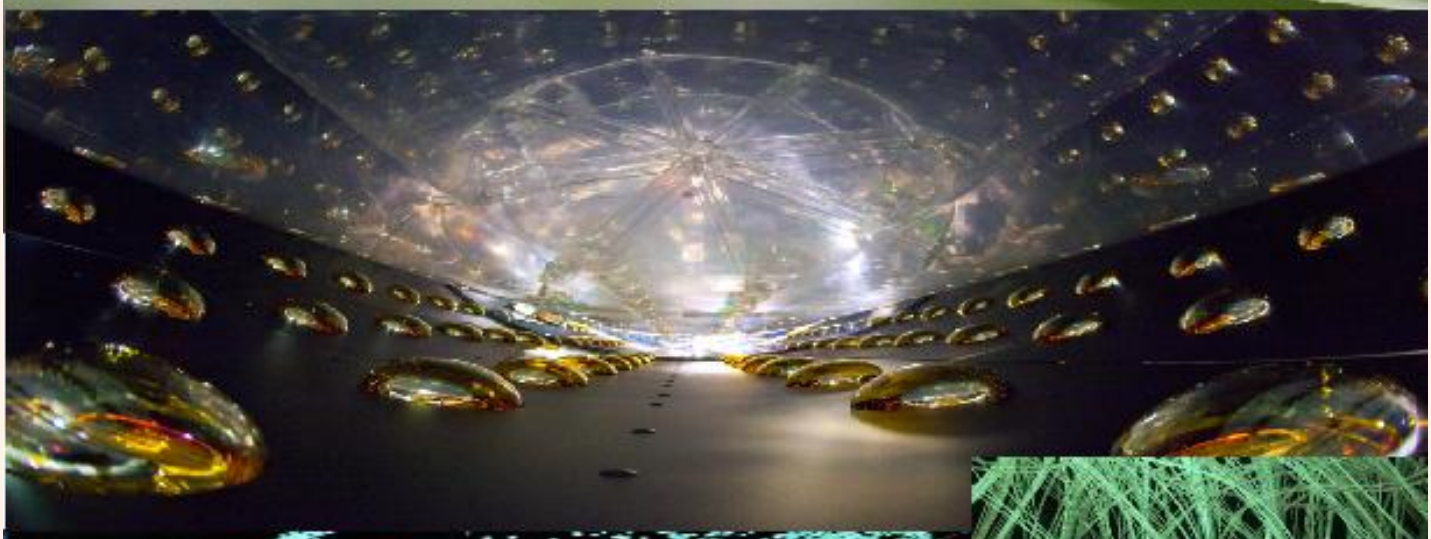
Fiscal Year 2012
Agency Financial Report



DOE/CF-0081

U.S. DEPARTMENT OF ENERGY

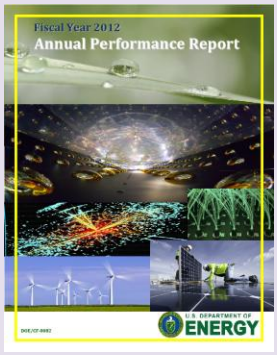
Foreword

The Reports Consolidation Act of 2000 authorizes Federal agencies, with the Office of Management and Budget's (OMB) concurrence, to consolidate various reports in order to provide performance, financial and related information in a more meaningful and useful format. The Department of Energy (Department or DOE), has chosen an alternative reporting to the consolidated Performance and Accountability Report and instead, produces an *Agency Financial Report*, an *Annual Performance Report* and a *Summary of Performance and Financial Information,* pursuant to the OMB Circular A-136. This reporting approach simplifies and streamlines the performance presentations while utilizing the Internet for providing and leveraging additional performance information. The Department's fiscal year (FY) 2012 reporting includes the following three components and will be available at the website below, as each component is completed:

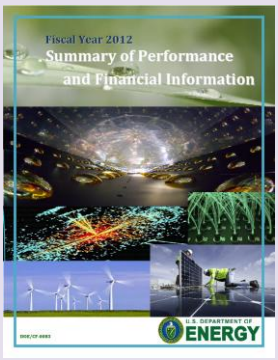
Agency Financial Report (AFR) - The AFR is organized by the following three major sections.

- **Management's Discussion and Analysis** section provides executive-level information on the Department's history, mission, organization, Secretarial priorities, analysis of financial statements, systems, controls and legal compliance and other management priorities facing the Department.
- **Financial Results** section provides a Message from the Chief Financial Officer, the Department's consolidated and combined financial statements and the Auditors' Report.
- **Other Accompanying Information** section provides the Inspector General's Statement of Management Challenges and other statutory reporting.

Annual Performance Report (APR) [will be available February 2013] The APR will be produced in conjunction with the Congressional Budget Justifications and will provide the detailed performance information and descriptions of results by each performance measure.



Summary of Performance Information [will be available February 2013] This document will highlight the most important performance and financial information from the APR and AFR in the brief, executive format.



The above three alternative reportings meet the following legislated reporting requirements:

- Reports Consolidation Act of 2000 requires the consolidated reporting of performance, financial and related information in a Performance and Accountability Report (PAR).
- Federal Financial Management Improvement Act (FFMIA) of 1996 requires an assessment of the agency's financial systems for adherence to Government-wide requirements.
- Government Management Reform Act (GMRA) of 1994 requires agency audited financial statements.
- Federal Managers' Financial Integrity Act (FMFIA) of 1982 requires a report on the status of internal controls and the agency's most serious problems.
- Inspector General (IG) Act of 1978 (Amended) requires information on management actions in response to IG audits.
- Department of Energy Organization Act of 1977 requires an annual report on agency activities.

All three PAR reports will be available at www.energy.gov/about/budget.htm

Table of Contents

Message from the Secretary

I am pleased to present the U.S. Department of Energy's (DOE) *Fiscal Year 2012 Agency Financial Report*. It provides key financial and performance information that demonstrates our accountability to ensure America's security and prosperity by addressing our Nation's energy, environmental, and nuclear challenges through transformative science and technology solutions. Our *Fiscal Year 2012-2014 Annual Performance Plan and Report* (performance supplement to the *Fiscal Year 2014 Congressional Budget Request*), available in February 2013, will be produced as a complement to this report. Access to these reports can be obtained through the Web at Energy.gov.

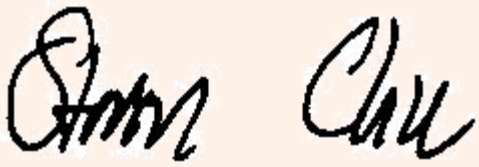
The Department of Energy continues to invest in America's energy sector, building a strong foundation for a clean energy future, advancing groundbreaking science, and reducing the nuclear dangers facing our citizens. In the process, we continue to improve the way the Department does business so we can excel at our work in a more efficient and effective manner. The Department of Energy Strategic Plan serves as the blueprint for achieving success along four strategic goal areas: (1) **transform our energy systems** through catalyzing the timely, material, and efficient transformation of the Nation's energy system and securing U.S. leadership in clean energy technologies; (2) **promote the science and engineering enterprise** by maintaining a vibrant U.S. effort in science and engineering as a cornerstone of our economic prosperity, with clear leadership in strategic areas; (3) **secure our Nation** by enhancing nuclear security through defense, nonproliferation, and environmental efforts; and (4) **achieve management and operational excellence** by establishing an operational and adaptable framework that combines the best wisdom of all Department stakeholders to maximize mission success.

The Energy Department contributed to historic achievements during FY 2012, from the discovery of the Higgs Boson to the powering of the *Curiosity* rover that landed on Mars. Through decades of research, we provided the facilities, equipment, and supercomputers to aid scientists around the globe that culminated with these outcomes. Other notable accomplishments in FY 2012 include the first electric grid-connected tidal energy project off the coast of Maine; a new approach to sea water desalination that could lower the costs of water purification; new insights into the molecular structure of a hydrogen fuel cell that could aid in achieving the goal of producing electricity for transportation; and new advances in engineering inedible plant biomass into biofuels. In the national security area, we met a major milestone of eliminating 450 metric tons of highly enriched Russian uranium taken from nuclear weapons and the dismantlement of the last remaining B53 nuclear bomb.

We also made significant progress in our management and operational areas by:

- Moving to a new website that (1) consists of 16 consolidated sites in an open source content management system and cloud hosting environment, and (2) eliminates several areas of duplication overlap and fragmentation,
- Increasing collaborations across programs in the DOE complex,
- Reducing our average hiring time to 86 days,
- Disposing of excess real property, and
- Increasing financial transparency.

The independent public accounting firm KPMG LLP conducted an audit of the Department's fiscal year 2012 financial statements contained in this report. Based on the results of that audit, the Department received an unqualified audit opinion. Based on our internal evaluations, I can provide reasonable assurance that the financial and performance information contained in this report is complete and reliable and accurately describes the results achieved by the Department.



Steven Chu
November 14, 2012

Management's Discussion and Analysis

As a crucial part of the Manhattan Project, the K-25 complex was constructed in 1943 to enrich uranium.

Agency Highlights

MISSION

To ensure America's security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions.

MANAGEMENT PRINCIPLES

1. Our mission is vital and urgent.
2. Science and technology lie at the heart of our mission.
3. We will treat our people as our greatest asset.
4. We will pursue our mission in a manner that is safe, secure, legally and ethically sound, and fiscally responsible.
5. We will manage risk in fulfilling our mission.
6. We will apply validated standards and rigorous peer review.
7. We will succeed only through teamwork and continuous improvement.

STRATEGIC STRUCTURE

Goal 1: Transform Our Energy Systems

- Deploy the technologies we have
- Discover the new solutions we need
- Lead the national conversation on energy

Goal 2: The Science and Engineering Enterprise

- Extend our knowledge of the natural world
- Deliver new technologies to advance our mission
- Sustain a world-leading technical workforce

Goal 3: Secure Our Nation

- Support the U.S. nuclear stockpile and future military needs
- Reduce global nuclear dangers
- Apply our capabilities for other critical national security missions
- Support responsible civilian nuclear power development and fuel cycle management
- Complete environmental remediation of our legacy and active sites

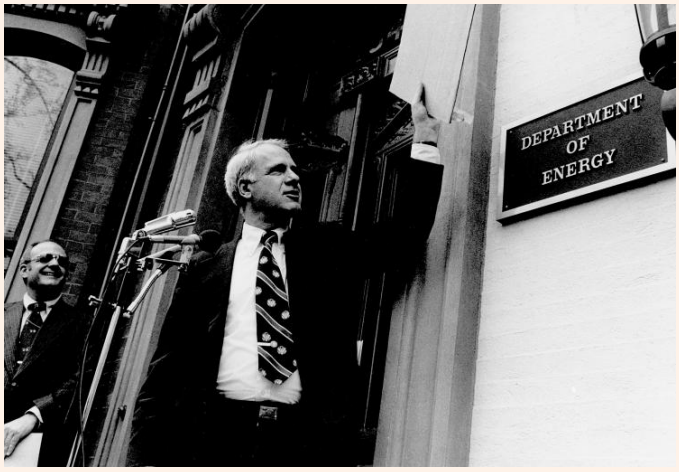
Goal 4: Management and Operational Excellence

- Achieve operational and technical excellence
- Implement a performance-based culture

History

The Department has one of the richest and most diverse histories in the Federal Government, with its lineage tracing back to the Manhattan Project and the race to develop the atomic bomb during World War II. Following that war, Congress created the Atomic Energy Commission (Commission) in 1946 to oversee the sprawling nuclear scientific and industrial complex supporting the Manhattan Project and to maintain civilian government control over atomic research and development (R&D). During the early Cold War years, the Commission focused on designing and producing nuclear weapons and developing nuclear reactors for naval propulsion. The creation of the Atomic Energy Commission ended the exclusive government use of the atom and began the growth of the commercial nuclear power industry, with the Commission having authority to regulate the new industry.

In response to changing needs and an extended energy crisis, the Congress passed the Department of Energy Organization Act in 1977, creating the Department of

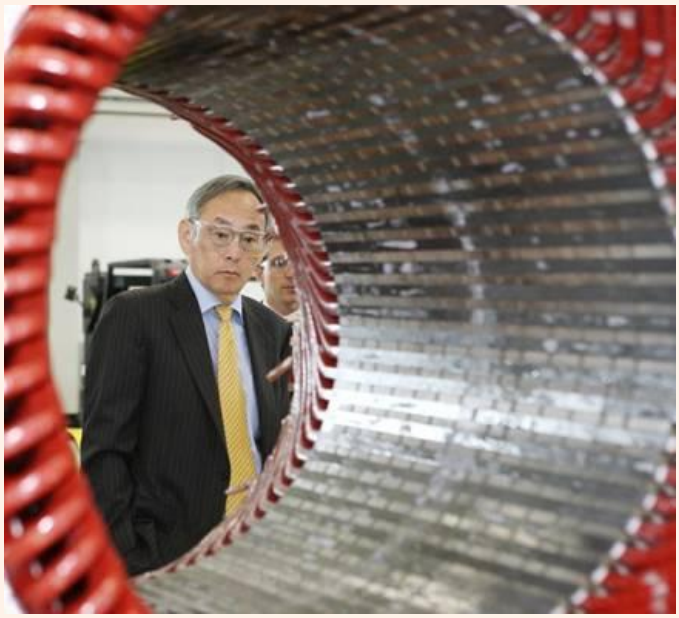


Dr. James R. Schlesinger, the first Secretary of Energy, unveils the sign plate at the Energy Department's temporary headquarters on October 1, 1977.

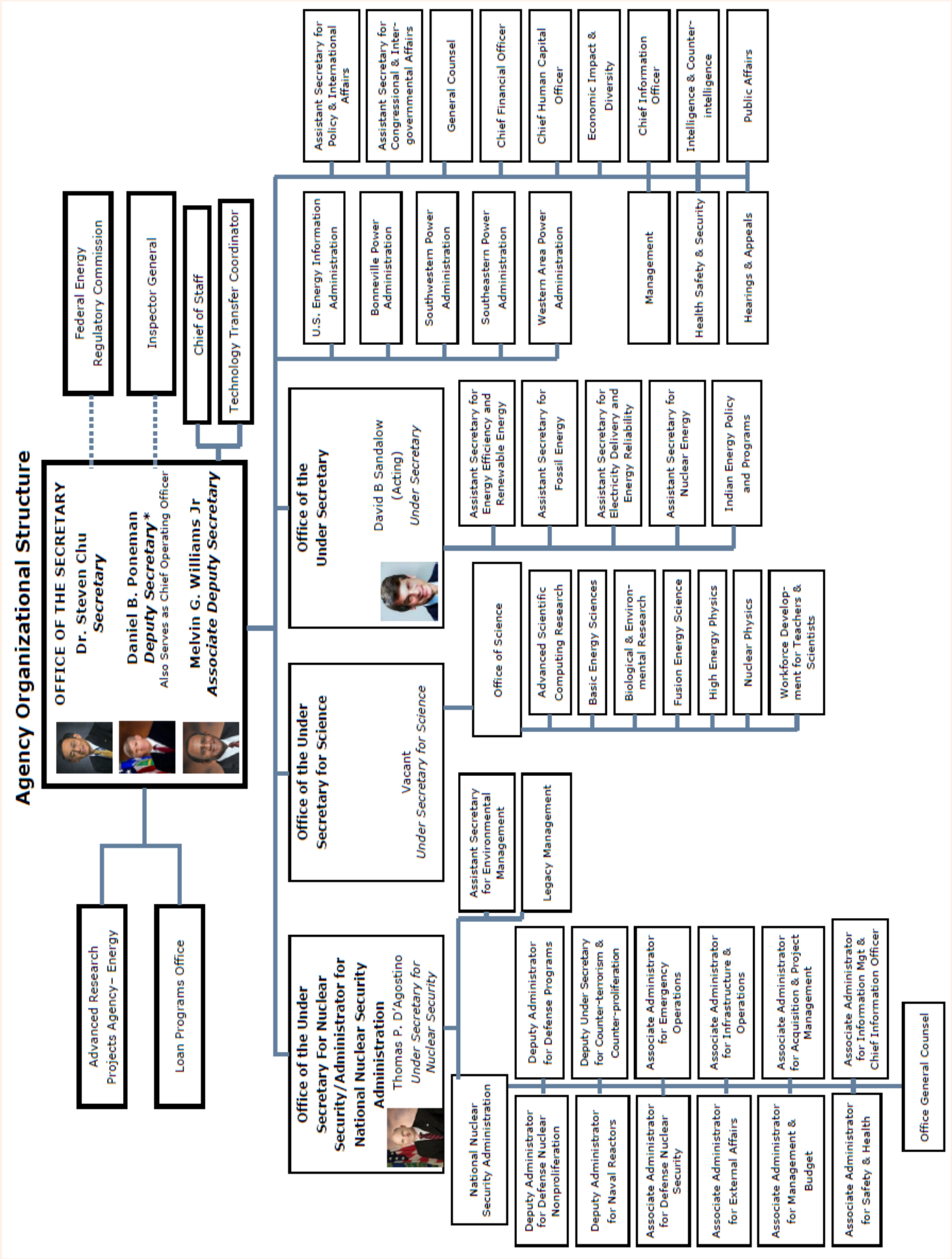
Energy. That legislation brought together for the first time, not only most of the government's energy programs, but also science and technology programs and defense responsibilities that included the design, construction and testing of nuclear weapons. The Department provided the framework for a comprehensive and balanced national energy plan by coordinating and administering the energy functions of the Federal Government. The Department undertook responsibility for long-term, high-risk research and development of energy technology, Federal power marketing, some energy conservation activities, the nuclear weapons programs, some energy regulatory programs and a central energy data collection and analysis program.

Over its history, the Department has shifted its emphasis and focus as the energy and security needs of the Nation have changed. On February 17, 2009, the Department was significantly impacted by President Obama signing into law the American Recovery and Reinvestment Act of 2009 (Recovery Act or ARRA). The Recovery Act more than doubled the Department's budget by providing an additional $35.2 billion of funding for the acceleration of a number of critical commitments in the Department's mission and activities.

View of tailings discarded in the Open-Pit Mine at Spook, Wyoming from uranium ore processing. Photo circa 1960.



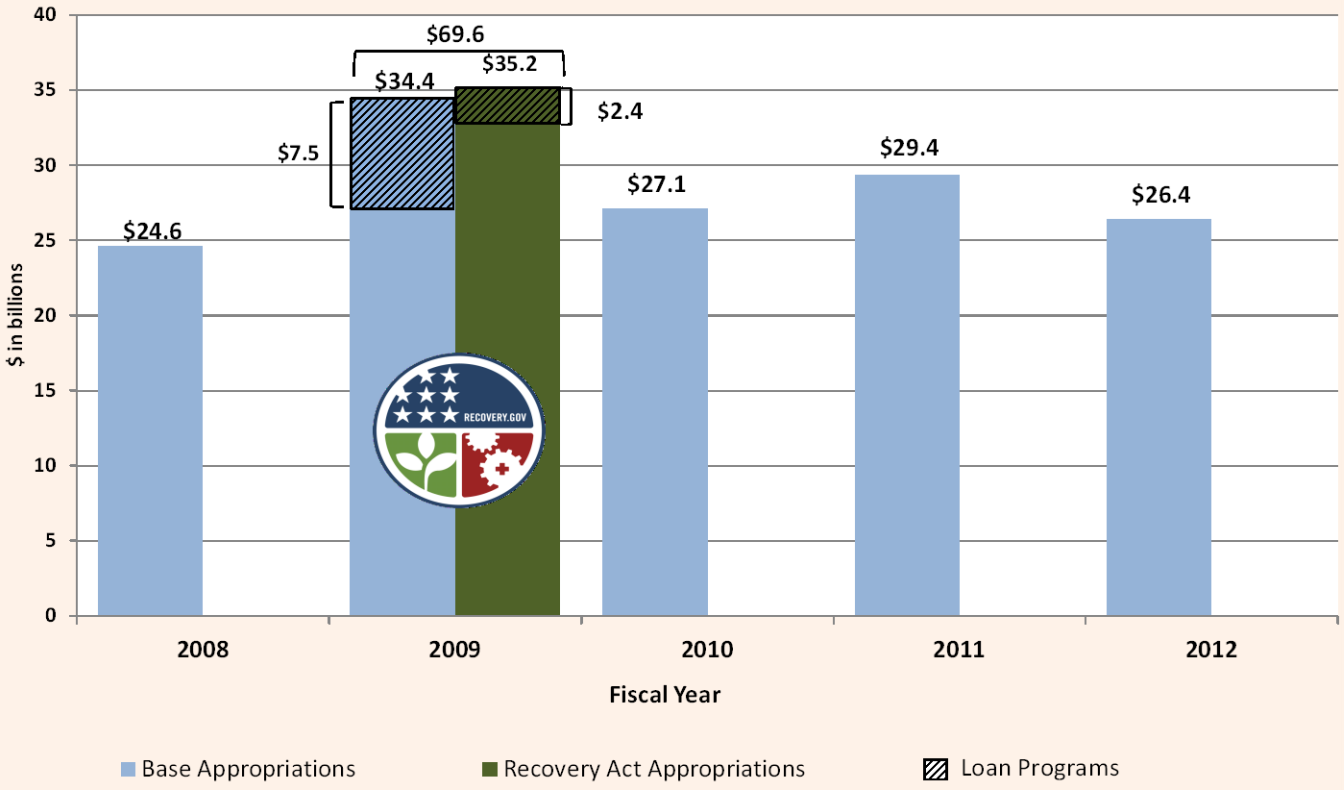
Secretary Chu visiting Ingeteam Inc.'s Milwaukee, Wisconsin facility. In this photo he is looking at the stator of a 2MW Wind Turbine Generator.


