel shipments regulated by the NRC have been safely transported in the United States in the past 25 years. Therefore, the agency must be able to assure the public that all movements of nuclear waste, including those to a permanent storage site, will be safe and secure.

Security at Nuclear Facilities

In addition to safety, the security of nuclear materials is of paramount importance to the Nation. Nuclear facilities are among the most secure facilities in the Nation. The NRC, in concert with other Federal agencies, constantly monitors intelligence to determine the level of threat faced by nuclear facilities. The agency continues to improve the regulatory requirements to better ensure the security of nuclear materials and facilities. The threat faced by the Nation from those seeking to steal classified information has become more urgent in recent years. Nuclear facilities have implemented increased security measures, including "force-on-force" training exercises, to help ensure protection of this vital national infrastructure.

Financial Performance Overview

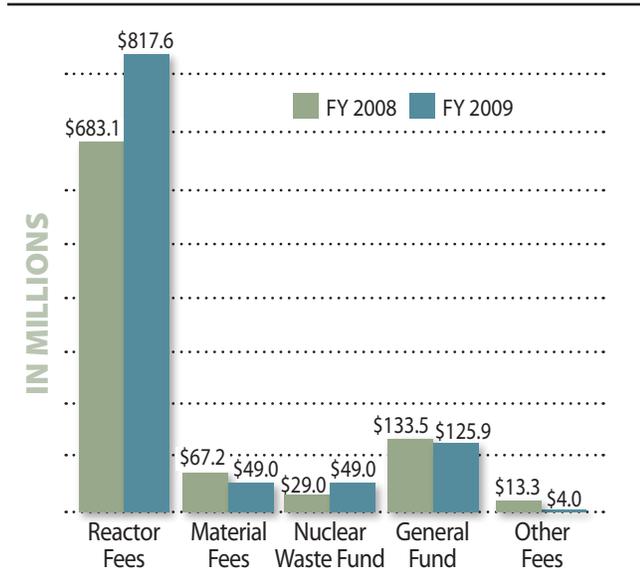
As of September 30, 2009, the financial condition of the NRC was sound with respect to having sufficient funds to meet program needs and adequate control of these funds in place to ensure obligations did not exceed budget authority. The NRC prepared its financial statements in accordance with the accounting standards codified in the Statements of Federal Financial Accounting Standards (SFFAS) and Office of Management and Budget (OMB) Circular A-136, "Financial Reporting Requirements."

Sources of Funds

The NRC has two appropriations, Salaries and Expenses and Office of the Inspector General. Funds for both appropriations are available until expended. The NRC's total new FY 2009 budget authority was \$1,045.5 million. Of this amount, \$1,034.6 million was for the Salaries and Expenses appropriation and \$10.9 million was for the Office of the Inspector General appropriation. This represents an increase in new budget authority of \$119.4 million over FY 2008 (\$117.3 million for the Salaries and Expenses appropriation and \$2.1 million for the Office of the Inspector General appropriation). In addition, \$100.0 million from prior-year appropriations, \$7.4 million from prior-year reimbursable work, and \$12.3 million for new reimbursable work to be performed for others was available to obligate in FY 2009. The sum of all funds available to obligate for FY 2009 was \$1,165.2 million, which was a \$136.4 million increase over the FY 2008 amount of \$1,028.8 million.

Figure 6

SOURCES OF FUNDS



The Omnibus Budget Reconciliation Act of 1990 (OBRA-90), as amended, required the NRC to collect fees to offset approximately 90 percent of its new budget authority, less the amount appropriated to

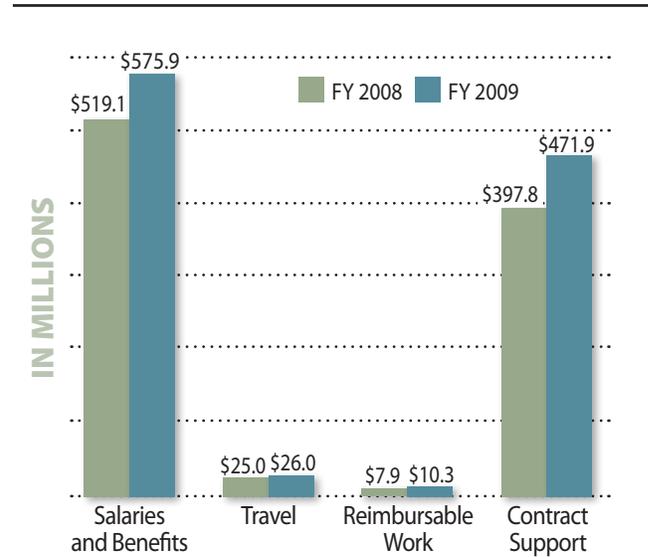
the NRC from the Nuclear Waste Fund and amounts appropriated for waste incidental to reprocessing and generic homeland security for FY 2009. The NRC collected \$857.8 million in reactor and material fees in FY 2009. This is 98.5 percent of the fee recovery requirement.