Agency Organizational Structure
OFFICE OF THE SECRETARY
Dr. Steven Chu
Secretary
Daniel B. Poneman
Deputy Secretary*
Also Serves as Chief Operating Officer
Melvin G. Williams Jr
Associate Deputy Secretary
Federal Energy Regulatory Commission
Inspector General
Chief of Staff
Technology Transfer Coordinator
Advanced Research Projects Agency– Energy
Loan Programs Office
Assistant Secretary for Policy & International Affairs
Assistant Secretary for Congressional & Inter-governmental Affairs
General Counsel
Chief Financial Officer
Chief Human Capital Officer
Economic Impact & Diversity
Chief Information Officer
Intelligence & Counter-intelligence
Public Affairs
U.S. Energy Information Administration
Bonneville Power Administration
Southwestern Power Administration
Southeastern Power Administration
Western Area Power Administration
Management
Health Safety & Security
Hearings & Appeals
Office of the Under Secretary
David B Sandalow
(Acting)
Under Secretary
Assistant Secretary for Energy Efficiency and Renewable Energy
Assistant Secretary for Fossil Energy
Assistant Secretary for Electricity Delivery and Energy Reliability
Assistant Secretary for Nuclear Energy
Indian Energy Policy and Programs
Office of the Under Secretary for Science
Vacant
Under Secretary for Science
Office of Science
Advanced Scientific Computing Research
Basic Energy Sciences
Biological & Environ-mental Research
Fusion Energy Science
High Energy Physics
Nuclear Physics
Workforce Develop-ment for Teachers & Scientists
Assistant Secretary for Environmental Management
Legacy Management
Office of the Under Secretary For Nuclear Security/Administrator for National Nuclear Security Administration
Thomas P. D'Agostino
Under Secretary for Nuclear Security
National Nuclear Security Administration
Deputy Administrator for Defense Programs
Deputy Under Secretary for Counter-terrorism & Counter-proliferation
Associate Administrator for Emergency Operations
Associate Administrator for Infrastructure & Operations
Associate Administrator for Acquisition & Project Management
Associate Administrator for Information Mgt & Chief Information Officer
Deputy Administrator for Defense Nuclear Nonproliferation
Deputy Administrator for Naval Reactors
Associate Administrator for Defense Nuclear Security
Associate Administrator for External Affairs
Associate Administrator for Management & Budget
Associate Administrator for Safety & Health
Office General Counsel

Financial Resources

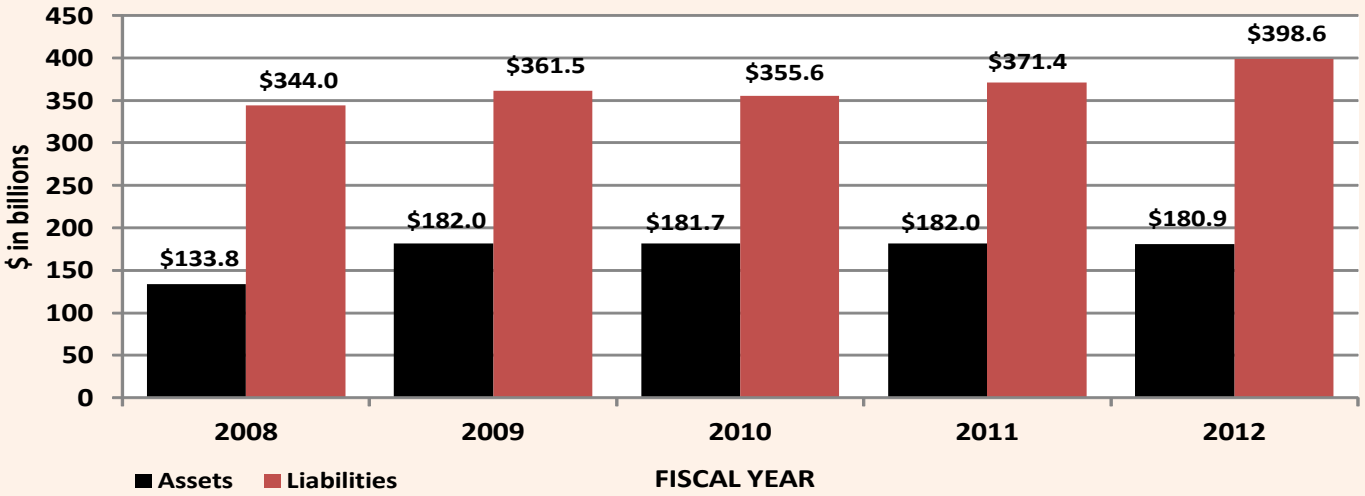
Adjusted Appropriated Amounts

(Adjustments include appropriation transfers, reductions and appropriations temporarily not available.)

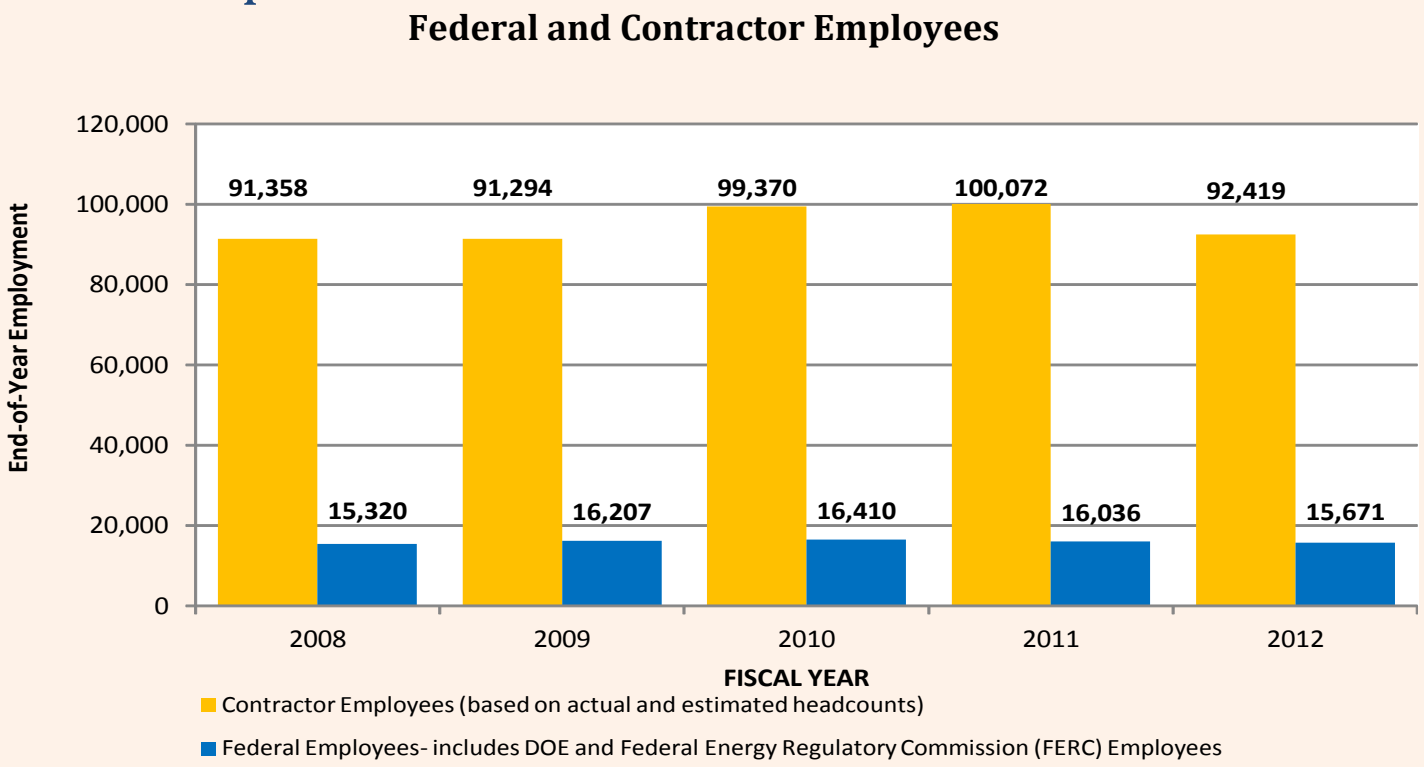


(Original $38.7 billion of Recovery Act Appropriations was later reduced by $3.5 billion in transfers and rescissions. Amounts do not include the Western Area and Bonneville Power Administrations' borrowing authority and credit reform financing accounts.)

Assets and Liabilities



Human Capital Resources



Financial Management Report Card

COMPLIANCE YES	COMPLIANCE NO	REQUIREMENT OR INITIATIVE	SUPPORTING INDICATORS (see page references for more detail)
☑		Government Management Reform Act –Financial Statement Audit	Unqualified Audit Opinion (pages 104 and 121)
☑	☑	Federal Managers' Financial Integrity Act – Internal Controls (Section II) Financial Systems (Section IV)	One Material Weakness (Section II) (pages 24 and 121). Financial Systems generally conform to (Section IV) requirements and no FISMA significant deficiencies identified (pages 24 & 121)
☑		OMB Circular A-123, Appendix A	No Material Weaknesses (see pages 25 and 121)
☑		Federal Financial Management Improvement Act	Substantially comply with Federal financial management system requirements (see pages 25 and 121)
☑		Federal Information Security Management Act (FISMA)	Substantially comply with FISMA requirements as evidenced by annual FISMA reporting data
☑		Improper Payments Information Act, as amended by the Improper Payments Elimination & Recovery Act	<1% overall improper payment rate and not susceptible to significant improper payments (pages 123-124)

Performance Summary

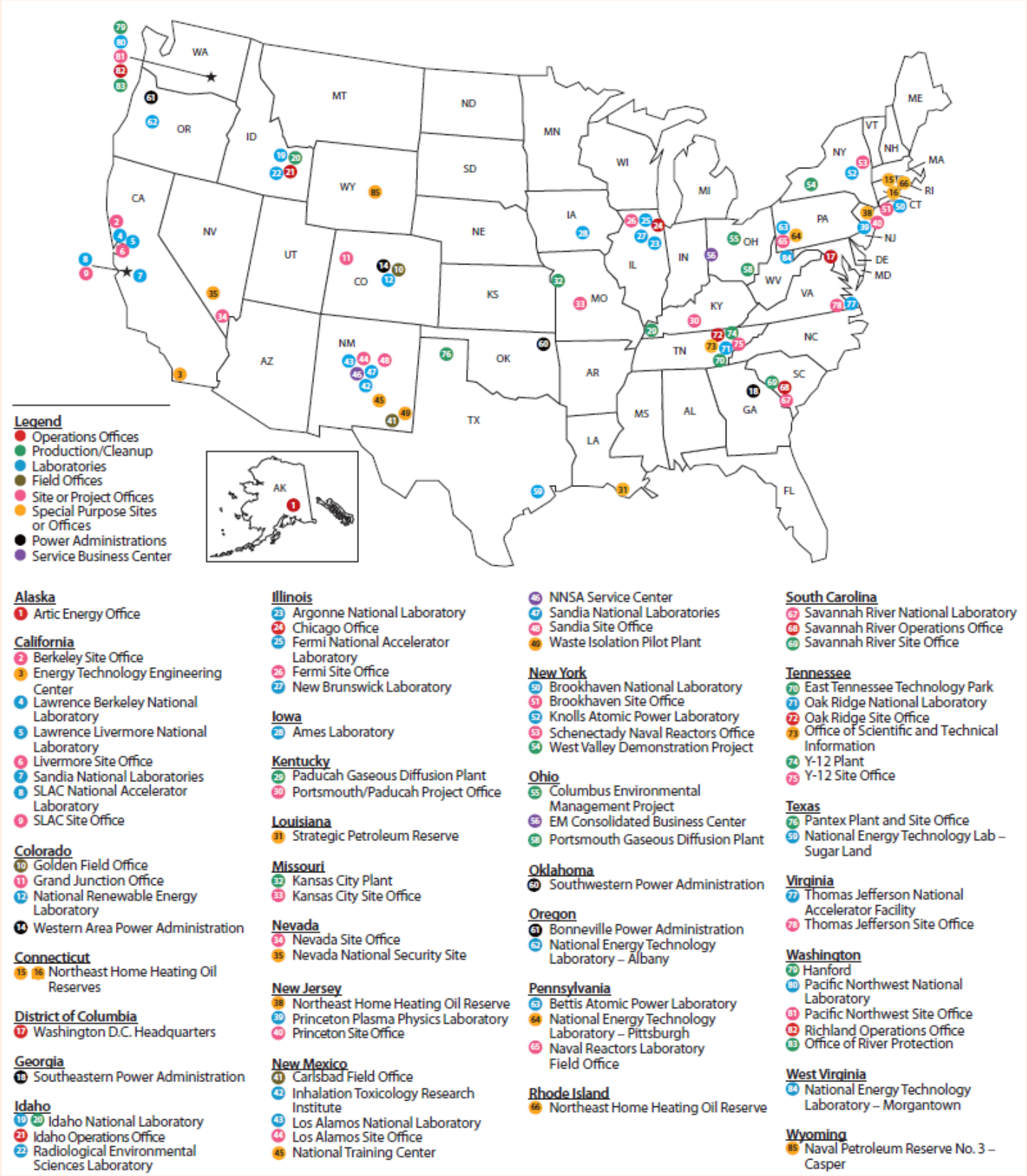
The tables in this section will be updated with FY 2012 data in the Department's FY 2012 Annual Performance Report available in February 2013.

STRATEGIC GOAL	ACTIVITY (includes Recovery Act projects)	Fiscal Year 2010 Performance			Fiscal Year 2011 Performance		
		Targets Met	Targets Not Met	Results Unknown	Targets Met	Targets Not Met	Results Unknown
Strategic Goal 1: Transform Our Energy Systems							
	Electricity Delivery & Energy Reliability	15	1		7	1	
	Western Area Power Administration	4			3	1	
	Bonneville Power Administration	3			3		
	Southeastern Power Administration	2			2		
	Southwestern Power Administration	4			4		
	Solar Energy	7	2		5		
	Wind Energy	4	4		3	1	
	Geothermal Technologies	2	4			1	
	Water Power	3	1		1	1	
	Biomass & Biorefinery Systems R&D	6	3		4		
	Hydrogen Technology	4			2		
	Vehicle Technologies	7	2		6		
	Industrial Technologies	5	1		2		
	Building Technologies	7	3		4		
	Federal Energy Management Program	4				1	
	Facilities & Infrastructure		3				
	Weatherization	6	1		1		
	State Energy Programs	2			1		
	Appliance Rebates		1				
	Fossil Energy	5			8		
	Near-Zero Atmospheric Emissions Coal-Based Electricity & Hydrogen Production	12					
	Petroleum Reserves	3			3		
	New Nuclear Generation Technologies	5			5		
	National Nuclear Infrastructure	3			2	1	
	Energy Information Administration	3			2		
	Loan Programs	1	2		4	2	
	Advanced Research Projects Agency-Energy	1					
	Total Goal 1	**118**	**28**	**0**	**72**	**9**	**0**
	High Energy Physics	10	1		4		
	Nuclear Physics	11	5		5	1	
	Biological & Environmental Research	12	1		6		
	Fusion Energy Sciences	8	4		3	1	
	Basic Energy Sciences	10			4		
	Advanced Scientific Computing Research	6	1		2		
	Infrastructure	4					
	Fellowships/ Career Awards	1					
	Small Business Research		1				
	Total Goal 2	**62**	**13**	**0**	**24**	**2**	**0**

AGENCY HIGHLIGHTS

STRATEGIC GOAL	ACTIVITY	Fiscal Year 2010 Performance			Fiscal Year 2011 Performance		
		Targets Met	Targets Not Met	Results Unknown	Targets Met	Targets Not Met	Results Unknown
Strategic Goal 3:	*Secure Our Nation*						
	Office of the Administrator	2			2		
	Directed Stockpile Work	2	2		3	1	
	Science Campaign	2	1		3		
	Engineering Campaign	5			5		
	Inertial Confinement Fusion Ignition & High Yield Campaign	3	3		3		1
	Advanced Simulation & Computing Campaign	4			3		
	Readiness Campaign	3			4		
	Readiness in Technical Base & Facilities	4			4		
	Secure Transportation Asset	3			3		
	Nuclear Counterterrorism Incident Response		1			1	
	Facilities & Infrastructure Recapitalization	2			2		
	Site Stewardship	2	1		2		
	Defense Nuclear Security	4			4	1	
	Cyber Security	1	2		1	2	
	Nonproliferation & Verification R&D	6			6		
	Elimination of Weapons-Grade Plutonium Production	1	2		2		
	Nonproliferation & International Security	5			5		
	International Nuclear Materials Protection & Cooperation	2	3		3	2	
	Fissile Materials Disposition	2	1		2	1	
	Global Threat Reduction Initiative	4			3	1	
	Naval Reactors	5			4	1	
	Environmental Management	30	11		3	4	
	Legacy Management	2	1		2		
	Nuclear Waste Disposal	1					
	Total Goal 3	**95**	**28**	**0**	**69**	**14**	**1**
	DOE Total	**275**	**69**	**0**	**165**	**25**	**1**
	Share of Targets Met	**80%**			**86%**		

Major Laboratories and Field Facilities



Alaska
1 Artic Energy Office

California
2 Berkeley Site Office
3 Energy Technology Engineering Center
4 Lawrence Berkeley National Laboratory
5 Lawrence Livermore National Laboratory
6 Livermore Site Office
7 Sandia National Laboratories
8 SLAC National Accelerator Laboratory
9 SLAC Site Office

Colorado
10 Golden Field Office
11 Grand Junction Office
12 National Renewable Energy Laboratory
14 Western Area Power Administration

Connecticut
15 16 Northeast Home Heating Oil Reserves

District of Columbia
17 Washington D.C. Headquarters

Georgia
18 Southeastern Power Administration

Idaho
19 20 Idaho National Laboratory
21 Idaho Operations Office
22 Radiological Environmental Sciences Laboratory

Illinois
23 Argonne National Laboratory
24 Chicago Office
25 Fermi National Accelerator Laboratory
26 Fermi Site Office
27 New Brunswick Laboratory

Iowa
28 Ames Laboratory

Kentucky
29 Paducah Gaseous Diffusion Plant
30 Portsmouth/Paducah Project Office

Louisiana
31 Strategic Petroleum Reserve

Missouri
32 Kansas City Plant
33 Kansas City Site Office

Nevada
34 Nevada Site Office
35 Nevada National Security Site

New Jersey
38 Northeast Home Heating Oil Reserve
39 Princeton Plasma Physics Laboratory
40 Princeton Site Office

New Mexico
41 Carlsbad Field Office
42 Inhalation Toxicology Research Institute
43 Los Alamos National Laboratory
44 Los Alamos Site Office
45 National Training Center
46 NNSA Service Center
47 Sandia National Laboratories
48 Sandia Site Office
49 Waste Isolation Pilot Plant

New York
50 Brookhaven National Laboratory
51 Brookhaven Site Office
52 Knolls Atomic Power Laboratory
53 Schenectady Naval Reactors Office
54 West Valley Demonstration Project

Ohio
55 Columbus Environmental Management Project
56 EM Consolidated Business Center
58 Portsmouth Gaseous Diffusion Plant

Oklahoma
60 Southwestern Power Administration

Oregon
61 Bonneville Power Administration
62 National Energy Technology Laboratory – Albany

Pennsylvania
63 Bettis Atomic Power Laboratory
64 National Energy Technology Laboratory – Pittsburgh
65 Naval Reactors Laboratory Field Office

Rhode Island
66 Northeast Home Heating Oil Reserve

South Carolina
67 Savannah River National Laboratory
68 Savannah River Operations Office
69 Savannah River Site Office

Tennessee
70 East Tennessee Technology Park
71 Oak Ridge National Laboratory
72 Oak Ridge Site Office
73 Office of Scientific and Technical Information
74 Y-12 Plant
75 Y-12 Site Office

Texas
76 Pantex Plant and Site Office
59 National Energy Technology Lab – Sugar Land

Virginia
77 Thomas Jefferson National Accelerator Facility
78 Thomas Jefferson Site Office

Washington
79 Hanford
80 Pacific Northwest National Laboratory
81 Pacific Northwest Site Office
82 Richland Operations Office
83 Office of River Protection

West Virginia
84 National Energy Technology Laboratory – Morgantown

Wyoming
85 Naval Petroleum Reserve No. 3 – Casper

Strategic Plan and Program Performance

The narrative below discusses recent results and outcomes for DOE programs as aligned with the strategic goals presented in the *DOE Strategic Plan*. A detailed discussion of results for each of the agency's fiscal year 2012 performance goals, assessment methodology, metrics, external reviews, and documentation of performance data will be presented in the performance supplement to the *DOE FY 2014 Congressional Budget Request* to be released in February 2013.

Goal 1 Transform Our Energy Systems

Catalyze the timely, material, and efficient transformation of the nation's energy system and secure U.S. leadership in clean energy technologies

Objectives:

- Deploy the technologies we have
- Discover the new solutions we need
- Lead the national conversation on energy

Supporting Offices:

ARPA-E
Electricity Delivery and Energy Reliability
Energy Efficiency and Renewable Energy
Energy Information Administration
Fossil Energy
Loan Programs
Nuclear Energy
Power Marketing Administrations

Access to clean, affordable, secure, and reliable energy has been a cornerstone of America's economic growth. However, maintaining this access while strengthening U.S. competitiveness and mitigating the environmental impacts of energy are long-standing challenges. In September 2011, DOE developed a set of six strategies to guide DOE's investments in technologies to transform U.S. energy systems. These strategies, which were articulated in the Quadrennial Technology Review (QTR), are to (1) deploy clean energy; (2) modernize the electric grid; (3) increase building and industrial efficiency; (4) deploy alternative fuels; (5) electrify the vehicle fleet; and (6) increase vehicle efficiency. Below are examples of recent program results and market outcomes from investments that address these strategic challenges.

Cost Competitive Solar Power: The SunShot Initiative aims to make solar energy cost competitive with other forms of energy by the end of the decade. Inspired by President Kennedy's "Moon Shot" program that put the first man on the moon, the SunShot Initiative has created new momentum for the solar industry by highlighting the need for American competitiveness in the clean energy race. Since 2011, DOE-funded research and development has led to new world-record efficiencies for single-junction photovoltaic (PV) cells, multi-junction PV cells, and PV solar modules. However, while solar hardware prices have fallen about 75% in the past four years, the non-hardware ("soft") costs of installing solar energy systems remain stubbornly high. As a part of the Sunshot Initiative, DOE launched a new competition in FY 2012 known as the SunShot Prize, which will make a total of $10 million in cash awards available to the first three teams that demonstrate that the soft costs of solar energy can be as low as $1 per watt for small-scale photovoltaic systems on American homes and businesses.

First Grid-Connected Tidal Energy Project: Leveraging a $10 million investment from the Energy Department, Ocean Renewable Power Company (ORPC) deployed its first commercial tidal energy device into Cobscook Bay, off the coast of Eastport, Maine, this summer. The project, which injected $14 million into the local economy and has supported more than 100 local and supply chain jobs, represents the first tidal energy project in the United States with long-term contracts to sell electricity – helping to drive American leadership in this innovative clean energy technology and diversify the nation's energy mix. Earlier this year, DOE released a nationwide tidal energy resource assessment, identifying about 250 terawatt hours of annual electric generation potential from tidal currents.