Uses of Funds by Function

The NRC incurred obligations of \$1,084.1 million in FY 2009, which was an increase of \$134.3 million over FY 2008. Approximately 53 percent of obligations were used for salaries and benefits. The remaining 47 percent was 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, training), staff travel, and reimbursable work. The unobligated budget authority available at the end of FY 2009 was \$81.1 million, an increase compared to the FY 2008 amount of \$79.0 million. Of this \$81.1 million, \$9.3 million was for reimbursable work and \$71.8 million was available to fund critical NRC needs in FY 2009.

Figure 7

USES OF FUNDS BY FUNCTION



Audit Results

The NRC received an unqualified audit opinion on its FY 2009 financial statements. In FY 2008, the auditors

identified a significant deficiency related to the method by which the NRC estimates the accounts payable balance which represents costs for billed and unbilled goods and services received (prior to year end) that are unpaid. Prior to the last quarter of FY 2008, the NRC used an algorithm that recognized accounts payable as a specific percentage of NRC's total expenses to date. Once this percentage was calculated, it was applied to an annualized expense figure. In the fourth quarter of FY 2008, the NRC implemented a revised methodology to calculate the accounts payable estimate. The new methodology involves analyzing the actual activity for the largest obligations to include in the estimate. For the remaining smaller obligations, the agency analyzed actual activity of a percentage of the obligations and developed an algorithm to estimate the total amount to include in the accounts payable balance. Throughout FY 2009, the NRC continued to refine this methodology and validated the estimate each quarter. In FY 2009, the auditors closed this significant deficiency due to the accuracy of this new estimation methodology.

In FY 2007 and FY 2008, the auditors also identified the Fee Billing System as a substantial noncompliance with the Federal Financial Management Improvement Act (Improvement Act) because of a lack of current certification and accreditation. In FY 2009, the auditors closed the substantial noncompliance because the NRC completed the certification and accreditation of the Fee Billing System.

A summary of the Financial Statement Audit Results is included in the "Other Accompanying Information" section of this report.

Limitations of the Financial Statements

The principal 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 financial activity and financial position of the agency. Chapter 3 presents the financial statements, footnotes, and required supplementary information. Analysis of the principal statements follows.

Analysis of the Balance Sheet

The NRC's assets were \$611.8 million as of September 30, 2009, an increase of \$57.3 million from the end of FY 2008. The increase is due to the Fund Balance with the U.S. Department of the Treasury (Treasury) increasing by \$55.1 million as a result of an increase in appropriated funds received which were obligated but not yet disbursed.

ASSET SUMMARY (In Millions)

| As of September 30, | 2009 | 2008 |
|----------------------------|----------------|----------------|
| Fund Balance with Treasury | \$448.6 | \$393.5 |
| Accounts Receivable, Net | 128.2 | 121.4 |
| Property & Equipment, Net | 31.6 | 35.5 |
| Other | 3.4 | 4.1 |
| Total Assets | \$611.8 | \$554.5 |

The Fund Balance with Treasury was \$448.6 million at September 30, 2009, accounting for 73 percent of total assets. This account represents appropriated funds, collected license fees, and other funds maintained at Treasury to pay current liabilities and to finance authorized purchase commitments. The \$55.1 million increase in the balance reflects an increase of \$119.4 million in new budget authority (including an increase of \$20.0 million for the Nuclear Waste Fund transfer), a \$37.1 million beginning balance increase over the prior year beginning balance, and an increase of \$107.4 million in fee collections, less expenditure increases of \$60.1 million in salaries and benefits, \$46.6 million in general disbursements, \$8.5 million in grant disbursements, and an increase in fee collection transfers to Treasury of \$94.2 million. The difference between the

increase in fee collections and fee collections transferred to Treasury results from an over collection of \$13.3 million in fees during FY 2007, which were included in the FY 2008 fee transfer to Treasury.

Accounts receivable consists of amounts owed to the NRC by other Federal agencies and the public. Accounts Receivable, Net as of September 30, 2009, was \$128.2 million, which includes an offsetting allowance for doubtful accounts of \$3.1 million. This 6 percent increase from the FY 2008 year-end Accounts Receivable, Net balance of \$121.4 million is the result of an increase of \$11.4 million in licensing and inspection activities due to an increase in hours invoiced and in the hourly rate for the NRC's services, offset by a decrease of \$5.4 million in accruals for materials and facilities open inspections.

LIABILITIES SUMMARY (In Millions)

| As of September 30, | 2009 | 2008 |
|---------------------------|----------------|----------------|
| Accounts Payable | \$ 51.0 | \$ 54.1 |
| Federal Employee Benefits | 7.6 | 7.1 |
| Other Liabilities | 86.2 | 75.8 |
| Total Liabilities | \$144.8 | \$137.0 |

Total liabilities were \$144.8 million as of September 30, 2009, an increase of \$7.8 million from the FY 2008 year-end balance of \$137.0 million. The increase resulted from an increase in Other Liabilities of \$10.4 million, which comprises increases of \$3.6 million in accrued annual leave, \$3.5 million in accrued funded salaries and benefits, and \$2.4 million in grants payable.

Of the agency's liabilities, \$56.6 million was not covered by budgetary resources, an 8 percent increase over the balance of \$52.5 million as of September 30, 2008. The increase of \$4.1 million was primarily due to an increase in unfunded accrued annual leave of \$3.6 million resulting from an increase in the number of full-time employee equivalents and salary increases. The liabilities not covered by budgetary resources in FY 2009 include \$47.3 million in unfunded accrued annual leave included in Other Liabilities, for the amount of leave, earned but not yet taken and \$7.6 million in future workers' compensation included in Federal Employee Benefits.

NET POSITION SUMMARY (In Millions)

| For the Years Ended September 30, | 2009 | 2008 |
|-----------------------------------|----------------|----------------|
| Unexpended Appropriations | \$338.6 | \$289.3 |
| Cumulative Results of Operations | 128.4 | 128.2 |
| Total Net Position | \$467.0 | \$417.5 |

Net Position, the difference between Total Assets and Total Liabilities, was \$467.0 million as of September 30, 2009, an increase of \$49.5 million from the FY 2008 year-end balance. Net Position is comprised of two components: Unexpended Appropriations and Cumulative Results of Operations. Unexpended Appropriations is the amount of spending authority granted by Congress that remains unused by the agency. The increase in FY 2009 for Unexpended Appropriations is \$49.3 million. Cumulative Results of Operations, which represents the cumulative excess of financing sources over expenses, remained relatively constant at September 30, 2009 and 2008.

Analysis of the Statement of Net Cost

Net costs are gross costs offset by earned revenue. The Statement of Net Cost presents the net cost of NRC's two programs as identified in the NRC Annual Performance Plan. 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, 2009, was \$170.4 million, which is an increase of \$23.9 million over the FY 2008 net cost of \$146.5 million.

NET COST OF OPERATIONS (In Millions)

| For the Years Ended September 30, | 2009 | 2008 |
|---|-----------------|-----------------|
| Nuclear Reactor Safety and Security | \$ 2.9 | \$ (20.0) |
| Nuclear Materials and Waste Safety and Security | 167.5 | 166.5 |
| Net Cost of Operations | \$ 170.4 | \$ 146.5 |

NRC's total gross costs increased \$98.8 million. The Nuclear Reactor Safety and Security program gross costs increased \$91.1 million primarily because of

increases of \$51.2 million in salaries and benefits, \$24.3 million in contractor support, and \$7.8 million in grants for nuclear education. These increases are primarily in the areas of new reactor activities, and existing licensing and oversight activities. The Nuclear Materials and Waste Safety and Security program gross costs increased \$7.7 million primarily in the areas of nuclear materials licenses, fuel facilities, and decommissioning activities.