Advancing Innovative Clean Coal Technology: As part of President Obama's all-of-the-above approach to energy, DOE has extended its work in clean coal technology to include a focus on the economically viable utilization of captured carbon dioxide (CO_2), labeling this effort Carbon Capture, Utilization and Storage (CCUS). While the largest near-term utilization opportunity for CO_2 is in enhanced oil recovery, DOE funding is also supporting research on using waste CO_2 to make commercial plastics and produce biofuels from algae. In FY 2012, DOE finished 2,000 hours of post-combustion CO_2 capture pilot-scale testing, using real coal-derived flue gas, at DOE's National Carbon Capture Center in Wilsonville, Alabama, using novel amines, solid sorbents and CO_2 separation membranes. DOE has also initiated the first large-scale injection of CO_2 into a saline formation in the United States from an industrial source through the Midwest Geological Sequestration Consortium, which began injecting 1,000 metric tons per day from the Archer Daniels Midland Ethanol Facility in Decatur, Illinois, into the Mount Simon Sandstone.

Supercomputer Modeling to Improve Existing Nuclear Power Plants: The current U.S. fleet of 104 nuclear reactors provides approximately 20% of U.S. electricity. DOE is committed to improving their efficiency and performance, to further reduce the cost and increase the safety of nuclear power. DOE's Consortium for Advanced Simulation of Light Water Reactors (CASL) Energy Innovation Hub has developed a new set of integrated, multi-physics computer simulation tools that can be used to predict and improve the performance of entire reactors, including increasing power uprates and fuel burnup, and enabling life extension. In FY 2012, CASL released key components of its Virtual Environment for Reactor Applications (VERA) software suite.

Advanced Computer Modeling of the Electric Grid: As demonstrated by several recent power outages in different locations around the country, it is vitally important for transmission operators to understand the performance of the wider electric grid. However, the increasing complexity and the aging infrastructure of the grid make this a significant technical challenge. In FY 2012, DOE awarded $6.8 million in advanced electric grid modeling research that will create a new class of software tools to simulate dynamic events and inform operators about real-time conditions on the electric grid. These projects will complement earlier investments by DOE in grid-monitoring hardware. Ultimately, this work will support the shift from static, off-line understanding of the grid to real-time measurement and control, thus improving electric grid stability.

Investing in Cybersecurity for Energy Delivery Systems (CEDS): In FY 2012, DOE jointly launched the *Electricity Subsector Cybersecurity Capability Maturity Model (ES-C2M2)*, which allows electric utilities and grid operators to assess their cybersecurity capabilities and prioritize their actions and investments to improve cybersecurity. CEDS -- a multi-disciplinary collaboration led by DOE among energy delivery control-system vendors, utilities, national laboratories, academia and government – will advance the use of this model and help develop advanced technologies to improve U.S. energy infrastructure reliability and resiliency. In FY 2012, DOE has also worked with partners in academia and industry to transition capabilities to the energy sector such as detection systems for malicious use of advanced metering infrastructure.

Advanced Manufacturing: In FY 2012, DOE awarded more than $54 million—leveraging approximately an additional $17 million in cost share from the private sector—for 13 projects across the country to advance transformational technologies and materials to help American manufacturers dramatically increase the energy efficiency of their operations and reduce costs. These projects will develop cutting-edge manufacturing tools, techniques, and processes that will be able to save companies money by reducing the energy needed to power their facilities. These projects are a part of the Administration's strategy for investing in emerging technologies that create high-quality domestic manufacturing jobs and enhance the competitiveness of U.S. companies in today's global markets.

Biofuels: In his Blueprint for a Secure Energy Future released in March 2011, President Obama set a goal of reducing oil imports by one-third by 2025 and laid out an all-of-the-above energy plan to achieve that goal by safely and responsibly developing domestic oil and gas energy resources, increasing transportation energy efficiency, and speeding development of biofuels and other alternatives. As part of that effort, the Blueprint directed the Navy, the U.S. Department of Agriculture, and DOE to collaborate to speed the development of "drop-in" biofuel substitutes for diesel and jet fuel. Competitively-priced drop-in biofuels would help improve America's energy security, contributing to the fuel needs of U.S. armed forces, as well as the commercial aviation and shipping sectors. This year, DOE, in collaboration with the Navy, announced $20 million in grants and cooperative agreements to speed the development of biofuels for military and commercial transportation that will reduce the need for oil and strengthen rural America.

Transformational Energy Storage: Thirty-two potentially new projects received a total of $73 million in funding from DOE's Advanced Research Projects Agency-Energy (ARPA-E) to enable some of the nation's brightest scientists, engineers, and entrepreneurs to develop energy storage technologies. These projects are supported through three new ARPA-E programs – Advanced Management and Protection of Energy Storage Devices, Small Business Innovation Research/Small Business Technology Transfer, and Methane Opportunities for Vehicular Energy. The first two programs focus on innovations in battery management and storage to advance electric vehicle technologies, help improve the efficiency and reliability of the electric grid, and provide important energy security benefits to America's armed forces. The third program supports research on light-weight, affordable natural gas tanks for vehicles and development of natural gas compressors to efficiently fuel a natural gas vehicle at home.

Mars Rover Power Source: NASA's Mars Science Laboratory (a.k.a. the Curiosity rover) that is currently exploring Mars is powered by a radioisotope thermoelectric generator that was built and tested by the Idaho National Laboratory, with components from the Los Alamos National Laboratory and Oak Ridge National Laboratory. Sandia National Laboratory performed the nuclear safety assessment. The device uses the same radioisotope technology that powers deep-space probes like Pioneer, Galileo, Cassini, and other instruments intended to operate in the coldest, darkest reach of space outside our solar system.

Goal 2 The Science and Engineering Enterprise

Maintain a vibrant U.S. effort in science and engineering as a cornerstone of our economic prosperity, with clear leadership in strategic areas

Objectives:
- Extend our knowledge of the natural world
- Deliver new technologies to advance our mission
- Sustain a world leading technical workforce

Supporting Offices:
Science

The Department of Energy supports basic research into the smallest constituents of matter; the most fleeting subatomic, atomic, and chemical transitions; and the structure and properties of materials and biological systems. We are the largest federal funder of physical sciences. Our research extends our understanding of nature; enables new technologies that support the Department's energy, environment, and security missions; and improves the quality of life of all Americans. Scientific discovery feeds technology development; and, conversely, technology advances enable scientists to pursue an ever more challenging set of questions. The Department strives to maintain leadership in fields where this feedback is particularly strong, including materials science research, bio-energy research, and high-performance computing. In addition, the Department provides the world's largest collection of scientific user facilities to some 26,000 researchers every year. Below are examples of recent program results from DOE investments in science and engineering.

Higgs Boson: On July 4, 2012, at the CERN Laboratory near Geneva, Switzerland, physicists announced the discovery of a new particle compatible with the Standard Model Higgs. More than 1,700 scientists, engineers, technicians and graduate students from U.S. institutions – including 89 American universities and 7 DOE national laboratories – helped design, build, and operate the Large Hadron Collider (LHC) and its four particle detectors at the CERN Laboratory. The United States provides support for research and detector operations at the LHC and also supplies computing for the ATLAS and CMS experiments through DOE's Office of Science and the National Science Foundation. Scientists have been looking for the Higgs particle for more than two decades; these results help validate the Standard Model used by scientists to explain the nature of matter.

2012 Nobel Prize in Chemistry: Brian Kobilka and Robert Lefkowitz shared the 2012 Nobel Prize in Chemistry "for studies of G-protein–coupled receptors." Cells use the receptors to receive signals from the outside world including tastes, flavors, and sights, and to communicate with mobile messengers from inside the body such as hormones and neurotransmitters. They are also the target of many medicines. Dr. Kobilka and his fellow researchers used special capabilities at the DOE Office of Science-supported Advanced Photon Source at Argonne National Laboratory to observe a G-protein-coupled receptor "at the exact moment that it is activated by a hormone and sends a signal into the cell."

X-rays Reveal Spin Types: Physicists working at Brookhaven National Laboratory and Switzerland's Paul Scherrer Institute have revealed key quantum characteristics of high-temperature superconductors, demonstrating new experimental methods and breaking fundamental ground on these mysterious materials. Using a technique called resonant inelastic x-ray scattering (RIXS), scientists examined the magnetic spins of atomically thin layers of copper oxide materials. In a surprising discovery, researchers found that the spin waves present in complete, three-dimensional samples survived all the way down to the atomic level. This will enable researchers to study truly two-dimensional behavior without the complicated interactions found on larger materials. It is widely believed that the essential electron pairing in high-temperature superconductors is magnetically mediated. Examining the fundamental building blocks of these superconductors, layers of copper and oxygen atoms, is key to understanding the magnetism and one day designing superconductors with even better properties.

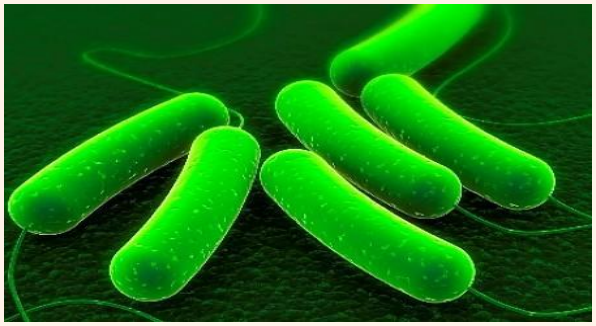
Strengthen America's Scientific Workforce: The Office of Science selected 68 scientists from across the nation to receive five-year awards under the Early Career Research Program. The five-year awards are designed to bolster the nation's scientific workforce by providing support to exceptional researchers during the crucial early career years, when many scientists do their most formative work. The research awards also aim at providing incentives for scientists to focus on mission research areas that are a high priority for DOE and the nation. A list of selectees, their institutions and abstracts of their research projects is available at http://science.energy.gov/early-career/.

DOE Computers Back in Lead: DOE's Lawrence Livermore National Laboratory (LLNL) and Argonne National Laboratory (ANL) put DOE back on the top of the world's most powerful supercomputers as measured by the June 2012 Top500 list, with LLNL's Sequoia, supported by the National Nuclear Security Administration, ranking first and ANL's Mira, supported by the DOE Office of Science, ranking third. Both machines are IBM Blue Gene/Qs and are the result of a research and development partnership among ANL, LLNL, and IBM. In FY 2013, the

Oak Ridge National Laboratory will begin operating the Titan machine, which will supercede the capabilities of Sequoia.

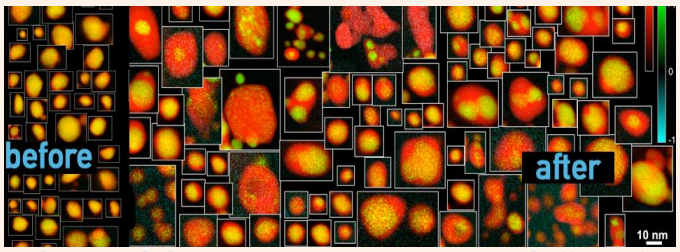
Energy Scan Reveals First Hints of Phase Boundary: Scientists taking advantage of the versatility and new capabilities of the Relativistic Heavy Ion Collider (RHIC), an atom smasher at DOE's Brookhaven National Laboratory, have observed first glimpses of a possible boundary separating ordinary nuclear matter, composed of protons and neutrons, from the seething soup of their constituent quarks and gluons that permeated the early universe some 14 billion years ago. Though RHIC physicists have been creating and studying this primordial quark-gluon plasma for some time, the latest preliminary data—presented at the Quark Matter 2012 international conference—come from systematic studies varying the energy and types of colliding ions to create this new form of matter under a broad range of initial conditions, allowing the experimenters to unravel its intriguing properties.

New Technique Lowers Memory Footprint and Saves Energy: Researchers at Oak Ridge National Laboratory have developed a preconditioner-based, high-throughput lossless compression technique for hard-to-compress scientific datasets. This technique exhibits both read and write performance gains proportional to the degree of data reduction, up to 46% on scientific datasets, in addition to reducing the total amount of data that is being stored and accessed. By operating on a lower memory footprint in parallel, this method offers high throughput, reduced data movement, and data reduction that collectively translate to a 50% reduction in energy consumption.



Strains of E. Coli bacteria engineered to digest switchgrass biomass and synthesize its sugars into gasoline, diesel and jet fuel. Image courtesy of Berkeley Laboratory.

Nanoscale Research in Fuel Cells: Researchers at the Energy Materials Center at Cornell (emc^2), a DOE Office of Science-supported Energy Frontier Research Center (EFRC), are using a sophisticated microscope that allows them to sneak a peek at the very atoms and molecules that make up a hydrogen fuel cell and figure out how the cells work and how their performance degrades as they age. Their conclusions are already providing insights into how to build a better fuel cell, with the ultimate goal of using clean hydrogen, or small organic (and renewable) molecules to supply electricity for transportation and a range of other applications. A fuel cell has some similarities to a battery. Both provide electricity that can, for example, run an electric motor. Unlike a battery, which needs to be recharged, usually over an extended period of time, the fuel cell generates its electricity on board, and can be repowered by a fast refilling of hydrogen (or another) fuel.



Sophisticated electron microscope images reveal effects of aging to fuel cell catalysts nanoparticles.

Advancing the Science for Next-Generation Biofuels: DOE Bioenergy Research Center researchers have developed new approaches for engineering plant biomass that can be more easily and efficiently digested for conversion into biofuels. These include increasing easily-digestible starch levels in the candidate biofuel crop switchgrass and discovering new lignin subunits within plant biomass that could be future engineering targets to make it easier to process into liquid fuel. They have also identified specific genes that enable biofuel-producing microorganisms to cope with toxic and inhibitory chemical components produced during biomass pretreatment processes, avoiding the expense of removing residual toxic chemicals from pretreated biomass.

Goal 3 Secure Our Nation

Enhance nuclear security through defense, nonproliferation, and environmental efforts

Objectives:
- Support the U.S. nuclear stockpile and future military needs
- Reduce global nuclear dangers
- Apply our capabilities for other critical national security missions
- Support responsible civilian nuclear power development and fuel cycle management
- Complete environmental remediation of our legacy and active sites

Supporting Offices:
Environmental Management
Intelligence and Counterintelligence
Legacy Management
National Nuclear Security Administration

The Department of Energy—primarily through the National Nuclear Security Administration—is central to preventing proliferation and nuclear terrorism and sustaining a safe, secure, and effective nuclear arsenal. We have added responsibility for cleaning up the environmental legacy of the Cold War's nuclear weapons complex. Through engagement with the International Atomic Energy Agency and directly with other international and interagency partners, the Department has a leading role in nonproliferation and cooperative threat-reduction programs. This expertise positions the Department ideally to help shape policy surrounding future deployment of nuclear power globally. Just as the Department is the trusted authority on the safety, security, and effectiveness of the U.S. nuclear weapons stockpile, it can apply science, technology, and engineering to ensure future nuclear power systems can be deployed safely and securely with appropriate mitigation of risks from terrorism and proliferation.

The Department has the monumental task of cleaning up the environmental legacy from five decades of nuclear weapons development and government-sponsored nuclear energy research. We have been successfully mitigating the technically challenging risks and have made substantial progress in nearly every area of nuclear waste cleanup, including stabilizing and consolidating special nuclear material and safely storing tons of used nuclear fuel. We have continued to build momentum in disposing of solid radioactive wastes, remediating contaminated soil and water, and deactivating and decommissioning radioactively contaminated facilities, with each succeeding year building on the last.

Our Intelligence Analysis program provides the Secretary, his staff, and other policymakers within the Department, timely, technical intelligence analyses on all aspects of foreign nuclear weapons, nuclear materials, and energy issues worldwide. In addition, a comprehensive Counterintelligence program protects the Department's personnel, technologies, facilities, and intellectual property from penetration by foreign intelligence services, terrorist and transnational criminal organizations, and malicious insiders.

Elimination of 450 Metric Tons of HEU: In July 2012, NNSA announced the elimination of 450 metric tons of Russian highly enriched uranium (HEU) taken from nuclear weapons. Under the 1993 U.S.-Russia HEU Purchase Agreement, Russia converts HEU from nuclear weapons to low enriched uranium (LEU). Then, the LEU is brought the United States where it is made into nuclear fuel and used in nuclear reactors. The U.S. monitors the Russian HEU to LEU conversion process through 24 monitoring visits each year. Likewise, Russia monitors the United States to confirm that the LEU is used for peaceful purposes.

Major Milestone in Radioactive Source Security: In March 2012, NNSA announced the recovery of the 30,000th disused and unwanted radiological source, representing a major milestone for the Global Threat Reduction Initiative (GTRI). Since no long-term commercial option exists for the disposition of radiological sources, GTRI routinely recovers them from licensed companies. This keeps the sources secure and reduces the risk that they could be used for terrorism.

100th WMD Counterterrorism Exercise Conducted: NNSA's Offices of Counterterrorism Policy and Cooperation and Global Threat Reduction and the Federal Bureau of Investigation completed the Bearcat Thunder counterterrorism table-top exercise at the University of Cincinnati in August 2012, the 100th exercise of its kind. The exercise is part of NNSA's Silent Thunder table-top series, which is aimed at giving federal, state and local officials, first responders and law enforcement critical, hands-on experience in responding to a terrorist attack involving radiological materials. NNSA began the Weapons of Mass Destruction (WMD) Counterterrorism Exercise Program in 1999. It has grown to include both domestic DOE facilities and private sector locations such as hospitals and universities. The exercises have been carried out primarily within the United States, but have included

foreign participants as well. In a first for the Silent Thunder series, an official from the International Atomic Energy Agency observed the Bearcat Thunder exercise. To date, NNSA and the FBI have conducted Silent Thunder exercises in 22 states and the District of Columbia, with plans to reach additional states in the future.

Cooperative Agreement to Support Production of Radioisotope: In May 2012, the NNSA Global Threat Reduction Initiative announced the signing of a cooperative agreement with the Morgridge Institute for Research to further the development of accelerator-based technology to produce molybdenum-99 (Mo-99) in the United States without the use of proliferation-sensitive highly enriched uranium. Mo-99 is a medical radioisotope used to diagnose heart disease, treat cancer and study organ structure and function.

Dismantlement of Last B53 Nuclear Bomb: The dismantlement of the 1960s-era weapon system is consistent with President Obama's goal of reducing the number of nuclear weapons. The dismantlement of the last remaining B53 ensures that the system will never again be part of the U.S. nuclear weapons stockpile. NNSA's Los Alamos National Laboratory and Sandia National Laboratories designed the B53 bomb and after being introduced into the stockpile in 1962, the B53 served a key role in the United States' nuclear deterrent until its retirement in 1997. The B53 bomb is one of the longest lived and highest yield nuclear weapons ever fielded. Its sheer size and weight – about the size of a minivan and approximately 10,000 pounds – provided many challenges for the project team responsible for developing a dismantlement program that meets the requirements of NNSA's rigorous SS-21 process.

Successful Tank Waste Removal: Contract workers poured more than 1 million gallons of a cement-like grout into two underground radioactive waste tanks, moving the Savannah River Site nearer to closing the massive structures. Tanks 18 and 19 each originally held 1.3 million gallons of radioactive hazardous waste. This now ensures that the tanks pose little or no future risk to the environment or the public.

Richland Completes Construction of New Treatment Facility: In January 2012, the Richland Operations Office boosted its capacity for treating groundwater to remove chromium near the Columbia River by 40% with the completion of a new treatment facility. The 100-DX groundwater treatment facility is located near the D and DR Reactors on the Hanford Site in southeast Washington State. The 100-DX facility represents a major upgrade in treatment capacity along the river and is a major component of the DOE's strategy for stopping chromium from entering the Columbia River by the end of 2012.

The groundwater treatment facility was built in 18-months and uses a new treatment resin to remove chromium. The more efficient resin is expected to reduce long-term operating costs by $20 million, roughly equivalent to the facility's construction cost. The 11,400 square-foot, 100-DX process plant uses 41 extraction wells and over 40 miles of piping to bring groundwater to the facility that will be able to treat up to 20 million gallons per month. The treated water is returned to the aquifer through a series of 14 injection wells.

As part of a joint project between NNSA and the Department of Homeland Security, the helicopter crew took measurements of naturally-occurring background radiation.

The 1960s-era B-53 Nuclear Bomb.

Goal 4 Management and Operational Excellence

Establish an operational and adaptable framework that combines the best wisdom of all Department stakeholders to maximize mission success

Objectives:
- Achieve operational and technical excellence
- Implement a performance-based culture

Supporting Offices:
Chief Financial Officer
Chief Human Capital Officer
Chief Information Officer
Congressional and Intergovernmental Affairs
Economic Impact and Diversity
General Counsel
Health, Safety, and Security
Hearings and Appeals
Inspector General
Management
Policy and International Affairs
Public Affairs
Federal Line Chief Operating Officers
Federal Field Site Managers
National Laboratory Chief Operating Officers

The Secretary has challenged all who serve within the Department of Energy to achieve and sustain a commitment to Management and Operational Excellence in support of the mission – from headquarters, to every site office and service center, and every laboratory and production facility. Below are examples of management initiatives and the progress achieved during FY 2012.

Alignment and Horizontal Integration: Secretary Chu established the Associate Deputy Secretary in February 2011. In support of the Secretary and Deputy Secretary, the Associate Deputy Secretary drives improvements in mission execution and assures that they are efficiently and effectively implemented throughout the Department. The operating model is "alignment" of the Department's strategy + processes + structure + people, all focused on safe, secure, efficient, and effective mission execution, with excellence as the standard. "Horizontal integration" is being achieved through collaborative boards and councils (headquarters and field, federal and national laboratory, line and functional leaders) which meet on a predictable and consistent schedule to make decisions, requirements, and recommendations, while sharing best practices across boundaries and reaffirming the Department's seven Management Principles. Results indicate that executive decision speed and quality has improved by a factor of ten, towards improved mission execution.

Employee Hiring Time: Efforts have been underway to reduce average time-to-hire for General Schedule and equivalent positions to a goal of 80-days while continuing to attract quality hires and to ensure the right skill sets are onboard. The average for FY 2012 was 86 days.

IT Strategy: DOE is the first, and currently only, civilian Department/Agency to have deployed managed security services to provide active cybersecurity defenses for its unclassified networks. Previously, these services have been available to only Department of Defense (DoD) networks and, through a DoD pilot program supported by the National Security Staff, to selected Defense Industrial Base (DIB) companies. To date, eleven DOE sites have partially or fully implemented the managed services and six others are about to begin implementation. When it becomes operational, these and other DOE sites will migrate to the Einstein-3 (Accelerated) program.