Total earned revenue increased \$74.9 million from \$797.6 million for the year ended September 30, 2008, to \$872.5 million at September 30, 2009. Earned revenue increased for the Nuclear Reactor Safety and Security program by \$68.2 million and for the Nuclear Materials and Waste Safety and Security program by \$6.7 million. The increases primarily result from increases in fees collected due to the increase in appropriations for NRC activities, of which the NRC is required to collect approximately 90 percent through fee billing. Fees for reactor and materials licensing and inspections are collected in accordance with Title 10 of the *Code of Federal Regulations* (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 during the reporting period. Net position is affected by changes in its two components—Cumulative Results of Operations and Unexpended Appropriations. The increase in Net Position of \$49.5 million from FY 2008 to FY 2009, was the result of an increase in Unexpended Appropriations. A change in unexpended appropriations results from appropriations received being more, or less, than appropriations used during the fiscal year. In FY 2009, appropriations received of

\$138.7 million consisted of NRC's total appropriation of \$1,045.5 million, reduced by \$857.8 million in fee collections returned to Treasury and the Nuclear Waste Fund transfer of \$49.0 million. Appropriations used in FY 2009 totaled \$89.3 million and consisted of funds used of \$993.9 million reduced by collection from fees assessed of \$857.8 million and Nuclear Waste Fund expenses of \$46.8 million.

Analysis of the Statement of Budgetary Resources

The Statement of Budgetary Resources reports the source and status of budgetary resources at the end of the period. It presents the relationship between budget authority and budget outlays and the reconciliation of obligations to total outlays. For FY 2009, NRC had total budgetary resources available of \$1,165.2 million, a 13 percent increase over FY 2008 budgetary resources available of \$1,028.8 million. The increase primarily resulted from an increase in appropriations received of \$119.4 million which increased from \$926.1 million in FY 2008 to \$1,045.5 million in FY 2009. The appropriation included increases of \$47.7 million for the Nuclear Reactor Safety and Security program, \$69.6 million for the Nuclear Materials and Waste Safety and Security program, and \$2.1 million for the Office of the Inspector General. This funding provided for increases in salaries and benefits of \$49.0 million and contract support services of \$70.4 million, primarily for growth of regulatory and support activities for new reactor facilities, regulatory oversight of existing reactors, and existing materials and waste facilities licensing activities.

For FY 2009, the NRC had Obligations Incurred of \$1,084.1 million, compared to FY 2008 Obligations Incurred of \$949.8 million, an increase of \$134.3 million. The increase resulted primarily from an increase in salaries and benefits and contract support (see Figure 7). Gross outlays for FY 2009 were \$999.1 million, which represents an increase of \$115.1 million over FY 2008 gross outlays of \$884.0 million. The increase resulted from an increase in salaries and benefits disbursements of \$60.1 million, general disbursements of \$46.6 million, and grant disbursements of \$8.5 million. Gross outlay

increases are reflected in the Nuclear Reactor Safety and Security program at \$96.0 million, primarily for new reactor and existing reactor licensing activities; the Nuclear Materials and Waste Safety and Security program at \$9.2 million, primarily for materials licensing, fuel facilities, and decommissioning; and nuclear education grants of \$8.5 million.

Systems, Controls, and Legal Compliance

Management Assurances

This section provides information on the NRC's compliance with the Federal Managers' Financial Integrity Act, the OMB Circular A-123, "Management's Responsibility for Internal Control," and the Federal Financial Management Improvement Act. Other Accompanying Information" section the, "Summary of Financial Statement Audit and Management Assurances," includes a summary of management assurances.

Federal Managers Financial Integrity Act

The Integrity Act mandates that agencies establish controls to reasonably ensure that the agency (1) complies with applicable laws concerning obligations and costs; (2) safeguards assets against waste, loss, unauthorized use, or misappropriation; and (3) 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 Governmentwide standards.