Continual Learning: We enhanced our Continual Learning Program to ensure that we develop the most highly-qualified, capable, and flexible federal workforce, moving us towards a more performance-based culture. A key initiative was the implementation of a "managers-training-managers" professional development training module which clearly communicates performance expectations and roles and responsibilities. This training employs a case study approach and is interactive. In FY 2012, 50% of our Senior Executives had participated, with a goal of 100% participation about every 3 years.

Diversity and Inclusion: Secretary Chu initiated actions to improve DOE's efforts in the area of Diversity and Inclusion. In July 2011, the Office of Diversity Programs concluded a comprehensive review of DOE's workforce diversity and inclusion policies and programs. The findings from this analysis indicate that we can do more to create a culture that values diversity, which in turn will make the Department an employer of choice and enhance our mission effectiveness. A first ever Diversity and Inclusion Town Hall meeting was conducted in December 2011. Additional Town Hall sessions are being executed across major DOE sites. A DOE Diversity and Inclusion Council was established in January 2012. A DOE Diversity and Inclusion Strategy was approved in March 2012. This effort is a potential 'game changer' towards achieving a performance-based culture. So as to provide an additional avenue for our people to voice their opinions and views regarding work related conditions, the Secretary established an Ombudsman position in March 2012. Also, in support of mission execution while supporting the President's goals for leveraging the capabilities of Small Businesses, DOE is working corporately to achieve assigned small business goals.

Website Reform: DOE reduced, consolidated, and moved websites to the "new" Energy.gov platform to achieve cost savings. A new web platform was launched that includes 16 consolidated sites in an open source content management system and cloud hosting environment. The Energy.gov website contributes to the Department's efforts to more effectively communicate and engage with the general public, to help ensure federal government transparency, and to achieve cost saving efficiencies through website consolidations. The Energy.gov website has received a number of national level awards (in 2011 and 2012) and is helping save the Department $11.1 million annually.

Vehicle Fleet Reduction: We are making progress at reducing the overall size of the DOE vehicle fleet by 35% over 3 years. Expected savings are $66 million between FY 2011 and FY 2013**.** We are also switching to hybrid vehicles, with more than 750 vehicles replaced in FY 2011. The Department leases vehicles with fuel provided from the General Services Administration. About 10% of the DOE vehicle fleet will be fuel efficient hybrid, plug-in hybrid, or electric vehicles by FY 2013.

Strategic Sourcing: By expanding the use of bulk purchasing and other methods, the Department saved over $330 million in FY 2011. FY 2012 savings are estimated to be $265 million.

Disposition of Excess Real Property: We are eliminating excess real property/buildings to lower the Department's overall stewardship costs. Since 2003, DOE maintains a one-for-one offset requirement resulting in an 11% reduction in DOE owned gross square feet. In FY 2012, 2.1 million gross square feet of buildings and trailers were removed from the inventory for an estimated cost avoidance of $7.8 million for operations and maintenance.

Support Service Contracts: DOE continues to reduce reliance on support service contracts while also ensuring that our federal workforce retains core competencies, talent, and marketability. We achieved a 28% reduction in support service contracts, saving $378 million in FY 2011**,** with comparable cost savings estimated for FY 2012.

Management's Analysis, Assurances and Priorities

Analysis of Financial Statements

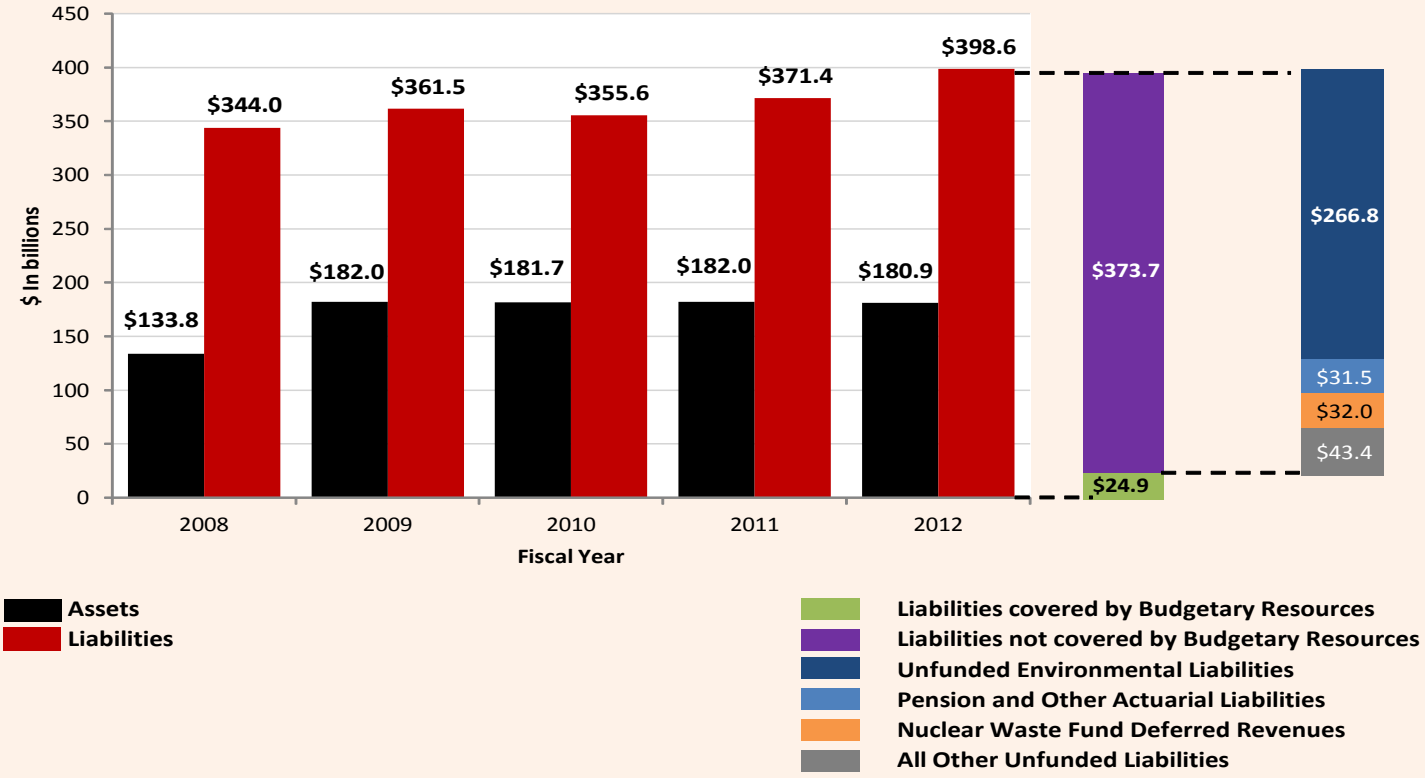
The Department's financial statements are included in the Financial Results section of this report. Preparing these statements is part of the Department's goal to improve financial management and provide accurate and reliable information that is useful for assessing performance and allocating resources. The Department's management is responsible for the integrity and objectivity of the financial information presented in these financial statements.

The financial statements have been prepared to report the financial position and results of operations of the entity, pursuant to the requirements of 31 U.S.C. 3515(b) (United States Code). The statements have been prepared from the Department's books and records in accordance with generally accepted accounting principles prescribed by the Federal Accounting Standards Advisory Board and the formats prescribed by the OMB (Office of Management and Budget). The financial statements are prepared 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.

Balance Sheet

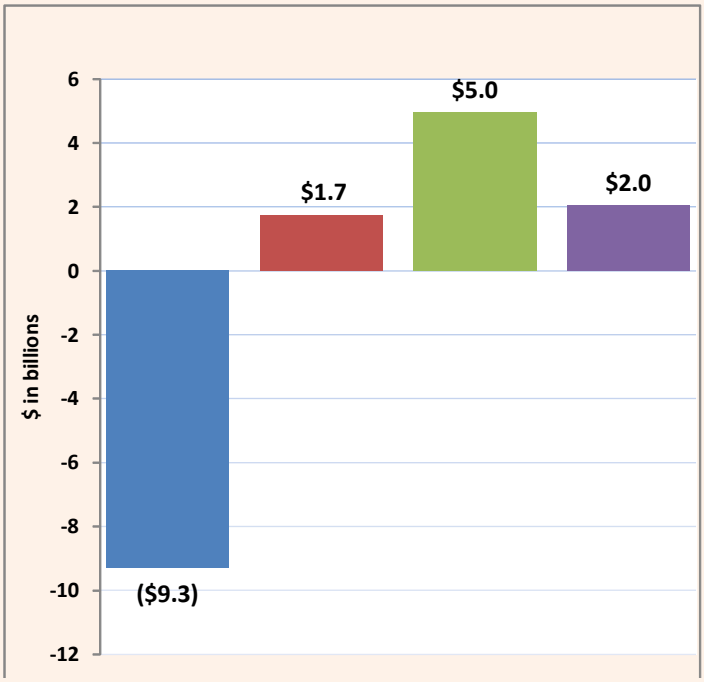
As shown in Chart 1, the Department's total liabilities exceed assets. Significant balance changes are detailed in Charts 2 and 3. Chart 4 provides a detailed trend analysis of the changes in the Department's environmental liability balances over the past 5 years. The largest component of the Department's environmental liability is managed by the Environmental Management (EM) program which addresses the legacy of contamination from the nuclear weapons complex and includes managing thousands of contaminated facilities formerly used in the nuclear weapons program, overseeing the safe management of large quantities of radioactive waste and nuclear materials, and cleanup of large volumes of contaminated soil and water. The active facilities liability includes anticipated remediation costs for active and surplus facilities managed by the Department's ongoing program operations and which will ultimately require stabilization, deactivation, and decommissioning. Other legacy liabilities are divided between environmental liabilities for active sites (including estimated cleanup) and the Office of Legacy Management (LM) for post-closure responsibilities (including surveillance and monitoring activities;

Chart 1: Total Assets and Liabilities with Breakdown of FY 2012 Liabilities



soil and groundwater remediation; and disposition of excess material for sites after the EM program activities have been completed). The other legacy liabilities also includes the Department's share of the estimated future costs of dispositioning its inventory of high-level waste and spent nuclear fuel.

Chart 2: FY 2012 Significant Changes in Assets



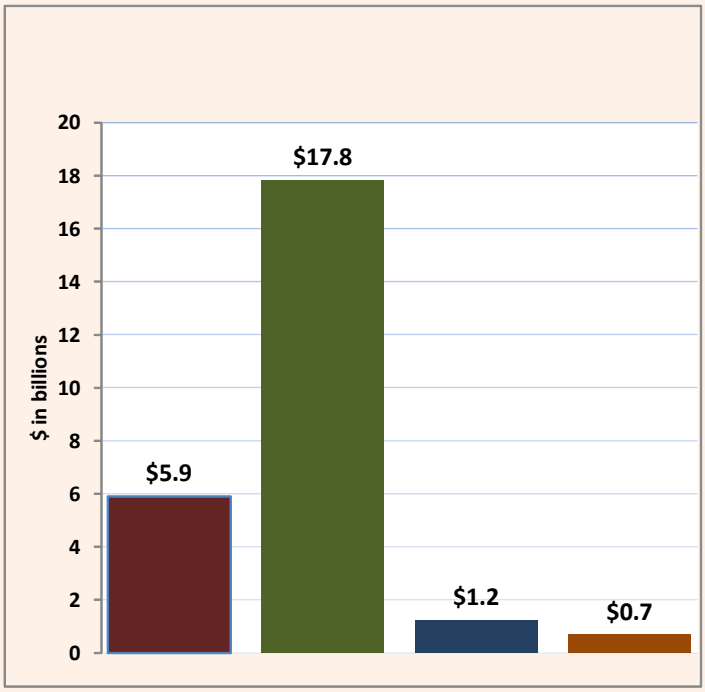
Fund Balance with Treasury
Net decrease primarily due to $7.8 billion of expenditures of ARRA funds.

Investments
Increase due primarily from additional Nuclear Waste Fund receipts from fees collected from owners and generators of spent nuclear fuel in excess of amounts needed to pay current program costs.

Loans and Loan Guarantees
Increase primarily due to $5.4 billion of disbursements on 18 loans partially offset by ($.4) billion decrease in present value.

Property, Plant & Equipment
Net increase resulted primarily from $4.2 billion of capitalized expenditures for additional non-legacy waste assets less $1.8 billion of current-year depreciation expenses.

Chart 3: FY 2012 Significant Changes in Liabilities



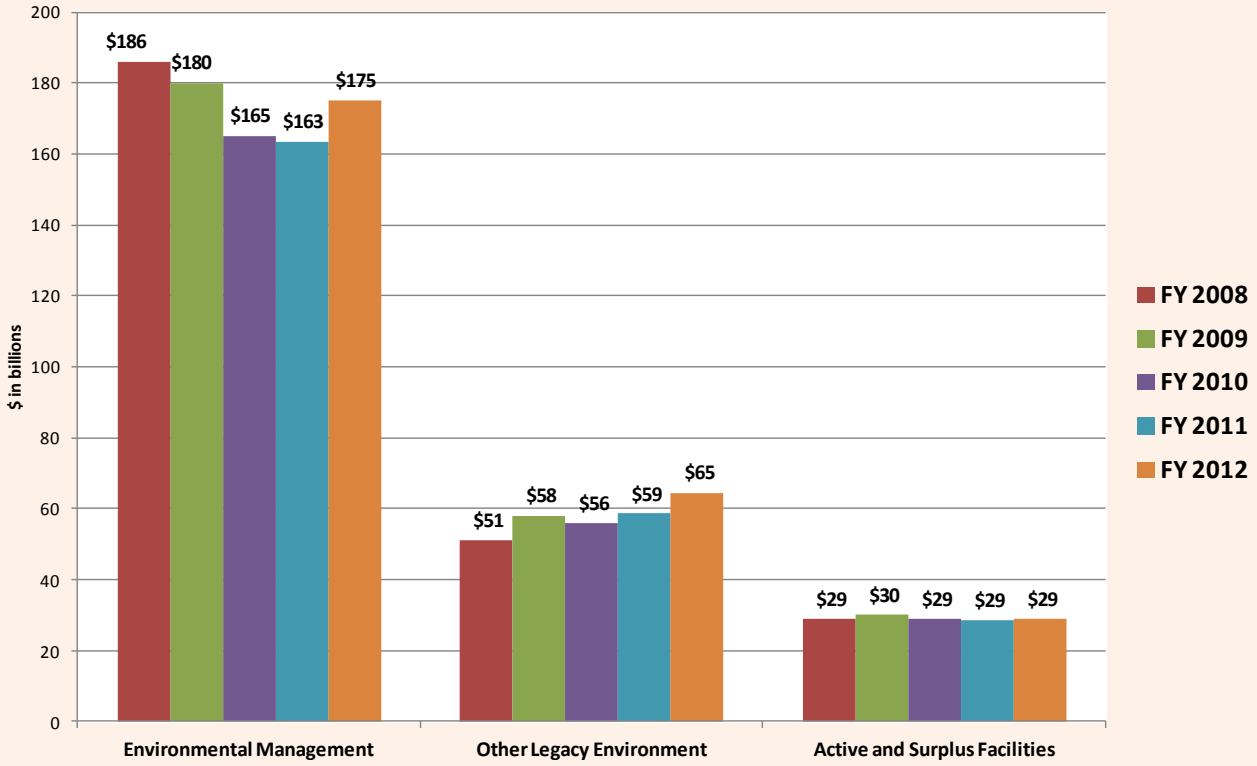
Debt
Increase attributable primarily from borrowing from the Federal Financing Bank to fund disbursements to loan recipients.

Environmental Cleanup
Net increase resulted from unfunded liability increase (see Chart 7) offset by FY 2012 cleanup expenditures of $7.4 billion. Environmental liabilities increase due primarily to updated estimates including revisions in technical approach or scope and contingencies. The most significant increases were in Hanford's Waste Treatment Plant and related projects impacts and Savannah River's High Level Waste and Spent Nuclear Fuels projects.

Pension and Other Actuarial Liabilities
Contractor pension plan liabilities increased by $1.7 billion and other contractor postretirement benefit plan liabilities decreased by $.5 billion. The most significant component of the pension plan liabilities increase resulted from a decrease in the rate used to discount the liabilities to present value (see Chart 8).

Contingencies and Commitments
Increase attributable to change in spent-nuclear fuel litigation liability estimate (see Chart 7) offset by $.9 billion of payments related to settlements and final judgments.

Chart 4: Composition of Environmental Cleanup and Disposal Liability



Net Cost of Operations

The major elements of net cost (see Chart 5) include program costs, unfunded liability estimate changes less earned revenues. The Statement of Net Cost also provides program cost information along the Department's three Programmatic Strategic Goals (see Chart 6).

The Department's overall net costs are dramatically impacted by changes in environmental and other unfunded liability estimates. Since these estimates primarily relate to past years of operations, they are not included as current year program costs, but rather reported as "Costs Not Assigned" on the Consolidated Statements of Net Cost. Components of the FY 2012 unfunded liability estimate changes are shown in Chart 7.

A net increase to the Department's environmental liability estimates during fiscal year 2012 resulted from inflation adjustments to reflect constant dollars for the current year; improved and updated estimates for the same scope of work, including changes resulting from deferral or acceleration of work; revisions in technical approach or scope; and regulatory changes. The most significant increases were in Hanford's Waste Treatment Plant and related projects impacts and Savannah River's High Level Waste and Spent Nuclear Fuels projects (see Chart 4).

The Department's FY 2012 unfunded liability estimates increased by $1.7 billion for contractor pension plans and decreased by $0.5 billion for contractor postretirement benefits other than pensions (PRB) plans. The major components of these estimate changes are shown in Chart 8. The most significant component of the change in the contractor pension plan liability resulted from a decrease in the rates used to discount the liabilities to present value. These discount rates are based on the yields of high-quality fixed income securities as of September 30, 2012 and 2011. Increases in contractor pension plan liabilities were partially offset by actual asset return greater than expected. The most significant component of the change in contractor PRB liabilities is due to a number of plan changes made by contractors during the year in an effort to control the future cost growth associated with these benefits. This reduction in PRB liability more than offset the increase in the PRB liability due to the decrease in the discount rate. There were also modest changes in both pension and PRB liability due to differences in actual plan experience for the year compared to the actuarial assumptions for rates of retirement, termination of employment, compensation increases, health care inflation, and other demographic factors, including changes made to those assumptions to better reflect anticipated future experience.

Chart 5: Major Elements of Net Cost

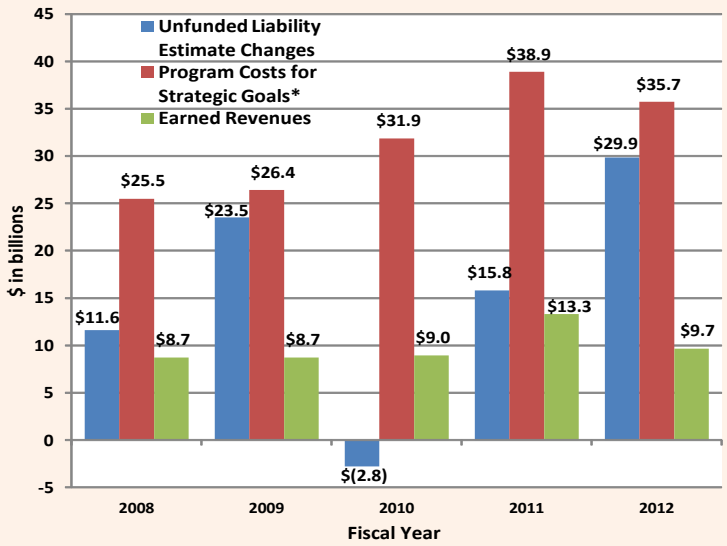
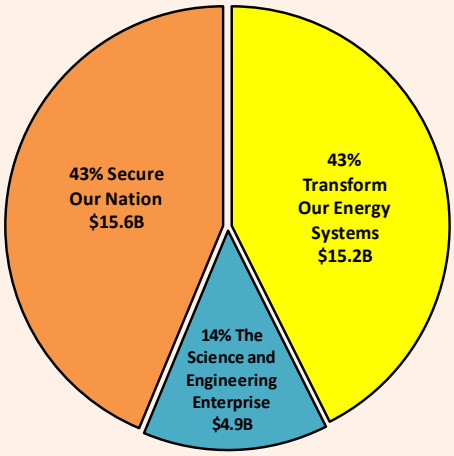


Chart 6: FY 2012 Program Costs (Gross) Breakdown by Programmatic Strategic Goal*



* Program Costs for strategic goals exclude certain costs not directly attributable to the strategic goals, such as the cost of reimbursable and other miscellaneous programs, costs applied to the reduction of legacy environmental liabilities and imputed costs for the occupational illness program. These excluded costs are more fully described in Notes 23-25 of the financial statements.