Management Control Review Program

Managers throughout the NRC are responsible for implementing effective controls in their areas of responsibility. Each office director and regional administrator prepares an annual assurance certification that identifies any control weaknesses requiring the attention of the NRC's Executive Committee on Internal Control (ECIC). These statements are based on various sources, including management knowledge gained from the daily operation of agency programs, management reviews, program evaluations, audits of financial statements, reviews of financial systems, annual performance



U.S. NUCLEAR REGULATORY COMMISSION FEDERAL MANAGERS' FINANCIAL INTEGRITY ACT STATEMENT FOR FY 2009

The U.S. Nuclear Regulatory Commission's (NRC) management is responsible for establishing and maintaining effective internal control and financial management systems that meet the objectives of the Federal Managers' Financial Integrity Act (Integrity Act). The NRC conducted its assessment of internal control over the effectiveness and efficiency of operations and compliance with applicable laws and regulations, and in accordance with OMB Circular A-123, *Management's Responsibility for Internal Control*. Based on the results of this evaluation, the NRC can provide reasonable assurance that its internal control over the effectiveness and efficiency of operations and compliance with applicable laws and regulations as of September 30, 2009, was operating effectively and no material weaknesses were found in the design or operation of internal control.

NRC can also provide reasonable assurance that its financial systems substantially conform to the Integrity Act and comply with the component requirements of the Federal Financial Management Improvement Act.

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 OMB Circular A-123. Based on the results of the evaluation, the NRC can provide reasonable assurance that NRC's internal control over financial reporting as of June 30, 2009, was operating effectively, and no material weaknesses were found in the design or operation of the internal control over financial reporting.

Gregory B. Jaczko
Chairman
U.S. Nuclear Regulatory Commission
November 13, 2009

plans, Inspector General and U.S. Government Accountability Office reports, and reports and other information provided by the congressional committees of jurisdiction.

The NRC's ECIC includes senior executives from the Office of the Chief Financial Officer and the Office of the Executive Director for Operations. Staff from the Office of the General Counsel participates as an advisor.

The ECIC met and reviewed the assurance certifications provided by the offices and regions. The ECIC then informed the Chairman as to whether the NRC had any internal control deficiencies serious enough to require reporting as a material weakness or noncompliance.

The NRC's ongoing internal control program requires, among other things, that reports on internal control deficiencies be integrated into the offices' and regions' annual operating plans. The operating plan process provides for periodic updates and ensures that key issues receive senior management attention. Combined with the individual assurance statements discussed previously, the internal control information in these plans provides the framework for monitoring and improving the agency's internal controls on an ongoing basis.

FY 2009 Integrity Act Results

The NRC evaluated its internal control systems for the fiscal year ending September 30, 2009. Based on this evaluation, the NRC is able to provide a statement of assurance that the internal controls and financial management systems meet the objectives of the Integrity Act. The NRC has reasonable assurance that its internal controls are effective and that its financial management systems conform to Governmentwide standards.

Office of Management and Budget Circular A-123, "Management's Responsibility for Internal Control," including Appendix A, "Internal Control over Financial Reporting"

In FY 2006, the NRC implemented the requirements of the OMB revised Circular A-123, which defined and strengthened management's responsibility for internal control in Federal agencies. The revised circular included updated internal control standards. A new

section, Appendix A, required Federal agencies to assess the effectiveness of internal controls over their financial reporting and to prepare a separate annual statement of assurance as of June 30, 2009.

In FY 2007, the agency adopted a 3-year rotational testing plan. The NRC determined that three of the original nine key processes were significant enough to include in the testing each year of the 3-year cycle. The remaining six key processes were to be tested once in the 3-year cycle, two each year. In FY 2008 and 2009, the NRC continued its assessment of internal control over financial reporting. The agency reevaluated its scope of financial reports, materiality values, risk assessments, key processes, and key controls. Based on the results of this evaluation, the NRC can provide reasonable assurance that its internal control over financial reporting was operating effectively as of June 30, 2009, and that the evaluation found no material weaknesses in the design or operation of the internal controls over financial reporting.

Federal Financial Management Improvement Act

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

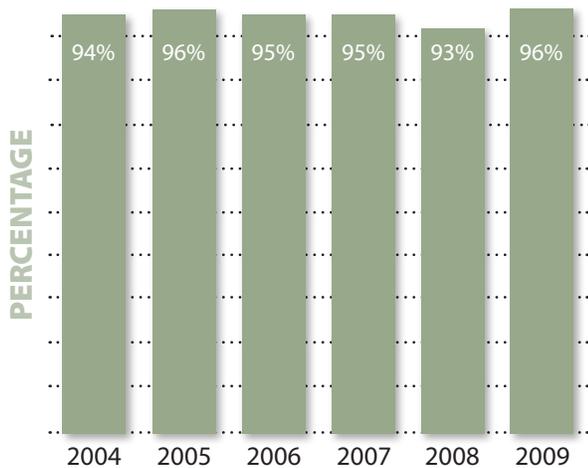
FY 2009 Improvement Act Results

As of September 30, 2009, the NRC evaluated its financial systems to determine if they complied with applicable Federal requirements and accounting standards required by the Improvement Act. The NRC evaluated the following eight systems: the Federal Financial System, Federal Personnel Payroll System, Human Resources Management System, Cost Accounting System, Advice of Allotments/Financial Plan System, Capitalized Property System, Fee Billing System, and Controller Resource Database System. As of September 30, 2009, the agency's financial