Chart 7: FY 2012 Unfunded Liability Estimate Changes

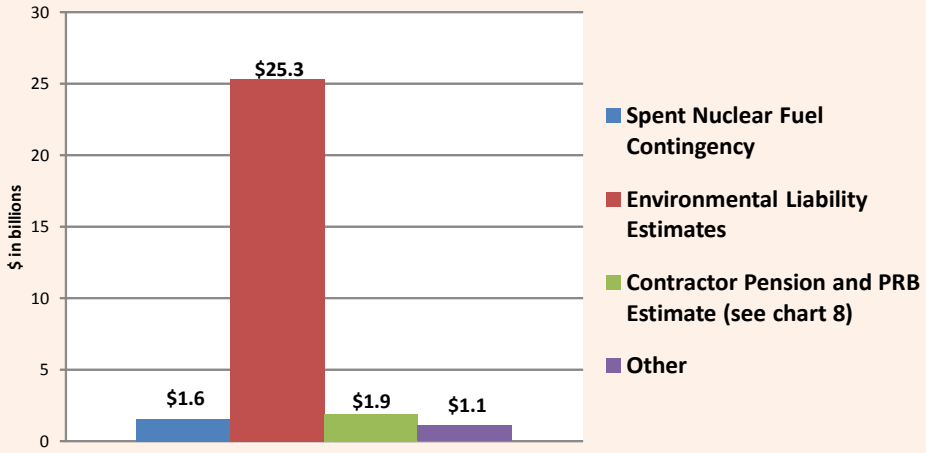
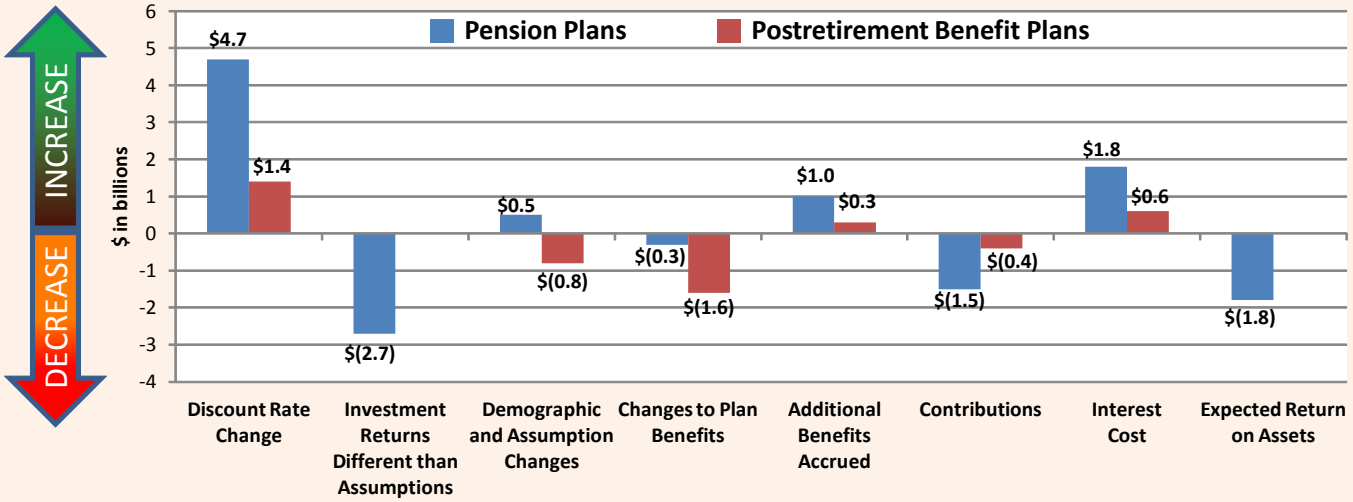


Chart 8: Contractor Employee Pension and PRB Liability Changes



Budgetary Resources

The Combined Statements of Budgetary Resources provide information on the budgetary resources available to the Department for the year and the status of those resources at the end of the fiscal year. The Department receives most of its funding from general government funds administered by the Department of the Treasury (Treasury) and appropriated for Energy's use by Congress. Since budgetary accounting rules and financial accounting rules recognize certain transactions at different points in time, Appropriations Used on the Consolidated Statements of Changes in Net Position will not match costs for that period. The primary difference results from recognition of costs related to changes in unfunded liability estimates. Budget authority from adjusted appropriations has decreased by $2.7 billion from FY 2011.

As shown in Chart 9, the Department's Obligations Incurred decreased by $11.2 billion from FY 2011. This was primarily due to no new loan obligations during FY 2012 as a result of the expiration of the Section 1705 program.

Chart 9: Obligations Incurred

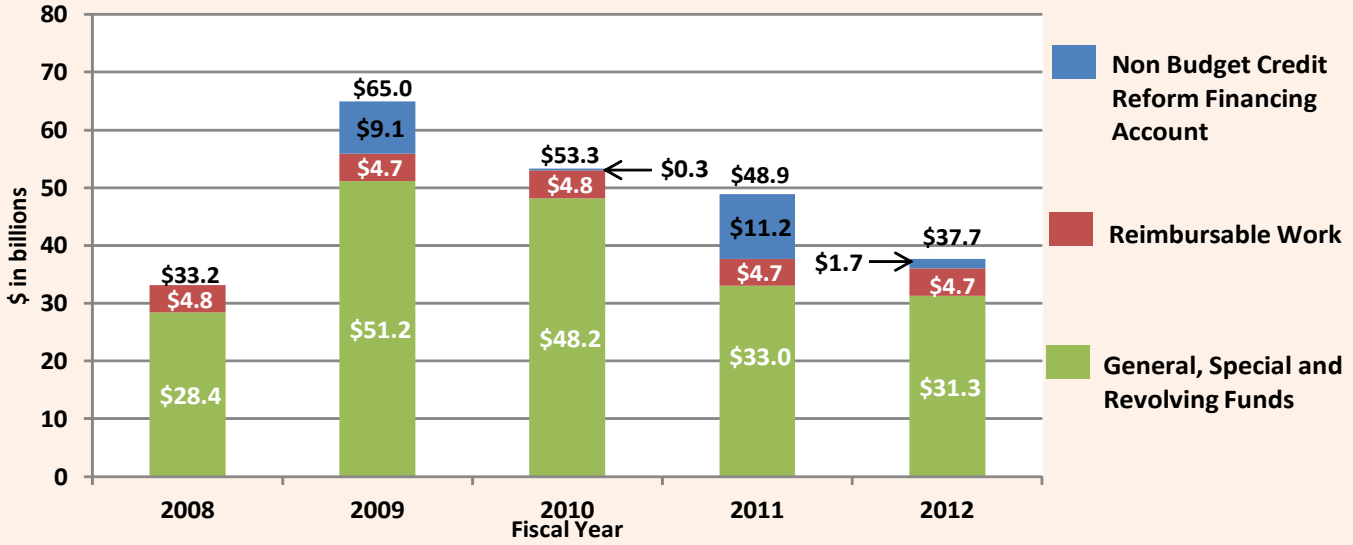


Chart 10: Recovery Act Appropriations, Obligations and Outlays

(Cumulative amounts through FY 2012 below exclude the Western Area and Bonneville Power Administrations' borrowing authority and credit reform financing accounts)

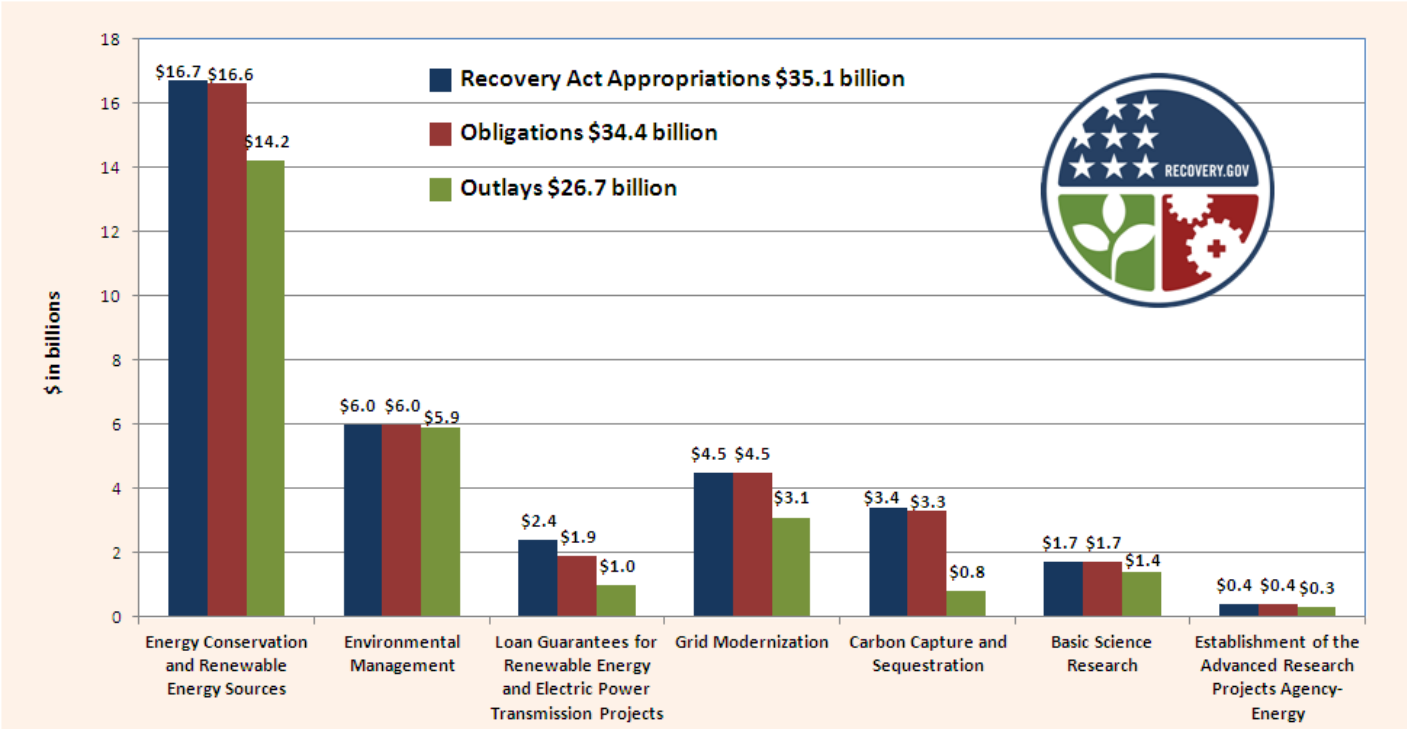


Chart 11: Linking Priorities, Budget and Cost

STRATEGIC GOALS	STRATEGIC OBJECTIVE	BUDGETARY EXPENDITURES INCURRED[a] ($ IN BILLIONS)	PROGRAM COST[b] (GROSS IN BILLIONS)	
			FY 2012	FY 2011
Transform Our Energy Systems	Deploy the technologies we have	$ 19.7	$ 11.2	$ 13.1
	Discover the new solutions we need	3.8	3.9	4.0
	Lead the National conversation on energy	0.2	0.2	0.2
The Science and Engineering Enterprise	Extend our knowledge of the natural world	2.5	3.6	3.5
	Deliver new technologies to advance our mission	2.2	1.3	1.4
	Sustain a world-Leading technical workforce	-	-	-
Secure Our Nation	Support the U.S. nuclear stockpile and future military needs	7.3	7.0	6.2
	Reduce global nuclear dangers	2.6	1.7	1.8
	Apply our capabilities for other critical national security missions	1.3	1.3	1.2
	Support responsible civilian nuclear power development and fuel cycle management	0.4	0.2	0.2
	Complete environmental remediation of our legacy and active sites	6.3	5.4	7.3

a *Budgetary Expenditures Incurred is synonymous with delivered orders – amounts accrued or paid for services performed, goods and tangible property received, or for programs for which no current service is required such as loans. Budgetary Expenditures are obtained from the Budgetary Standard General Ledger and are reported/recorded based on budgetary accounting rules. Includes capital expenditures but excludes such items as depreciation, changes in unfunded liability estimates, and certain other non-fund costs and allocations of Department Administration activities.*

b *Program Costs (Gross) are taken from the Department's Consolidated Statements of Net Cost.*

Analysis of Systems, Controls and Legal Compliance

Management Assurances

The Department's management is responsible for establishing and maintaining an effective system of internal controls to meet the objectives of the Federal Managers' Financial Integrity Act (FMFIA). To support management's responsibilities, the Department is required to perform an evaluation of management and financial system internal controls as required by Sections II and IV, respectively, of FMFIA, OMB Circular A-123, *Management's Responsibility for Internal Control*, and internal controls over financial reporting as required by Appendix A of the Circular. The following assurances are made based on the results of these evaluations, which are reflected in reports and representations completed by senior accountable managers within the Department.

The Department has completed its evaluation of management and financial system internal controls. Based on that assessment, as of September 30, 2012, the Department can provide a qualified assurance that management internal controls over the effectiveness and efficiency of operations and compliance with applicable laws and regulations were operating effectively in their design or operation, with the exception of a material weakness regarding a breach in security at the Y-12 National Security Complex, which revealed a systemic problem in processes at the site. The Department took immediate actions for remediation. Special reviews and investigations of the situation have been initiated. As a result of this security breach, I have directed the Office of Health, Safety and Security to conduct a series of inspections at the Department of Energy/National Nuclear Security Administration sites with Category I quantities of special nuclear material. Evaluation results also indicated that the Department's financial systems generally conform to governmental financial system requirements and substantially comply with requirements of the Federal Financial Management Improvement Act (FFMIA).

In addition, the Department is providing reasonable assurance that internal controls over financial reporting as of June 30, 2012, were working effectively and no material weaknesses in financial controls were identified in the design or operation of the specific controls over financial reporting. This assessment and evaluation of internal control over financial reporting, includes safeguarding assets and compliance with applicable laws and regulations, as required by Appendix A of OMB Circular A-123 and Departmental requirements. The evaluation required an assessment of both entity and process controls.

The Department is responsible for establishing and maintaining adequate internal control (including safeguarding of assets and compliance with applicable laws and regulations) over all of the Department's American Recovery and Reinvestment Act (Recovery Act) funding. Controls have been established to ensure that the following critical objectives are met: (1) Recovery Act funding has been expended for the intended purposes and in accordance with internal and external guidance; (2) reported results regarding the expenditures of funds and the outcomes achieved are accurate and verifiable; and (3) key processes affecting the execution of Recovery Act funding have been evaluated and are deemed effective.

The Department is addressing the material weakness and continues its work to address Management Priorities. These Management Priorities represent the most important strategic management issues facing the Department in accomplishing its mission now and in the coming years.

Steven Chu
November 14, 2012

Federal Managers' Financial Integrity Act

The Federal Managers' Financial Integrity Act (FMFIA) of 1982 requires that agencies establish internal controls and financial systems to provide reasonable assurance that the integrity of Federal programs and operations is protected. Furthermore, it requires that the head of the agency provide an annual assurance statement on whether the agency has met this requirement and whether any material weaknesses exist.

In response to the FMFIA, the Department developed an internal control program which holds managers accountable for the performance, productivity, operations and integrity of their programs through the use of internal controls. Annually, senior managers at the Department are responsible for evaluating the adequacy of the internal controls surrounding their activities and determining whether they conform to the principles and standards established by the OMB and the Government Accountability Office (GAO). The results of these evaluations and other senior management information are used to determine whether there are any internal control problems to be reported as material weaknesses. The Departmental Internal Control and Audit Review Council, the organization responsible for oversight of the Internal Control Program, makes the final assessment and decision for the Department.

The Department's evaluation for FY 2012 identified a material weakness in the operation of its management internal controls regarding a breach in security at the Y-12 National Security Complex. The breach revealed multiple system failures.

Immediate action was taken and the Department has initiated corrective actions to remediate this material weakness. Specifically, a special review and investigations were conducted and the Secretary has directed the Office of Health, Safety and Security to conduct a series of inspections at all Department of Energy/National Nuclear Security Administration sites with Category I quantities of special nuclear material.

High standards of effective leadership also have been re-established at the Y-12 site through immediate actions taken following the July 28 security failure including:

- Changes to the contract structure to ensure more effective oversight of the Y-12 protective force.
- Replacing Y-12 Site's Contractor Senior Leadership.
- Replacing the three most senior federal officials at NNSA headquarters office of Defense Nuclear Security.

- Replacing the senior Federal Official at the Y-12 Site Office.

Most importantly, the Department, NNSA and the Y-12 contractors have conducted focused training to improve the team's understanding of the management internal control programs and processes. There are additional actions still in progress including implementation of a new performance assessment model and organizational structure for NNSA.

OMB Circular A-123, Appendix A

Internal control requirements for publicly traded companies contained in the Sarbanes-Oxley Act of 2002 paved the way for the Federal Government to also strengthen its internal control requirements. The issuance of Appendix A of OMB Circular A-123 provides specific requirements to agencies for conducting management's assessment of internal control over financial reporting. The Department's evaluation for FY 2012 did not identify any material weaknesses in financial controls as of, or subsequent to, June 30, 2012.

Federal Financial Management Improvement Act

The Federal Financial Management Improvement Act (FFMIA) of 1996 was designed to improve Federal financial management and reporting by requiring that financial management systems comply substantially with three requirements: (1) Federal financial management system requirements; (2) applicable Federal accounting standards; and (3) the United States Government Standard General Ledger at the transaction level. Furthermore, the Act requires independent auditors to report on agency compliance with the three stated requirements as part of financial statement audit reports.

The Department has evaluated its financial management systems and has determined that they substantially comply with Federal financial management systems requirements, applicable Federal accounting standards and the U.S. Government Standard General Ledger at the transaction level.

American Recovery and Reinvestment Act

The Recovery Act was signed into law to jumpstart our economy, create or save millions of jobs and put a down payment on addressing long-neglected challenges so our country can thrive in the 21st century. The Recovery Act is an extraordinary response to a crisis unlike any since the Great Depression, and includes measures to modernize our Nation's infrastructure, enhance energy independence, expand educational opportunities, preserve and improve affordable health care, provide tax relief and protect those in greatest need.

The Department has established and maintained adequate internal controls to ensure that: (1) Recovery Act funding has been expended for the intended purposes and in accordance with internal and external guidance; (2) reported results regarding the expenditure of Recovery Act funds and the outcomes achieved are accurate and verifiable; and (3) key processes impacting the execution of Recovery Act funding have been evaluated and are deemed effective.

Management Priorities

The Department carries out multiple complex and highly diverse missions. Although the Department is continually striving to improve the efficiency and effectiveness of its programs and operations, there are some specific areas that merit a higher level of focus and attention. These areas often require long-term strategies for ensuring stable operations and represent the most daunting Management Priorities the Department faces in accomplishing its mission.

The Reports Consolidation Act of 2000 requires that, annually, the Inspector General (IG) prepare a statement summarizing what they consider to be the most serious management and performance challenges facing the Department. These challenges are included in the Other Accompanying Information section of this report. Similarly, in FY 2011 the GAO identified five major management challenges and program risks to be addressed by the Department.

The Department, after considering all critical activities within the agency and those areas identified by the IG and GAO, has identified nine Management Priorities that represent the most important strategic management issues facing the Department now and in the coming years.

CONTRACT AND PROJECT ADMINISTRATION

Key Challenges: Congress directed that the Department take corrective action to be removed from the GAO High-Risk List for inadequate contract and project oversight and management. DOE has been on this list since its inception in 1990. Leadership commitment from the Department's senior management and support from GAO and OMB is required to shape the necessary broad ranging policy and cultural changes and prevent adverse impact to the Department's mission.

Departmental Initiatives: The Department completed a comprehensive Root Cause Analysis (RCA) of contract and project management deficiencies in April 2008 and approved a Corrective Action Plan (CAP) in July 2008. The CAP addressed the root causes with solutions that provide demonstrable results. Based on Departmental progress, especially in DOE's Office of Science, GAO in 2009 narrowed the scope of the high-risk designation to focus on the two major program elements remaining in DOE that continue to experience challenges - the National Nuclear

Security Administration (NNSA) and the Office of Environmental Management (EM). GAO issued a scorecard with five criteria for removing all DOE programs from the High-Risk List. While GAO acknowledges that the Department has met three of these criteria, DOE must still demonstrate that it has met the two remaining criteria, including having sufficient staffing resources and independently validating the effectiveness of corrective measures. In its most recent High-Risk List update (February 2011) GAO acknowledged that the steps DOE has taken are very important, but have not yet consistently improved contract and management performance in EM and NNSA.

The major enhancements in DOE's project and contract management practices resulting from the RCA and CAP efforts include: improving front-end planning by requiring sufficient design maturity prior to establishing performance baselines; defining required project staff size and required skill set across the project lifecycle and enhancing training and qualifications of project and contract management personnel; stabilizing project funding and affordability by adhering to baseline funding profiles for incrementally funded projects in annual budget requests; strengthening DOE Order 413.3B inclusive of new independent cost estimating requirements at all Critical Decision gateways; deploying a new and more robust Project Assessment and Reporting System which allows for direct upload of contractor project performance data in order to eliminate errors and delays inherent in the original system and enhance data reliability; and implementing Project Peer Reviews, a best practice successfully employed by the Office of Science, across the Department to better monitor project development and execution and foster sharing of design, procurement and construction lessons learned.

In FY 2011, the Department's Operations Management Council identified contract and project management as a key initiative of the Department's Management Excellence agenda. In December 2010, per direction from the Deputy Secretary, a Contract and Project Management Summit was conducted that brought together Federal Project Directors, program officials, Heads of Contracting Activity, Procurement Directors, Headquarters staff, as well as Energy Facility Contractor Group and National Laboratory Directors Council representatives. The Summit focused on six key areas – Project and Contract Alignment and Change Control; Contract Administration including surveillance, monitoring and oversight; Program/Project Prioritization and Funding Alignment; Roles and Responsibilities of Contracting Officers and Contracting Officer Representatives; Accountability – Aligning Incentives; and, Adequate Project and Contract Management Staffing. Following the Summit, cross-functional teams were established for each area to develop and implement solutions.

A report was issued in April 2012 documenting completion of a majority of the corrective actions to address the issues identified during the DOE Contract and Project Management Summit, and the effective mitigation of most of the causes identified as responsible for the most significant issues. Corrective actions included: issuance of new policies such as the Change Control Management Guide (DOE G 413.3-20) and a revised DOE Acquisition Guide Chapter 42.5 Contract Management Planning; Contracting Officers (CO) and Contracting Officer Representatives (COR) tool kit to clarify and strengthen COs and CORs roles, responsibilities and oversight functions; and more in-depth guidance on the development of Performance Evaluation Management Plans (PEMPs) by contract and project teams.

The issue of staffing of DOE projects is considered mitigated. Staffing reviews of projects at critical decision points will be performed and mobility agreements of project staff and use of the Army Corps of Engineers and Naval Facility Engineering Command staff are viable resources for use by the Department.

Continuous improvements in Contract and Project management in the Department will be implemented by the Department's Program Staff/Support Offices. In FY 2012, the project and contract management oversight offices within the Office of Management, the Office of Engineering and Construction Management and Office of Procurement and Assistance Management respectively, were merged and consolidated into a singular Office of Acquisition and Project Management (APM). This complements the consolidation of like functions into APM offices within both NNSA and EM initiated in FY 2011. These APM organizations are working to collaboratively address continuous improvement initiatives. The Department's focus on contract and project management improvement will continue with the goal of consistent and sustainable project success.

Implementation of the RCA/CAP corrective measures are monitored and appropriate project success performance metrics are reported to Departmental leadership, OMB and GAO. The annual metric report ending FY 2011, highlights that for the first time ever, relative to the Department's project success metric (deliver projects to completion at original scope with no greater than a 10% cost increase), DOE has exceeded 80%. Specifically, 84% of construction projects completed during the three fiscal years (FY 2009-2011) met the success standard. Even more encouraging, for all new capital asset projects (including environmental cleanup projects) baselined after the RCA/CAP initiative started in October 2007, 98% of projects completed during the FY09-FY11 timeframe were completed successfully. Clearly, DOE's trend shows a positive increase in the percentage of projects completed successfully.