management systems were in compliance with the Improvement Act. In making this determination, the NRC considered all the information available, including the report from the ECIC on the effectiveness of internal controls, the Office of the Inspector General audit reports, and the results of the agency's financial management system reviews. The agency also relied on the Department of the Interior National Business Center (DOI-NBC) annual reasonable assurance statement, which concluded that, for FY 2009, the cross-serviced financial systems were in substantial compliance with Federal financial management system requirements.

In FY 2008, the financial management systems were in compliance with the Improvement Act, except for the Licensee Fee Billing System (Fee System) which was operating without its accreditation and Authority to Operate (ATO). The ATO was granted June 2009, therefore, the Inspector General closed the finding.

Figure 8
PROMPT PAYMENT



Prompt Payment

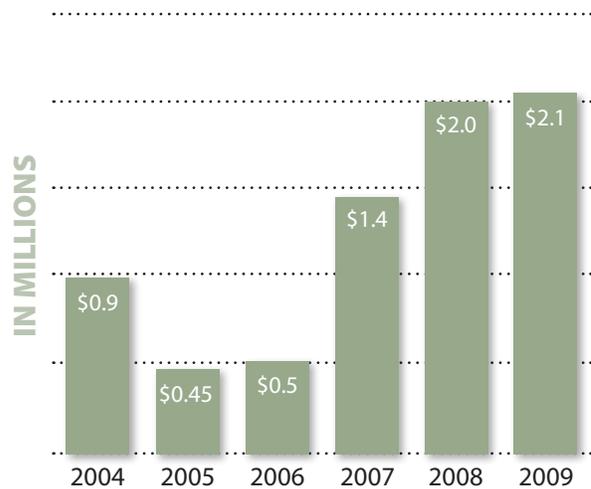
The Prompt Payment Act requires Federal agencies to make timely payments to vendors for supplies and services, to pay interest penalties when payments are made after the due date, and to take cash discounts when they are economically justified. In FY 2009, the NRC paid 96 percent of the 12,903 invoices subject to the

Prompt Payment Act on time (see Figure 8). The NRC incurred \$19,825 in interest penalties during FY 2009.

Improper Payments

The NRC remains at low risk of making improper payments. At the present time, the NRC's payments consist of commercial vendor, interagency, and travel reimbursements. The NRC monitors and reports improper payments within its programs and continues to evaluate internal controls guarding against improper payments. The NRC continues to perform annual risk assessments for each of these areas. Based on the FY 2009 risk assessments, the number and amount of improper payments fall below the external reporting requirement established by OMB guidance on what is considered a significant risk. The NRC awards less than \$500 million in annual contracts and, therefore, is not subject to annual reporting under the Recovery Auditing Act. The DOI-NBC's Federal Personnel/Payroll System, as the system of record for payroll disbursements, is responsible for monitoring and reporting on any improper payroll-related payments.

Figure 9
DELINQUENT DEBT



Debt Collection

The Debt Collection Improvement Act 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 continues to meet this goal and, at the end of FY 2009, delinquent debt was \$2.1 million (Figure 9). The NRC continues to pursue the collection of delinquent debt and refers all eligible debt over 180 days delinquent to the Treasury for collection.