ACQUISITION PROCESS MANAGEMENT

Key Challenges: The Department is the largest civilian contracting agency in the Federal Government and spends approximately 90% of its annual budget on contracts to operate its scientific laboratories, engineering and

production facilities, and environmental restoration sites. The Department has been challenged, both externally and internally, to improve the efficiency and efficacy of the procurement process. A July 2009 report by the National Academy of Public Administration identified systemic and other areas where improvements could be made to facilitate DOE's acquisition processes. In addition, the DOE Inspector General has identified contract management as a management challenge and has issued two additional reports on DOE's acquisition workforce. DOE, through its own internal assessments, has determined that it needs to improve the quality of both its procurement systems across the complex and the procurement transactions which they produce. In response to the key challenges, DOE conducted a RCA and developed a CAP that will, over time, help the Department's major projects meet their budget, schedule and scope requirements. Vulnerabilities will be eliminated or mitigated by the initiatives implemented.

Departmental Initiatives: Significant progress has been made in addressing this Management Priority. The majority of corrective measures have been completed and will improve the way contracts are awarded and administered. In FY 2010, the former Office of Procurement and Assistance Management (OPAM) implemented a concept of operations for the Source Evaluation Board Secretariat Function and further matured its source selection knowledge management initiatives. OPAM also worked with EM to develop an aggressive portfolio of initiatives that will build on, and further mature, its re-engineering of the competitive contracting process with a focus on acquisition planning and proposal evaluations, and strengthening field contracting operational effectiveness. In concert with the RCA/CAP initiatives championed by the former Office of Engineering and Construction Management (OECM), specific areas of focus include:

- Strengthening front-end planning (requirements definition).
- Augmenting project staffing levels.
- Strengthening risk management strategies.
- Improving cost estimating capability.
- Stronger Federal oversight, including better integration of acquisition strategies, acquisition plans and project plans.
- Enhancing integrated contract teams through Quarterly Project Reviews Deep Dive Reviews, Program Reviews and other oversight actions along with close interaction between Program and Office of Procurement acquisition officials.

Highlights of significant activities include developing Departmental guidance on Project Definition and Rating Index and Technical Readiness Assessments. In the area of Project and Contract Alignment and Change Control, OPAM and EM also collaborated in the development of a stand-alone course for managing contract/project changes which is expected to significantly improve our post-award management function. Eleven sessions were delivered in FY 2012 at various DOE sites. Feedback on the course from attendees has been consistently positive. In addition, OPAM is continuing to support Government-wide initiatives aimed at building and strengthening the acquisition workforce.

The lessons learned from the Department's successful obligation of $32.7 billion Recovery Act funding, in addition to our normal obligations, and an unprecedented amount in a very compressed timeframe, are being incorporated into all facets of DOE acquisition. For example, the Department is looking at more wide-spread adoption of co-location of contracting officials with programs where appropriate. DOE also undertook a number of industry outreach efforts to educate the public on the competitive award process making the entire process more efficient. OPAM officials are routinely interacting with programs and their acquisition officials during the acquisition concept phase to help acquisition officials build their requirements and provide advice and recommendations. OPAM's engagement from the beginning of each major acquisition and its continued assistance throughout the entire acquisition cycle is significantly enhancing the success of the program and facilitating more timely awards and post-award management.

During the first quarter of FY 2012, several initiatives resulting from the Contract and Project Management Summit were completed. The report containing the status and detail on completed actions is available at http://energy.gov/management/downloads/contract-and-project-management-improvement-cpmi-closure-report-april-2012. To help the Department in its ongoing efforts to improve contract administration so that projects can be completed on time and within cost, the Department's Acquisition Guide 42.5 was revised in February 2012 to provide enhanced guidance to the acquisition workforce on the development and execution of Contract Management Plans. This guidance, including a Contract Management Plan template, will serve to help ensure appropriate surveillance and oversight by members of the acquisition workforce charged with administering contracts. A new Acquisition Guide Chapter was issued in July 2012 that provides more in-depth guidance on the development of PEMPs by contract and project teams.

The new chapter provides guidance and examples to assist acquisition professionals in the development of performance goals, evaluation factors/criteria and administrative duties of evaluation team members.

SECURITY

Key Challenges: The Department works to ensure the security of national assets entrusted to the DOE while striving to enhance productivity and achieve the Department's mission objectives; however, the recent security breach at Y-12 demonstrates that more needs to be accomplished.

Departmental Initiatives: In FY 2012, Departmental elements continued to implement the security reform initiated in prior years to maintain high standards of safeguards and security of national assets entrusted to the Department thus contributing to National security and safety of the public while reducing regulatory burden. Through leadership, worker and stakeholder engagement, and operational experience, the Department worked to implement its revised safeguards and security policies. This was implemented through an aggressive outreach program to establish and strengthen lines of communication, seek feedback and resolve areas of interest and concern. Such activities included conducting focus group meetings led by the Office of Health, Safety and Security with participation from DOE program offices, worker trade unions, professional associations and other stakeholders. DOE program and staff offices worked towards completing a review of their safeguards and security programs and requirements to validate the technical basis and soundness of security measures in order to shift towards clear, concise, performance-based requirements without being overly prescriptive or redundant, and to maximize the use of consensus standards. In some, but not all cases, the revised directives are being implemented in organizational procedures and site contracts, and training is being provided. Independent oversight activities were further focused on sites and laboratories that maintain significant levels of classified materials and/or information and demonstrate poor performance. Additionally, the Department continued to reduce the overall security footprint and meet the Graded Security Protection (GSP) Policy by consolidating and improving special nuclear material storage facilities; eliminating or releasing for general use facilities that previously required safeguarding; and restructuring security management systems.

In FY 2013, the Department will work towards institutionalizing the safeguards and security reforms through the following initiatives:

- Continue to maximize the use of national and international consensus standards where applicable and ensure DOE requirements are performance-based, meaningful, clear and concise without being unnecessarily prescriptive or redundant;
- Continue to streamline the access authorization process and implement other efficiencies while providing oversight and guidance for the issuance of credentials that support both physical and logical access under the DOE Identity Credentialing and Access Management program (ICAM). (The DOE ICAM program efforts maps to the Federal ICAM initiative, implements Homeland Security Presidential Directive-12 as well as other information technology based initiatives.);
- Continue implementing the requirements of the GSP Policy by updating risk acceptance and vulnerability assessment processes, deploying cost-effective security measures and consolidating and improving nuclear material storage facilities;
- Collectively review and assess key elements of the U.S. Nuclear Weapons Physical Security Program with the Department of Defense to "harmonize" security practices leading to a common basis for protection of nuclear weapons and material at the national level, and allow better communication and transparency with key decision makers in Congress and the Executive Branch;
- Maintain effective levels of security expertise throughout the Department by providing security training and professional development programs through the National Training Center;
- Foster improvements to security performance by clarifying roles and responsibilities for Federal and contractor line management;
- Conduct effective and transparent safeguards and security self-assessment, independent oversight, and enforcement programs to maintain stakeholder and public confidence; and
- At the direction of the Secretary of Energy following the July 2012 security breach at the Y-12 National Security Complex (Y-12), the Office of Health, Safety and Security (HSS) conducted a comprehensive Independent Oversight safeguards and security inspection at Y-12, including force-on-force performance testing in August – September 2012. The Secretary also directed HSS to conduct comprehensive Independent Oversight safeguards and security inspections at all other Category I Special Nuclear Material (SNM) sites in FY 2013. Additionally, in collaboration with the National Nuclear Security Administration, the Offices of Science, Environmental Management and Nuclear Energy, HSS will conduct safeguards and security implementation reviews at all Category I SNM sites in the first quarter of FY 2013 to determine whether issues identified at Y-12 are present at other Category I SNM sites. Lessons learned and findings from these inspections and reviews are being used to implement corrective actions to address the identified physical security material weakness.

ENVIRONMENTAL CLEANUP

Key Challenges: Within the Department, EM's mission is to clean up the environmental legacy of nuclear weapons production and nuclear energy research. Fifty years of conducting these activities produced unique, technically complex problems. These problems must be solved under exceptionally hazardous conditions, and will require billions of dollars a year over the several decades it will take to do the work.

Technical and programmatic risks and associated uncertainties are an inherent part of complex cleanup projects. The process of characterizing legacy sites to identify the nuclear and other hazardous wastes that remain and tearing down facilities, removing hazardous materials, stabilizing waste streams to prevent additional environmental damage, and restoring the sites to conditions required by legal agreements can last for decades and often requires first-of-a-kind solutions. EM's

cleanup work at most sites is governed by one or more regulatory agreements or court orders that establish the scope of work to be performed at a given site and the dates by which specific cleanup milestones must be achieved. Compliance with these agreements and orders is one of the major cost drivers for the EM program.

There is often a level of uncertainty about what will be discovered as each site is fully characterized. In some cases, regulatory milestones were developed based on the best information about a site's condition available at the time, recognizing that further characterization was needed, whether to determine the amount and composition of waste or the nature and extent of environmental contamination. As additional data and risk analyses become available, the scope of the potential cleanup work becomes better defined. The Department uses that better understanding to renegotiate milestones and remedy decisions with State governments, its regulators, and other stakeholders. The Department attempts to balance the goals of protecting human health and the environment and cost effectiveness within the negotiation and decision-making process.

The legacy of the Manhattan Project and the Cold War plus byproducts of the US nuclear fuels programs for power facilities and post Cold War defense purposes has created a backlog of excess facilities, materials and wastes requiring cleanup and disposition. EM has established a procedure to integrate the remediation and disposition of these environmental liabilities into its existing program.

Departmental Initiatives: With the completion of FY 2012, the Department will continue its environmental cleanup mission with the following ongoing initiatives:

- Review re-sequencing of specific cleanup actions to clean up higher-risk waste and environmental contamination sooner. This allows EM to work with regulators to identify actions that can achieve risk reduction as quickly and efficiently as feasible while delivering good value for the taxpayer.
- To meet DOE's strategic goals for improving project and contract management performance, EM is implementing several initiatives, as follows:
    - EM is expanding the use of project peer reviews and continues independent contract and project reviews, construction project reviews, and external independent reviews to keep contracts and projects aligned and on track.
    - EM is partnering with national laboratories, industry, academia, and the U. S. Army Corps of Engineers to ensure the best scientific and engineering resources are used. As a result, the selected technologies, design, and construction approaches are expected to help reduce risk, lower cost, and accelerate project completion.
    - EM is improving its acquisition planning practice by focusing on achieving early consensus among key stakeholders about the acquisition strategy. Under the Procurement Strategy Panel process, stakeholder agreement on the acquisition approach is reached earlier. This reduces rework and drives efficiencies in the procurement process. Additionally, by working closely with EM's budget and planning offices and mission units, projected acquisition forecasts are aligned with the sites' budget profile ensuring more realistic scopes of work for contract opportunities.
    - EM recognizes the central role that Small Businesses play in the execution of EM's mission and resulting benefits of increased competition for cost efficiencies. EM proactively seeks small business prime contract opportunities for the execution of contracts.
    - EM continues to strengthen the integration of acquisition, budget and project management processes so that contract statements of work and deliverables are based on clear project requirements and robust front-end planning and risk analysis. EM is also ensuring nuclear safety requirements are addressed early and modifications to the contract and project baseline are managed through strict and timely change-control processes.
    - EM has completed restructuring its cleanup projects into smaller, better defined capital projects and non-capital operations activities. Since the restructuring, EM exceeded Departmental goals by completing more than 95% of the capital projects finished in FY 2011 within 110% of the total project cost. EM will continue rigorous management, and application of DOE Order 413.3B for planning and execution, of capital projects into FY 2013 and beyond. In addition, EM will follow the same disciplined principles for managing the non-capital asset operations activities, e.g., establishing approval authorities, performance goals and metrics, operations activity manager designation, and change control procedures.
    - EM's organizational roles and responsibilities have been aligned to improve programmatic and project management accountability. EM's reorganization in February 2012 combined Acquisition and Project Management at the Deputy Assistant Secretary level. Additionally, EM has assigned a HQ-level project sponsor for all capital projects in the new organizational structure to align programmatic accountability and provide more direct oversight of performance and prompt disposition of issues.
    - On March 1, 2012 the DOE and Energy Facility Contractors Group jointly conducted a Recovery Act Best Practices and Lessons Learned Workshop at the Waste Management Symposia 2012 in Phoenix, Arizona. The purpose of the workshop was to identify and build upon the Recovery Act lessons learned within EM to streamline and improve the efficiency of executing all EM work scope. The goal is for DOE and contractor leadership to effectively apply best practices across the EM complex and program mission.
    - EM sites at Richland, Office of River Protection, Savannah River, Portsmouth, Paducah, Oak Ridge and West Valley have signed partnering agreements with

their major contractors. A total of ten agreements have been signed to date. Partnering agreements create win-win scenarios where both the federal staff and contractor staff understand and respect the rules of engagement and build better business relationships. EM is working to build stronger relationships with oversight organizations to improve communications and demonstrate transparency and accountability in EM's contract and project management.

- In 2008, the Office of Science (SC), the Office of Nuclear Energy (NE), and the National Nuclear Security Administration (NNSA) nominated for possible transfer to EM, approximately 340 excess facilities, materials, and wastes no longer needed for current Departmental missions. EM conducts a comprehensive evaluation for each nominated liability to determine if they satisfy transfer criteria. If EM determines that nominated facilities, materials, and/or wastes meet the criteria, they are formally transferred to the EM program, as funding becomes available to pay for the associated surveillance, maintenance, and cleanup costs. Until funding becomes available, the current owners (SC, NE, and NNSA) retain ownership, and are responsible for any associated surveillance and maintenance costs. Furthermore, for any excess facilities, the Department's Facilities Information Management System (FIMS) shall continue to identify SC, NE, and NNSA as the current owners of the excess liabilities.
- Since mid-2009, EM has used funding under the Recovery Act to accelerate the clean-out and demolition of 288 facilities and reduced the legacy footprint of the EM complex by 690 square miles or 74% from 931 to 241 square miles as of the end of FY 2012.
- DOE has developed a planning process that evaluates different cleanup and completion scenarios based on the changing external environment. The goal is to facilitate early planning and therefore maximize return on investment.

NUCLEAR WASTE DISPOSAL

Key Challenges: The Department of Energy is directed by the amended Nuclear Waste Policy Act of 1982 (NWPA) to manage and dispose of the nation's commercial and defense high-level waste and spent nuclear fuel in a manner that protects public health, safety and the environment.

The NWPA authorizes the Secretary to enter into contracts with commercial nuclear utilities and commercial research reactor operators that own and generate spent nuclear fuel. In return for the 1 mill per kilowatt-hour fee payment by utilities into the Nuclear Waste Fund, the government was to begin disposing of their spent nuclear fuel starting in 1998. As of June 30, 2012, 78 lawsuits have been filed by utilities to recover damages resulting from the delay. The Department of Justice has entered into 31 settlements. To date, approximately $ 2.6 billion has been paid in claims and judgments to contract holders. Contract holders will continue to submit annual claims for additional costs under the settlement agreements. Additional annual payments will be made until the government has fulfilled its spent fuel acceptance obligations. The Department of Energy reviews the claims and provides recommendations for approval to the Department of Justice. Staff from the Department of Energy continue to be the lead government witness for the remaining unsettled cases being tried and continue to manage the Nuclear Waste Fund investment balance of approximately $29 billion.

Departmental Initiatives: The Secretary, acting at the direction of the President, established the Blue Ribbon Commission on America's Nuclear Future (the Commission) to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel, high-level waste, and materials derived from nuclear activities. The Commission completed its review and provided the final report to the Secretary in January 2012. The Department is giving full consideration to the Commission's recommendations as it works to develop a new nuclear waste management strategy.

In NARUC v. U.S., the D.C. Circuit Court found that the Department's 2010 fee adequacy determination was legally inadequate and has ordered that by January 18, 2013, the Department issue a new fee adequacy evaluation in compliance with the court's opinion.

CYBERSECURITY

Key Challenges: Despite overall improvements in the cybersecurity posture of the Department, cyber attacks are increasing in their level of complexity, frequency, and aggression. These persistent, pervasive areas of weakness must be addressed at an Enterprise level to ensure that DOE information assets and systems are adequately protected from harm.

Departmental Initiatives: The following actions continue their momentum in support of the Departmental initiatives.:

- DOE successfully partnered with the Department of Homeland Security and Department of Defense (DOD) in the implementation of advance persistent threat technologies at Oak Ridge National Laboratories (ORNL). DOE has since implemented DOE Enhanced Cybersecurity Services at Headquarters (HQ) and the Southeast Power Administration (SEPA), preventing 16 attacks to date. Several other sites are in various stages of implementation, which will further strengthen defenses across the complex.
- To further support the Department's ongoing effort to enhance awareness of Cybersecurity initiatives and to promote effective channels of communication and collaboration, the Office of the Associate Chief Information Officer (ACIO) for Cybersecurity hosted an Information and Communications Technology (ICT) Supply Chain Risk Management Summit at the Kansas

City Plant Facility in Kansas City, MO during August 2012. The primary goals of the Summit were to promote Department-wide awareness of current ICT supply chain threats and protection measures; to proactively collaborate with corporate and industry partners; and to develop a path forward for a Departmental ICT supply chain RMA. Participants had the opportunity to attend sessions with a variety of industry and Federal partners who have specialized in supply chain RMA policies and programs. The Summit also included DOE-specific technical and management briefings, as well as several interactive workshops. To address the Government Accountability Office (GAO) report recommendations, the Associate CIO for Cybersecurity is working to draft an enterprise policy that institutes supply chain programs within DOE organizations by first quarter fiscal year (FY) 2013. Program requirements will include the policies, processes, and monitoring capabilities identified in the recommendations as well as supply chain oversight, mitigation, and remediation appropriate to organizational mission and risk tolerance as part of the RMA. This activity is being done with the support of a Department-wide working group.

- The Department continues its deliveries and momentum on training and workforce development through execution of the approved plan to implement a centralized Cybersecurity Role-Based Training Program for critical Federal cybersecurity roles. The *Authorizing Official/Authorizing Official Designated Representative* (*AO/AODR) Role-Based Training Course* was launched Department-wide in March 2012. A *Security Risk Management (SRM) Core Competency* has been deployed and is available via the Online Learning Center. Core content development for the third role-based training module, *System Authorization (SA) Core Competency Module*, has been completed and forwarded to the Skillsoft development team. It is anticipated that development of the *SA Core Competency Module* will be completed and made available to the DOE cyber workforce during FY 2013.

HUMAN CAPITAL MANAGEMENT

Key Challenges: The Department must continue to develop the most highly qualified, capable, and flexible workforce to accomplish its scientific and technological missions in a dynamic human capital environment. Factors impacting the environment include: improving federal hiring processes to help attract and retain quality hires; responding to rapidly changing federal human capital policies and programs; leading people and managing resources in an uncertain fiscal climate; improving human capital systems and processes to support a more efficient, effective, and accountable government; and mitigating the loss of knowledge and skills due to retirements and other sources of attrition.

Departmental Initiatives: In FY 2012, the top priorities in human capital management were: achieving alignment with and working on the goals of the DOE Strategic Plan; leading the development and implementation of numerous Presidential and Secretarial initiatives to improve the hiring, diversity, engagement, development, and performance of the DOE workforce; providing leadership and expertise to develop and implement government-wide human capital initiatives in partnership with OPM, OMB, GAO, and the President's Management Council; and placing a greater emphasis on human capital accountability audits to help DOE improve mission execution.

Two priorities under the DOE Strategic Plan set the direction for managing human capital in support of DOE Goal 4, "Management and Operational Excellence," and its strategic objectives:

- Develop the most highly qualified, capable, and flexible federal workforce (Priority 4.A.2) that will help DOE to achieve operational and technical excellence (Objective 4.A)
- Cultivate a performance-based framework (Priority 4.B.1) of employee performance management that will help DOE to implement a performance-based culture (Objective 4.B)

The DOE Strategic Plan includes targeted outcomes for all of its priorities, and the Chief Human Capital Officer (CHCO) continues to partner with the Performance Improvement Officer and the Associate Deputy Secretary in using measures of performance (MOPs) that track the Department's progress toward the targeted outcomes related to human capital.

The following highlights summarize the Department's successes in FY 2012 for the DOE priority of "developing the most highly qualified, capable, and flexible federal workforce" and related targeted outcomes:

- For the targeted outcome related to hiring reform, DOE continues to improve the average time-to-hire individuals for General Schedule (GS) and equivalent position. In FY 2012, the Department hired individuals in an average of 86 days, which is a 14% improvement over FY 2011. In contrast, the average time-to-hire in FY 2009 was 174 days.
- OPM recognized the DOE online reporting dashboard and hiring policies as best practices in Federal Hiring Reform. (See http://www.chcoc.gov/transmittals/TransmittalDetails.aspx?TransmittalID=4454.)
- Accelerated the implementation of Senior Executive Service (SES) hiring reforms, including establishing a baseline for the SES time-to-hire of 250 days in FY 2011 and 241 days in FY 2012. We are applying the best practices and lessons learned from the GS Hiring Reforms to support improvements in this area.
- DOE has improved new employees' satisfaction with the on-boarding program from 68% in 2010 to 75% in 2012. Improvements to the Headquarters on-boarding program include changing it from a one-day "fill in the forms" event to a one-year program that builds employee engagement, encourages learning, and supports performance.

- For the targeted outcome related to employee engagement, DOE doubled the goal of achieving a 10% improvement in participation for the Federal Employee Viewpoint Survey: the participation rate of 47% in 2012 is a 21% improvement over the 39% rate in 2011.
- For the targeted outcome related to learning and workforce development, DOE continued to make significant year-over-year improvements in the use of individual development plans beginning with the baseline of 27% usage in FY 2010 to 38% in FY 2011 and 58% in FY 2012.
- Implemented a portfolio of Knowledge Capture and Transfer Programs to mitigate the loss of skills due to attrition, especially retirements.
- Completed development of Mechanical, Nuclear Engineering, Electrical and Safety Engineering competency models for DOE, and actively participated in the GAO High Risk Initiative to update the Government's Critical Occupation Skills.
- Key supporter in stand-up of the Interagency Rotation Program of President's Management Council, while sending five DOE employees to other agencies and hosting five employees from other agencies during FY 2012.