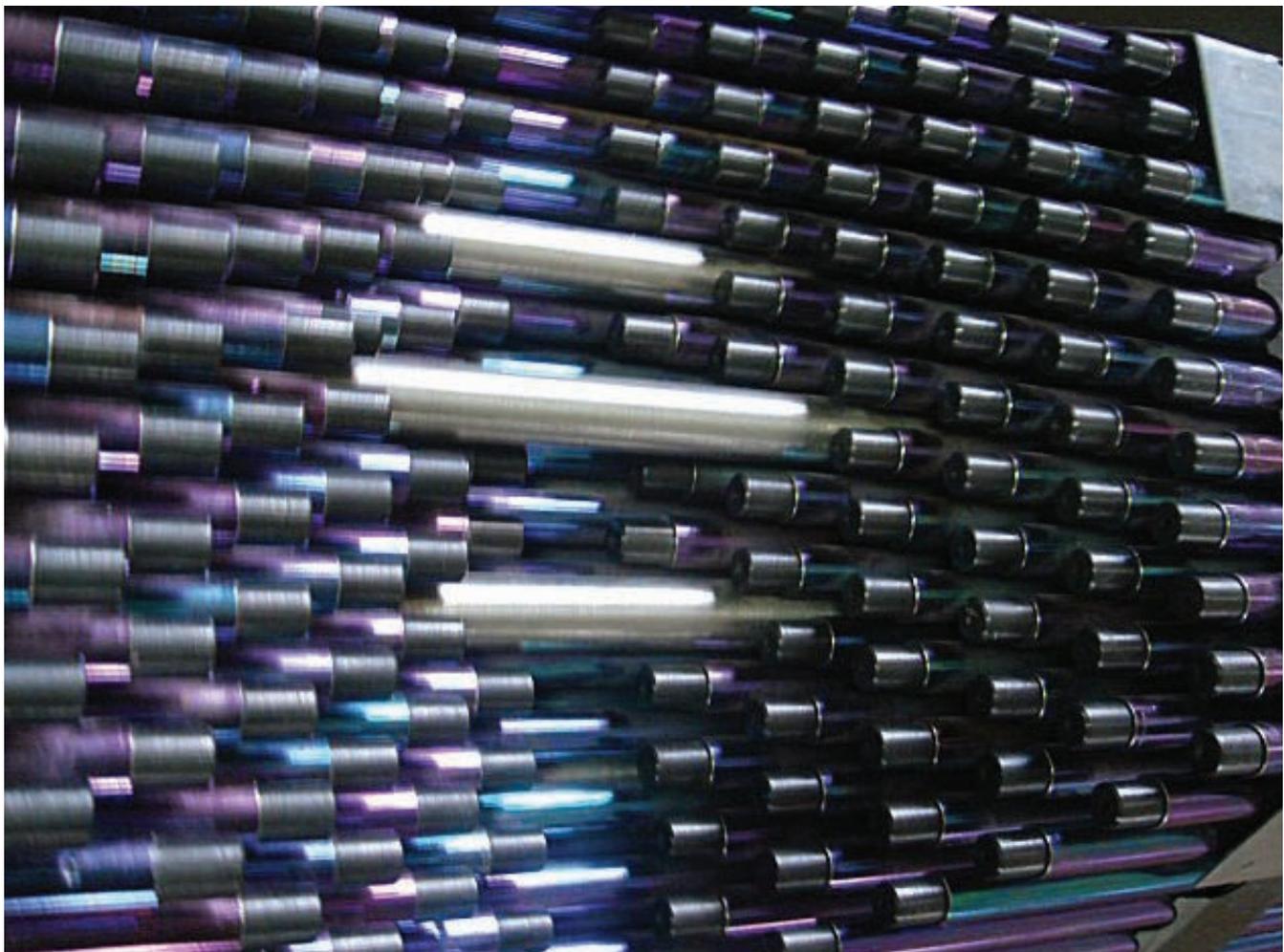
Biennial Review of User Fees

The Chief Financial Officers Act 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. Each year, the NRC revises the hourly rates for license and inspection fees and adjusts the annual fees to meet the fee collection requirements of OBRA-90, as amended. The *Federal Register* (74 FR 27641, June 10, 2009) describes the most recent changes to the

license, inspection, and annual fees. In FY 2009, the NRC revised the fees for public use of the auditorium to more appropriately recover the actual costs. The agency concluded that other types of fees did not warrant revisions at this time.

Inspector General Act

The agency has established and continues to maintain an excellent record in resolving and implementing Office of the Inspector General open audit recommendations. In the Other Accompanying Information section of this report, "Management Decisions and Final Actions on OIG Audit Recommendations," includes this information, as well as data concerning disallowed costs determined through contract audits conducted by the Defense Contract Audit Agency.



Nuclear energy fuel rods

Photo Courtesy of NRC Photo Library