The following highlights summarize the Department's successes in FY 2012 for the DOE priority of "cultivate a performance-based framework" of employee performance management and related targeted outcomes:

- For the targeted outcome related to improving employee performance management, DOE deployed the online ePerformance system and processes.
- With ePerformance, DOE has transitioned from a paper-based performance management system to an online one that: cascades performance goals from the DOE Strategic Plan and the organization's goals; provides employees with direct electronic filing of plans into the eOPF system, and tracks compliance status in real-time.
- The Department uses the real-time tracking capability of ePerformance to inform senior management of organizational compliance/non-compliance with performance management milestones.
- In collaboration with the President's Management Council, developed a new SES Performance Appraisal System that will be implemented in FY 2013.
- Secretary Chu committed DOE as one of five agencies piloting the performance management reform concepts of Goals-Engagement-Accountability-Results the product of a workgroup co-chaired by DOE and sponsored by the Office of Personnel Management (OPM) and the National Council on Federal Labor-Management Relations. DOE has integrated this pilot with ePerformance implementation and related initiatives in Diversity and Inclusion; Federal Employee Viewpoint Survey/Best Places to Work; the DOE Integrated Management Systems initiative to improve mission execution; and the DOE Continual Learning Program.
- OPM selected DOE as a participant in the 2012 HRstat Pilot, a prototype project that uses human resources statistics to help agencies deliver an efficient, effective, and accountable government. The goal of the pilot is to identify the best set of metrics that describe the workforce and the performance of human capital management in relation to the DOE mission.

In FY 2013, the CHCO will continue to emphasize programs and initiatives that support the agency priorities related to human capital under the DOE goal of "Management and Operational Excellence."

- We recognize that the desired outcomes of hiring reforms include not only improved efficiency (e.g., time-to-hire), but also greater satisfaction and effectiveness (i.e., quality) for hiring managers and job applicants. We will build upon our time-to-hire successes by measuring and improving the quality of our end-to-end hiring processes and results.
- We will continue to improve the execution of our employee performance management processes in support of the DOE Performance-Based Culture.
- In accordance with reporting requirements of the Government Performance and Results Act Modernization Act 0f 2012 and in partnership with the Performance Improvement Officer and the Associate Deputy Secretary, the CHCO will continue to develop, refine, and implement metrics that support a data-driven approach to assessing the alignment and performance of human capital management in relation to the DOE mission and strategic goals.

SAFETY AND HEALTH

Key Challenges: The Department works to maintain the safety and health of its workers and the public, while striving to enhance productivity and achieve its mission objectives; however, the nuclear safety culture concerns at the Waste Treatment and Immobilization Plant demonstrates that more needs to be accomplished.

Departmental Initiatives: In FY 2012, Departmental elements continued to implement the safety and health reform efforts initiated in prior years to maintain high standards of health and safety for its workers and the public while reducing regulatory burden. Through leadership, worker and stakeholder engagement, and operational experience, the Department worked to implement its revised safety and health policies, oversight programs, and enforcement activities. This was implemented through an aggressive safety and health outreach program to establish and strengthen lines of communication, seek feedback and resolve areas of interest and concern. Such activities included conducting focus group meetings led by the Office of Health, Safety and Security with participation from DOE program offices, worker trade unions, professional associations and other stakeholders. DOE program and staff offices have

essentially completed efforts to review safety and health programs and requirements to validate the technical basis and soundness of Department measures. Where necessary, requirements were amended to better support the Department's overall mission objectives and management principles. In some, but not all cases, the revised directives have been incorporated into organizational procedures and site contracts, and training is being provided where necessary. The Department also continued to strengthen oversight of capital projects, to include major nuclear design and construction projects and to ensure that quality assurance and safety and health requirements are properly implemented in all project life-cycle phases. Independent oversight activities were further focused on operations involving higher hazards and/or demonstrating poor performance. The Department continued to align its worker and nuclear safety enforcement programs with those of the Occupational Safety and Health Administration and the Nuclear Regulatory Commission to provide a more consistent regulatory environment to its contractor base. The Department also continued to implement Title 10 Code of Federal Regulation (C.F.R.) 851, *Worker Health and Safety Program*, and the Department's Integrated Safety Management principles into all facets of work planning and execution, including work conducted under the American Recovery and Reinvestment Act.

In FY 2013, the Department will work towards institutionalizing the safety and health reforms through the following initiatives:

- Continue to maximize the use of national and international consensus standards where applicable and ensure DOE requirements are performance-based, meaningful, clear and concise without being overly prescriptive or redundant;
- Continue to strengthen the implementation of Department safety and health-related programs, e.g., DOE Voluntary Protection Program and Integrated Safety Management, through corporate assistance and awareness activities;
- Maintain effective levels of safety and health expertise throughout the Department by providing safety training and professional development programs through the National Training Center;
- Continue to foster improvements to safety and health performance by clarifying and communicating roles and responsibilities for Federal and contractor line management;
- Continue the conduct of effective and transparent safety and health self-assessment, independent oversight, and enforcement programs to maintain stakeholder and public confidence;
- Continue to conduct Independent Oversight extent of condition reviews of nuclear safety culture and management of nuclear safety concerns at nuclear facility construction projects and other nuclear operations similar to the Hanford Site Waste Treatment and Immobilization Plant (WTP) based on the results of assessments conducted in 2010 and 2011; and
- Continue to conduct independent oversight of the construction facilities classified as high-hazard nuclear facilities under 10 C.F.R. 830 to ensure the project is in compliance with nuclear safety requirements.

RECOVERY ACT

Key Challenges: Through the Recovery Act, the Department of Energy was appropriated $35.2 billion contract, grant and loan guarantee funds and $6.5 billion in power marketing administration borrowing authority. DOE was originally appropriated $38.7 billion of Recovery Act funds, which was later reduced to $35.2 billion after $3.5 billion in rescissions and transfers from the loan program. The Department also supported Treasury in administering more than $15 billion in tax grants for renewable-energy generation and tax credits for clean-energy manufacturing. These Recovery Act funds represented a five-fold increase in the Applied Energy base budget and required the majority of program offices to significantly scale up operations quickly. As a result of the Recovery Act, the Department increased transparency and accountability, improved efficiency in the procurement process, and improved collaboration within DOE and with external stakeholders.

Departmental Initiatives: The Department has undertaken the following initiatives to meet the goals of the Recovery Act:

- Developed a master plan that defined key deadlines: issuing notices of funding opportunities, application due, completion of review processes, announcements, NEPA reviews, contracts to be completed and projects to be started.
- Developed an online financial database for Recovery Act work, accessible through the iPortal. This provides managers with a consistent set of information regarding the current status of programs aggregated by agency or program or at the level of a particular project. Information related to obligations, payments and milestones is also available. Daily reports are generated and made available to the Department's senior management and the Congress.
- Specified the resources required to meet deadlines in the master plan. This highlighted the Department's need for reviewers, environmental compliance specialists and procurement officers. DOE worked vigorously with partners and external stakeholders to bring in more resources to the Department. The additional resources created the capacity to deliver at scale.
- Held regular "tag up" meetings to identify critical issues, assign staff to resolve the issues and set a clear deadline for resolution.
- Conducted Recovery Program Reviews to perform a "deep dive" into a specific Program Office's financial, operational and impact metric progress in meeting targets.
- Developed comprehensive risk management plans for each program. Plans were supported by Inspector

General's preventive up-front audit, documenting each instance of waste, fraud and abuse that had occurred over the last decade in any program receiving funds under the Recovery Act.
- Established call centers to help those applying for funding and, if necessary, provided resources to the field to facilitate the application process.

While the Department was successful in obligating Recovery Act funds, continued focus will remain on the following issues:
- Ensuring Recovery Act funds are expended quickly and wisely to maximize job creation and meet energy goals.
- Strengthening risk management practices as part of project oversight, including closing out Recovery Act related contracts on a timely basis and resolving post-award audits promptly.
- Providing appropriate level of resources for Recovery Act–specific oversight and management through the end of Recovery Act projects.

SUMMARY

It is the Department's goal that its initiatives for each management priority will also help mitigate related IG and GAO management challenges. To highlight how the Department's strategies for pursuing its Management Priorities align with the IG and GAO challenge areas, the following table provides a crosswalk of the relationship between the three. Please note that the IG and GAO did identify areas that are not currently reported as Management Priorities by the Department. While the ongoing importance of those areas is recognized and they continue to receive appropriate management attention, management has not designated them as Management Priorities.

DOE MANAGEMENT PRIORITIES	IG CHALLENGE AREAS FY 2012	GAO CHALLENGE AREAS
Contract and Project Administration **S** Acquisition Process Management **S**	Contract and Financial Assistance Award Management **S**	Resolve contract administration and project management problems for large and complex projects **S**
Security **D** and **S**	Safeguards and Security **D** and **S**	
Environmental Cleanup **D**	Environmental Cleanup **D**	
Nuclear Waste Disposal **D**	Nuclear Waste Disposal **D**	
	Stockpile Stewardship **D**	Improve the safety, reliability and physical and information security for the Nation's nuclear weapons stockpile **D**
Cybersecurity **S**	Cybersecurity **S**	
	Energy Supply **D**	Enhance the development, management and protection of assets vital to the nation's energy and national security **D**
Human Capital Management **S**	Human Capital Management **S**	Address the human capital challenge of developing and retaining a skilled workforce capable of overseeing complex projects **S**
Safety & Health **S**		
		Sustain the relevance and effectiveness of nonproliferation efforts **D**
Recovery Act **D** and **S**		
	Operational Efficiency & Cost Savings **D** and **S**	

D = Mission Direct **S = Mission Support**

Financial Results

A recent report by EERE finds that LED light bulbs have less environmental impact than other bulbs when taking into account the bulbs' life cycles. LED prices have fallen 20% in the past year as more Americans adopt this energy-saving technology.

Message from the Chief Financial Officer

I am pleased to present the Department's Fiscal Year 2012 financial statements, which were audited by the independent public accounting firm of KPMG LLP. For a sixth consecutive year, the Department has maintained its unqualified audit opinion. Furthermore, no material weaknesses in financial internal controls were identified by the audit. The Department completed an evaluation of its financial management system and found it to be in general conformance with governmental financial system requirements and identified no material nonconformances.

In Fiscal Year 2012, we continued to work closely with program offices to successfully execute the Department's $26 billion budget that supports important energy, scientific, and national security investments. In addition, we maintained our efforts for improving our integrated financial and business systems to create efficiencies, enhance decision-making capabilities and to support mission objectives. In the upcoming year, we will continue to safeguard and preserve the resources entrusted to us by the taxpayers and look for opportunities to improve our Agency Financial Report that communicates the financial and performance results of the Department.

I would like to take this opportunity to express my deepest appreciation for the continued dedication and professionalism of our financial management community to assure the financial integrity of our Department.

Thank you.

Joanne Choi
Acting Deputy Chief Financial Officer
November 14, 2012

Consolidated and Combined Financial Statements

Introduction to Principal Statements

The Department's financial statements have been prepared to report the financial position and results of operations of the Department of Energy, pursuant to the requirements of the Chief Financial Officers Act of 1990, the Government Management Reform Act of 1994, and the OMB Circular A-136, "*Financial Reporting Requirements*."

The responsibility for the integrity of the financial information included in these statements rests with the management of the Department. The audit of the Department's principal financial statements was performed by an independent certified public accounting firm selected by the Department's Inspector General. The auditors' report issued by the independent certified public accounting firm is included in this report.

The following provides a brief description of the nature of each required financial statement.

Consolidated Balance Sheets

The Consolidated Balance Sheets describe the assets, liabilities and net position components of the Department.

Consolidated Statements of Net Cost

The Consolidated Statements of Net Cost summarize the Department's operating costs by the strategic goals and objectives identified in the Department's May 2011 Strategic Plan. All operating costs reported reflect full costs, including all direct and indirect costs, consumed by a program or responsibility segment. The full costs are reduced by earned revenues to arrive at net costs.

Consolidated Statements of Changes in Net Position

The Consolidated Statements of Changes in Net Position identify appropriated funds used as a financing source for goods, services or capital acquisitions. This statement presents the accounting events that caused changes in the net position section of the Consolidated Balance Sheets from the beginning to the end of the reporting period.

Combined Statements of Budgetary Resources

The Combined Statements of Budgetary Resources identify the Department's budget authority. Federal law gives budgetary authority to agencies to incur financial obligations that will eventually result in outlays or expenditures. Budget authority that the Department receives includes appropriations, borrowing authority, contract authority and spending authority from offsetting collections. The Combined Statements of Budgetary Resources provide information on budgetary resources available to the Department during the year and the status of those resources at the end of the year. Detail on the amounts shown in the Combined Statements of Budgetary Resources is included in the Required Supplementary Information section on the schedule Budgetary Resources by Major Account.

Consolidated Statements of Custodial Activities

The Consolidated Statements of Custodial Activities identify revenues collected by the Department on behalf of others. These revenues primarily result from power marketing administrations that sell power generated by hydroelectric facilities owned by the Army Corps of Engineers and the Bureau of Reclamation.

Principal Statements

U.S. Department of Energy Consolidated Balance Sheets

As of September 30, 2012 and 2011

($ IN MILLIONS)	FY 2012	FY 2011
ASSETS: (Note 2)		
Intragovernmental Assets:		
Fund Balance with Treasury (Note 3)	$ 38,425	$ 47,720
Investments and Related Interest, Net (Note 4)	35,040	33,291
Accounts Receivable, Net (Note 5)	673	807
Regulatory Assets (Note 6)	5,471	5,492
Other Assets	31	33
Total Intragovernmental Assets	**$ 79,640**	**$ 87,343**
Investments and Related Interest, Net (Note 4)	181	181
Accounts Receivable, Net (Note 5)	3,870	3,893
Direct Loans and Loan Guarantees, Net (Note 7)	10,683	5,732
Inventory, Net: (Note 8)		
Strategic Petroleum and Home Heating Oil Reserve	20,778	20,668
Nuclear Materials	21,120	21,642
Other Inventory	554	536
General Property, Plant, and Equipment, Net (Note 9)	32,779	30,740
Regulatory Assets (Note 6)	6,982	7,406
Other Non-Intragovernmental Assets (Note 10)	4,293	3,840
Total Assets	**$ 180,880**	**$ 181,981**
LIABILITIES: (Note 11)		
Intragovernmental Liabilities:		
Accounts Payable	$ 121	$ 104
Debt (Note 12)	24,843	19,307
Deferred Revenues and Other Credits (Note 13)	96	64
Other Liabilities (Note 14)	1,478	1,511
Total Intragovernmental Liabilities	**$ 26,538**	**$ 20,986**
Accounts Payable	4,228	4,843
Loan Guarantee Liability (Note 7)	157	86
Debt Held by the Public (Note 12)	6,127	5,763
Deferred Revenues and Other Credits (Note 13)	34,206	31,715
Environmental Cleanup and Disposal Liabilities (Note 15)	268,401	250,569
Pension and Other Actuarial Liabilities (Note 16)	31,537	30,304
Capital Leases (Note 17)	863	607
Other Non-Intragovernmental Liabilities (Note 14)	6,723	7,373
Contingencies and Commitments (Note 18)	19,853	19,175
Total Liabilities	**$ 398,633**	**$ 371,421**
NET POSITION:		
Unexpended Appropriations		
Unexpended Appropriations - Earmarked Funds (Note 19)	$ 23	$ 21
Unexpended Appropriations - Other Funds	28,073	37,741
Cumulative Results of Operations		
Cumulative Results of Operations - Earmarked Funds (Note 19)	(4,919)	(5,083)
Cumulative Results of Operations - Other Funds	(240,930)	(222,119)
Total Net Position	**$ (217,753)**	**$ (189,440)**
Total Liabilities and Net Position	**$ 180,880**	**$ 181,981**

The accompanying notes are an integral part of these statements.

U.S. Department of Energy Consolidated Statements of Net Cost

For the Years Ended September 30, 2012 and 2011

($ IN MILLIONS)	FY 2012	FY 2011
STRATEGIC GOALS:		
Transform Our Energy Systems		
Program Costs (Note 21)	$ 15,221	$ 17,315
Less: Earned Revenues (Note 22)	(4,721)	(8,400)
Net Cost of Transform Our Energy Systems	**10,500**	**8,915**
The Science and Engineering Enterprise		
Program Costs (Note 21)	4,943	4,872
Less: Earned Revenues (Note 22)	(29)	(32)
Net Cost of Science and Engineering Enterprise	**4,914**	**4,840**
Secure Our Nation		
Program Costs (Note 21)	15,550	16,698
Less: Earned Revenues (Note 22)	(390)	(375)
Net Cost of Secure Our Nation	**15,160**	**16,323**
Net Cost of Strategic Goals	**30,574**	**30,078**
OTHER PROGRAMS:		
Reimbursable Programs:		
Program Costs	4,214	4,257
Less: Earned Revenues (Note 22)	(4,168)	(4,168)
Net Cost of Reimbursable Programs	**46**	**89**
Other Programs (Note 23)		
Program Costs	815	826
Less: Earned Revenues (Note 22)	(354)	(357)
Net Cost of Other Programs	**461**	**469**
Costs Applied to Reduction of Legacy Environmental Liabilities (Notes 15 and 24)	(5,524)	(7,881)
Costs Not Assigned (Note 25)	29,853	21,235
Net Cost of Operations (Notes 20 and 26)	**$ 55,410**	**$ 43,990**

The accompanying notes are an integral part of these statements.

U.S. Department of Energy Consolidated Statements of Changes in Net Position

For the Years Ended September 30, 2012 and 2011

($ IN MILLIONS)	EARMARKED FUNDS (Note 19)	ALL OTHER FUNDS	ELIMINATIONS	CONSOLIDATED
		FY 2012		
CUMULATIVE RESULTS OF OPERATIONS:				
Beginning Balances	$ (5,083)	$ (222,119)	$ -	$ (227,202)
Budgetary Financing Sources:				
Appropriations Used	$ 8	$ 35,376	$ -	$ 35,384
Non-Exchange Revenue	2	53	-	55
Donations and Forfeitures of Cash	-	11	-	11
Transfers - In/(Out) Without Reimbursement	(136)	(51)	9	(178)
Other Financing Sources (Non-Exchange):				
Donations and Forfeitures of Cash	38	-	-	38
Transfers - In/(Out) Without Reimbursement (Note 26)	(90)	(90)	(9)	(189)
Imputed Financing from Costs Absorbed by Others (Note 26)	1	2,728	-	2,729
Other	22	(1,090)	(19)	(1,087)
Total Financing Sources	**$ (155)**	**$ 36,937**	**$ (19)**	**$ 36,763**
Net Cost of Operations	319	(55,748)	19	(55,410)
Net Change	**$ 164**	**$ (18,811)**	**$ -**	**$ (18,647)**
Total Cumulative Results of Operations	**$ (4,919)**	**$ (240,930)**	**$ -**	**$ (245,849)**
UNEXPENDED APPROPRIATIONS:				
Beginning Balances	$ 21	$ 37,741	$ -	$ 37,762
Budgetary Financing Sources:				
Appropriations Received (Note 27)	$ 10	$ 26,518	$ -	$ 26,528
Appropriations Transferred - In/(Out)	-	9	-	9
Other Adjustments	-	(819)	-	(819)
Appropriations Used	(8)	(35,376)	-	(35,384)
Total Budgetary Financing Sources	**$ 2**	**$ (9,668)**	**$ -**	**$ (9,666)**
Total Unexpended Appropriations	**$ 23**	**$ 28,073**	**$ -**	**$ 28,096**
Net Position	**$ (4,896)**	**$ (212,857)**	**$ -**	**$ (217,753)**
		FY 2011		
CUMULATIVE RESULTS OF OPERATIONS:				
Beginning Balances	$ (4,622)	$ (216,231)	$ -	$ (220,853)
Budgetary Financing Sources:				
Appropriations Used	$ 9	$ 37,713	$ -	$ 37,722
Non-Exchange Revenue	7	52	-	59
Donations and Forfeitures of Cash	-	15	-	15
Transfers - In/(Out) Without Reimbursement	(26)	(276)	-	(302)
Other Financing Sources (Non-Exchange):				
Donations and Forfeitures of Cash	9	6	-	15
Transfers - In/(Out) Without Reimbursement (Note 26)	(664)	(78)	-	(742)
Imputed Financing from Costs Absorbed by Others (Note 26)	1	5,237	-	5,238
Other	(3,273)	(1,038)	(53)	(4,364)
Total Financing Sources	**$ (3,937)**	**$ 41,631**	**$ (53)**	**$ 37,641**
Net Cost of Operations	3,476	(47,519)	53	(43,990)
Net Change	**$ (461)**	**$ (5,888)**	**$ -**	**$ (6,349)**
Total Cumulative Results of Operations	**$ (5,083)**	**$ (222,119)**	**$ -**	**$ (227,202)**
UNEXPENDED APPROPRIATIONS:				
Beginning Balances	$ 18	$ 46,981	$ -	$ 46,999
Budgetary Financing Sources:				
Appropriations Received (Note 27)	$ 11	$ 29,020	$ -	$ 29,031
Appropriations Transferred - In/(Out)	-	3	-	3
Other Adjustments	-	(549)	-	(549)
Appropriations Used	(8)	(37,714)	-	(37,722)
Total Budgetary Financing Sources	**$ 3**	**$ (9,240)**	**$ -**	**$ (9,237)**
Total Unexpended Appropriations	**$ 21**	**$ 37,741**	**$ -**	**$ 37,762**
Net Position	**$ (5,062)**	**$ (184,378)**	**$ -**	**$ (189,440)**

The accompanying notes are an integral part of these statements.

U.S. Department of Energy Combined Statements of Budgetary Resources

For the Years Ended September 30, 2012 and 2011

($ IN MILLIONS)	BUDGETARY	NON-BUDGETARY CREDIT REFORM FINANCING ACCOUNTS	BUDGETARY	NON-BUDGETARY CREDIT REFORM FINANCING ACCOUNTS
	FY 2012		FY 2011	
BUDGETARY RESOURCES:				
Unobligated Balance Brought Forward, October 1	$ 9,522	$ 4,593	$ 9,946	$ 3,363
Recoveries of Prior Year Unpaid Obligations	842	851	157	30
Other Changes in Unobligated Balance	(5)	(1,064)	1	(36)
Unobligated Balance from Prior Year Budget Authority, Net	$ 10,359	$ 4,380	$ 10,104	$ 3,357
Appropriations (Note 27)	26,376	-	29,382	-
Borrowing Authority	806	4	1,048	10,152
Contract Authority	1,272	-	1,288	-
Spending Authority from Offsetting Collections	7,308	787	5,377	2,313
Total Budgetary Resources (Note 27)	**$ 46,121**	**$ 5,171**	**$ 47,199**	**$ 15,822**
STATUS OF BUDGETARY RESOURCES:				
Obligations Incurred (Notes 26 and 27)	$ 35,998	$ 1,664	$ 37,677	$ 11,229
Unobligated Balance, End of Year:				
Apportioned	$ 9,590	$ 12	$ 6,200	$ 38
Exempt from Apportionment	18	-	29	-
Unapportioned (Note 27)	515	3,495	3,293	4,555
Total Unobligated Balance, End of Year	**$ 10,123**	**$ 3,507**	**$ 9,522**	**$ 4,593**
Total Budgetary Resources	**$ 46,121**	**$ 5,171**	**$ 47,199**	**$ 15,822**
CHANGE IN OBLIGATED BALANCE:				
Unpaid Obligations, Brought Forward, October 1	$ 41,616	$ 12,268	$ 51,502	$ 6,143
Uncollected Customer Payments from Federal Sources, Brought Forward, October 1	(4,501)	(2,655)	(4,498)	(2,093)
Obligated Balance, Start of Year, Net	**$ 37,115**	**$ 9,613**	**$ 47,004**	**$ 4,050**
Obligations Incurred (Notes 26 and 27)	35,998	1,664	37,677	11,229
Outlays, Gross	(45,702)	(7,116)	(47,406)	(5,074)
Change in Uncollected Customer Payments from Federal Sources	86	1,575	(3)	(562)
Recoveries of Prior Year Unpaid Obligations	(842)	(851)	(157)	(30)
Obligated Balance, End of Year:				
Unpaid Obligations, End of Year (Note 27)	$ 31,070	$ 5,965	$ 41,616	$ 12,268
Uncollected Customer Payments from Federal Sources, End of Year	(4,415)	(1,080)	(4,501)	(2,655)
Obligated Balance, End of Year, Net	**$ 26,655**	**$ 4,885**	**$ 37,115**	**$ 9,613**
BUDGET AUTHORITY AND OUTLAYS, NET:				
Budget Authority, Gross	$ 35,762	$ 791	$ 37,095	$ 12,465
Actual Offsetting Collections	(9,111)	(2,415)	(8,750)	(1,752)
Change in Uncollected Customer Payments from Federal Sources	86	1,575	(3)	(562)
Budget Authority, Net	**$ 26,737**	**$ (49)**	**$ 28,342**	**$ 10,151**
Outlays, Gross	$ 45,702	$ 7,116	$ 47,406	$ 5,074
Actual Offsetting Collections	(9,111)	(2,415)	(8,750)	(1,752)
Outlays, Net	$ 36,591	$ 4,701	$ 38,656	$ 3,322
Distributed Offsetting Receipts (Notes 26 and 27)	(4,132)	-	(7,306)	-
Agency Outlays, Net (Note 27)	**$ 32,459**	**$ 4,701**	**$ 31,350**	**$ 3,322**

The accompanying notes are an integral part of these statements.

U.S. Department of Energy Consolidated Statements of Custodial Activities

For the Years Ended September 30, 2012 and 2011

($ IN MILLIONS)	FY 2012	FY 2011
SOURCES OF COLLECTIONS:		
Cash Collections: (Note 28)		
Power Marketing Administrations	$ 783	$ 819
Federal Energy Regulatory Commission	178	48
Total Cash Collections	**$ 961**	**$ 867**
Accrual Adjustment	(8)	(20)
Total Custodial Revenue	**$ 953**	**$ 847**
DISPOSITION OF COLLECTIONS:		
Transferred to Others:		
Bureau of Reclamation	(415)	(491)
Department of the Treasury	(459)	(306)
Army Corps of Engineers	(88)	(63)
Others	-	(6)
Decrease/(Increase) in Amounts to be Transferred	9	19
Net Custodial Activity	**$ -**	**$ -**

The accompanying notes are an integral part of these statements.

Notes to the Consolidated and Combined Financial Statements

1. Summary of Significant Accounting Policies

A. BASIS OF PRESENTATION

These consolidated and combined financial statements have been prepared to report the financial position and results of operations of the United States (U.S.) Department of Energy (the Department). The statements were prepared from the books and records of the Department in accordance with generally accepted accounting principles applicable to federal entities.

B. DESCRIPTION OF REPORTING ENTITY

The Department is a cabinet level agency of the Executive Branch of the U.S. Government. The Department is not subject to federal, state, or local income taxes. The Department's headquarters organizations are located in Washington, D. C. and Germantown, Maryland, and consist of an executive management structure that includes the Secretary; the Deputy Secretary; the Under Secretary of Energy; the Under Secretary for Nuclear Security/Administrator for The National Nuclear Security Administration; the Under Secretary for Science; Secretarial staff organizations; and program organizations that provide technical direction and support for the Department's principal programmatic missions. The Department also includes the Federal Energy Regulatory Commission (FERC), which is an independent organization responsible for regulating the transmission and sale of natural gas for resale in interstate commerce and for regulating the transmission and wholesale of electricity in interstate commerce and the licensing of hydroelectric power projects.

The Department has a complex field structure comprised of operations offices, field offices, power marketing administrations (Bonneville Power Administration, Southeastern Power Administration, Southwestern Power Administration, and Western Area Power Administration), laboratories, and other facilities. The majority of the Department's environmental cleanup, energy research and development, and testing and production activities are carried out by major contractors. The contractors operate, maintain, or support the Department's government-owned facilities on a day-to-day basis and provide other special work under the direction of the Department's field organizations. The Department indemnifies these contractors against financial responsibility from nuclear accidents under the provisions of the Price-Anderson Act.

These contractors have unique contractual relationships with the Department. In most cases, their charts of accounts and accounting systems are integrated with the Department's accounting system through a home office-branch office type of arrangement. Additionally, the Department is responsible for reimbursing the allowable costs of contractor contributions to certain defined benefit pension plans, as well as postretirement benefits such as medical care and life insurance, for the employees of these contractors. As a result, the Department's financial statements reflect not only the costs incurred by these contractors, but also include certain contractor assets (e.g., employee advances and prepaid pension costs) and liabilities (e.g., accounts payable, accrued expenses including payroll and benefits, and pension and other actuarial liabilities) that would not be reflected in the financial statements of other federal agencies that do not have these unique contractual relationships.

C. BASIS OF ACCOUNTING

Transactions are recorded on an accrual accounting basis and budgetary basis. Under the accrual accounting basis, revenues are recognized when earned and expenses are recognized when liabilities are incurred, without regard to receipt or payment of cash. Budgetary accounting facilitates compliance with legal constraints and controls over the use of federal funds. All material intradepartmental balances and transactions have been eliminated in the *Consolidated Balance Sheets, Consolidated Statements of Net Cost, Consolidated Statements of Changes in Net Position, and Consolidated Statements of Custodial Activities*. The *Combined Statements of Budgetary Resources* are prepared on a combined basis and do not include intradepartmental eliminations.

Throughout these financial statements, assets, liabilities, earned revenue, and costs have been classified according to the type of entity with whom the transactions were made. Intragovernmental assets and liabilities are those from or to other federal entities. Intragovernmental earned revenue represents collections or accruals of revenue from other federal entities. Intragovernmental costs are payments or accruals for goods and services provided by other federal entities, and costs incurred by other federal entities as a result of the Department's programs (see Note 20).

D. FUND BALANCE WITH TREASURY

Funds with the Department of the Treasury (Treasury) primarily represent appropriated and revolving funds that are available to pay current liabilities and finance authorized purchases. Disbursements and receipts are processed by Treasury, and the Department's records are reconciled with those of Treasury (see Note 3).

E. INVESTMENTS AND RELATED INTEREST, NET

All investments are reported at cost net of amortized premiums and discounts as it is the Department's intent to hold the investments to maturity. Premiums and discounts are amortized using the effective interest yield method (see Note 4).

F. ACCOUNTS RECEIVABLE, NET

Intragovernmental accounts receivable represent amounts due from other federal agencies and are considered to be fully collectible. The amounts due for non-intragovernmental (non-federal) receivables are stated net of an allowance for uncollectible accounts. The estimate of the allowance is based on past experience in the collection of receivables and an analysis of the outstanding balances (see Note 5).

G. DIRECT LOANS AND LOAN GUARANTEES

The Department has two loans that were obligated and disbursed prior to fiscal year 1992, and are presented net of an allowance for loss. All loans obligated after fiscal year 1992 are presented on a present value basis in compliance with the Federal Credit Reform Act of 1990. The present value of the loans is revalued on an annual basis (see Note 7).

Interest expense on the Bureau of Public Debt (BPD) and Federal Financing Bank (FFB) Debt is calculated in accordance with the Office of Management and Budget (OMB) Circular No. A-11, Sections 185.32 and 185.34 using the Credit Subsidy Calculator 2 (CSC2). Capitalized interest receivables on loans with FFB are reclassified to principal outstanding on the capitalization date.

H. INVENTORY, NET

Stockpile materials are recorded at historical cost in accordance with Statement of Federal Financial Accounting Standards (SFFAS) No. 3, *Accounting for Inventory and Related Property,* except for certain nuclear materials identified as surplus or excess to the Department's needs. These nuclear materials are recorded at their net realizable value (see Note 8).

I. GENERAL PROPERTY, PLANT, AND EQUIPMENT, NET

Property, plant, and equipment that are purchased, constructed, or fabricated in-house, including major modifications or improvements, are capitalized at cost. The Department's property, plant, and equipment capitalization threshold, except as noted below, is $500,000 subsequent to September 30, 2011 and $50,000 prior to October 1, 2011. The capitalization threshold for the power marketing administrations (PMAs) and FERC range from $5,000 to $50,000. The capitalization threshold for internal use software is $750,000, except for the PMAs and FERC, which use thresholds ranging from $5,000 to $150,000 (see Note 9).

Costs of construction are capitalized as construction work in process. Upon completion or beneficial occupancy or use, the cost is transferred to the appropriate property account. Property, plant, and equipment related to environmental management facilities storing and processing the Department's environmental legacy wastes are not capitalized.

Depreciation expense is generally computed using the straight-line method. The units of production method is used only in special cases where applicable, such as depreciating automotive equipment on a mileage basis and construction equipment on an hourly use basis. The ranges of service lives are generally as follows:

- Structures and Facilities 25 – 50 years
- Automated Data Processing Software 3 – 7 years
- Equipment 5 – 40 years
- Land rights for a specified period or 50 years, whichever is less

J. LIABILITIES

Liabilities represent amounts of monies or other resources likely to be paid by the Department as a result of a transaction or event that has already occurred. However, no liability can be paid by the Department absent an authorized appropriation. Liabilities for which an appropriation has not been enacted are, therefore, classified as not covered by budgetary resources (see Note 11), and there is no certainty that the appropriations will be enacted. Also, liabilities of the Department that are not contract based can be abrogated by the government acting in its sovereign capacity.

K. EARMARKED FUNDS

Earmarked funds are financed by specifically identified revenues, often supplemented by other financing sources, which remain available over time. These specifically identified revenues and other financing sources are required by statute to be used for designated activities, benefits or purposes, and must be accounted for separately from the government's general revenues (see Note 19).

L. ACCRUED ANNUAL, SICK, AND OTHER LEAVE

Federal Employees: Federal employees' annual leave is accrued as it is earned, and the accrual is reduced annually for actual leave taken. Each year, the accrued annual leave balance is adjusted to reflect the latest pay rates. To the extent that current or prior year appropriations are not available to fund annual leave earned but not taken, funding will be obtained from future financing sources. Sick leave and other types of non-vested leave are expensed as taken.

Contractor Employees: The Department accrues annual leave for contractor employees. Unlike leave for federal employees, this is a funded liability rather than an unfunded liability.

M. RETIREMENT PLANS

Federal Employees: There are two primary retirement systems for federal employees. Employees hired prior to January 1, 1984, may participate in the Civil Service Retirement System (CSRS). On January 1, 1984, the Federal Employees Retirement System (FERS) went into effect pursuant to Public Law 99-335. Most employees hired after December 31, 1983, are automatically covered by FERS and Social Security. Employees hired prior to January 1, 1984, elected to either join FERS and Social Security or remain in CSRS. A primary feature of FERS is

that it offers a savings plan to which the Department automatically contributes one percent of pay and matches any employee contribution up to an additional four percent of pay. For most employees hired since December 31, 1983, the Department also contributes the employer's matching share for Social Security (see Note 20). The Department does not report CSRS or FERS assets, accumulated plan benefits, or unfunded liabilities, if any, applicable to its employees. Reporting such amounts is the responsibility of the Office of Personnel Management (OPM). The Department does report, as an imputed financing source (see Note 26) and a program expense (see Note 20), the difference between its contributions to federal employee pension and other retirement benefits and the estimated actuarial costs as computed by OPM. The PMAs make additional annual contributions to Treasury to ensure that all postretirement benefit programs provided to their employees are fully funded and such costs are both recovered through rates and properly expensed.

Contractor Employees: The Department is contractually responsible for reimbursing its major contractors who sponsor employee defined benefit pension plans for the costs of contractor employee retiree benefits because these are allowable costs under their contracts. Most of these contractors sponsor defined benefit pension plans under which these plans promise to pay employees specified benefits, such as a percentage of the final average pay for each year of service. The Department does not sponsor and is not the fiduciary of contractor employee defined benefit plans. Contractors are required to make contributions to their plans as required by the Internal Revenue Code, the Employee Retirement Income Security Act (ERISA), as amended, and consistent with Departmental policy. Employer contributions are calculated to ensure that plan assets are sufficient to provide for accrued benefits of contractor employees. The level of contributions is dependent on plan provisions and actuarial assumptions about the future, such as interest rates, employee turnover and mortality, age of retirement, and compensation increases. The Department's major contractors also sponsor postretirement benefits other than pensions (PRB) consisting of predominantly postretirement health care benefits which are generally funded on a pay-as-you-go basis. Since the Department is responsible for the allowable costs of funding these contractor pension and PRB plans, it reports assets and liabilities for these plans (see Note 16).

N. NET COST OF OPERATIONS

Program costs are summarized in the *Consolidated Statements of Net Cost* by the strategic goals and objectives identified in the Department's May 2011 Strategic Plan. Program costs reflect full costs including all direct and indirect costs consumed by these strategic goals and objectives. Full costs are reduced by exchange (earned) revenues to arrive at net operating cost (see Notes 21 and 22).

O. REVENUES AND OTHER FINANCING SOURCES

The Department receives the majority of the funding needed to perform its mission through Congressional appropriations. These appropriations may be used, within statutory limits, for operating and capital expenditures. In addition to appropriations, other financing sources include exchange and non-exchange revenues and imputed financing sources. The Department also collects custodial revenues on behalf of others.

Exchange and Non-Exchange Revenues*:* In accordance with federal government accounting standards, the Department classifies revenues as either exchange (earned) or non-exchange. Exchange revenues are those that derive from transactions in which the government provides value to the public or another government entity at a price (see Note 22). Non-exchange revenues derive from the government's sovereign right to demand payment, including fines and penalties. Non-exchange revenues also include interest earned on investments funded from amounts remaining from the privatization of the U.S. Enrichment Corporation (see Note 4). These revenues are not considered to reduce the cost of the Department's operations and are reported on the *Consolidated Statements of Changes in Net Position.*

Imputed Financing Sources: In certain instances, program costs of the Department are paid out of the funds appropriated to other federal agencies. For example, certain costs of retirement programs are paid by OPM, and certain legal judgments against the Department are paid from the Judgment Fund maintained by Treasury. When costs are incurred by other federal entities as a result of the Department's programs, the Department recognizes these amounts on the *Consolidated Statements of Net Cost.* In addition, these amounts are recognized as imputed financing sources on the *Consolidated Statements of Changes in Net Position* (see Notes 20 and 26).

Custodial Revenues: The Department collects certain revenues on behalf of others, which are designated as custodial revenues. The Department incurs virtually no costs to generate these revenues, nor can it use these revenues to finance its operations. The revenues are returned to Treasury and others and are reported on the *Consolidated Statements of Custodial Activities* (see Note 28).

P. USE OF ESTIMATES

The preparation of financial statements requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Significant items subject to such estimates and assumptions include present value of loan receivables, estimated lives of general property, plant and equipment, environmental cleanup and disposal liabilities, pension and other actuarial liabilities, contingencies and commitments, cost accruals, and managerial cost allocations. Actual results could differ from these estimates.

Q. COMPARATIVE DATA

In fiscal year 2012, changes to the presentation of the Combined Statements of Budgetary Resources were made, in accordance with Guidance provided in OMB Circular No. A-136, and as such, fiscal year 2011 activity and balances reported on the Combined Statement of Budgetary Resources have been reclassified to conform to the presentation in the current year.

Certain other fiscal year 2011 amounts have been reclassified to conform to the fiscal year 2012 presentation.

R. ALLOCATION TRANSFERS WITH OTHER FEDERAL AGENCIES

The Department is a party to allocation transfers with other federal agencies as both a transferring (parent) entity and a receiving (child) entity. Allocation transfers are legal delegations by one department of its authority to obligate budget authority and outlay funds to another department. A separate fund account (allocation account) is created in the U.S. Treasury as a subset of the parent fund account for tracking and reporting purposes. All allocation transfers of balances are credited to this account, and subsequent obligations and outlays incurred by the child entity are charged to this allocation account as it executes the delegated activity on behalf of the parent entity. Generally, all financial activity related to these allocation transfers (e.g., budget authority, obligations, outlays) is reported in the financial statements of the parent entity, from which the underlying legislative authority, appropriations and budget apportionments are derived. The Department allocates funds, as the parent, to the U.S. Army Corps of Engineers. The Department receives allocation transfers, as the child, from Treasury and the U.S. Department of Transportation.

2. Non-Entity Assets

($ IN MILLIONS)	FY 2012	FY 2011
Intragovernmental		
Investments - Petroleum Pricing Violation Escrow Fund (Notes 4 and 14)	$ 75	$ 75
Other	5	8
Subtotal	**$ 80**	**$ 83**
Investments - Petroleum Pricing Violation Escrow Fund (Notes 4 and 14)	181	181
Inventories - Department of Defense stockpile oil (Notes 8 and 14)	123	123
Other	1	2
Total non-entity assets	**$ 385**	**$ 389**
Total entity assets	180,495	181,592
Total assets	**$ 180,880**	**$ 181,981**

Assets in the possession of the Department that are not available for its use are considered non-entity assets.

PETROLEUM PRICING VIOLATION ESCROW FUND

The Petroleum Pricing Violation Escrow Fund represents receipts collected as a result of agreements or court orders with individuals or firms that violated petroleum pricing and allocation regulations during the 1970s and 1980s. These receipts are invested in Treasury securities and certificates of deposit at minority-owned financial institutions pending determination by the Department as to how to distribute the fund balance. The investments are liquidated, as needed, to make payments to claimants from this fund.

3. Fund Balance with Treasury

($ IN MILLIONS)	APPROPRIATED FUNDS	REVOLVING FUNDS	SPECIAL FUNDS	OTHER FUNDS	TOTAL
			FY 2012		
Unobligated budgetary resources					
Available	$ 8,898	$ 253	$ 469	$ -	$ 9,620
Unavailable (Note 27)	332	3,672	6	-	4,010
Obligated balance not yet disbursed					
Unpaid obligations (Note 27)	27,675	8,725	635	-	37,035
Uncollected customer payments from Federal sources	(4,045)	(1,423)	(27)	-	(5,495)
Deposit funds and clearing accounts	-	-	-	147	147
Other adjustments					
Appropriations temporarily not available pursuant to law, and contract authority	-	(1,272)	-	-	(1,272)
Collections temporarily not available pursuant to public law	47	-	-	-	47
Invested balances - payable - to be transferred	-	42	-	-	42
Unavailable receipt accounts	-	-	895	-	895
Borrowing authority not yet converted to fund balance	-	(6,051)	-	-	(6,051)
Budgetary resources invested in Treasury securities					
Nuclear Waste Fund	-	-	(25)	-	(25)
Uranium Enrichment D&D Fund	-	-	(133)	-	(133)
Power marketing administrations	-	(395)	-	-	(395)
Total fund balance with Treasury	**$ 32,907**	**$ 3,551**	**$ 1,820**	**$ 147**	**$ 38,425**
			FY 2011		
Unobligated budgetary resources					
Available	$ 5,438	$ 268	$ 561	$ -	$ 6,267
Unavailable (Note 27)	3,291	4,557	-	-	7,848
Obligated balance not yet disbursed					
Unpaid obligations (Note 27)	38,127	15,019	738	-	53,884
Uncollected customer payments from Federal sources	(4,135)	(2,980)	(41)	-	(7,156)
Deposit funds and clearing accounts	-	-	-	48	48
Other adjustments					
Appropriations temporarily not available pursuant to law, and contract authority	-	(1,288)	-	-	(1,288)
Collections temporarily not available pursuant to public law	47	-	-	-	47
Invested balances - payable - to be transferred	-	34	-	-	34
Unavailable receipt accounts	-	-	913	-	913
Borrowing authority not yet converted to fund balance	-	(12,384)	-	-	(12,384)
Budgetary resources invested in Treasury securities					
Nuclear Waste Fund	-	-	(34)	-	(34)
Uranium Enrichment D&D Fund	-	-	(168)	-	(168)
Power marketing administrations	-	(291)	-	-	(291)
Total fund balance with Treasury	**$ 42,768**	**$ 2,935**	**$ 1,969**	**$ 48**	**$ 47,720**

4. Investments and Related Interest, Net

($ IN MILLIONS)	FACE	UNAMORTIZED PREMIUM (DISCOUNT)	INTEREST RECEIVABLE	INVESTMENTS, NET	UNREALIZED MARKET GAINS (LOSSES)	MARKET VALUE
			FY 2012			
Intragovernmental Non-Marketable						
Nuclear Waste Fund	$ 49,552	$ (20,856)	$ 75	$ 28,771	$ 9,969	$ 38,740
D&D Fund	4,022	131	36	4,189	108	4,297
U.S. Enrichment Corporation Fund	1,598	2	8	1,608	-	1,608
Power marketing administrations	395	1	1	397	-	397
Petroleum Pricing Violation Escrow Fund (Note 2)	75	-	-	75	-	75
Subtotal	**$ 55,642**	**$ (20,722)**	**$ 120**	**$ 35,040**	**$ 10,077**	**$ 45,117**
Petroleum Pricing Violation Escrow Fund (Note 2)	181	-	-	181	-	181
Total investments and related interest, net	**$ 55,823**	**$ (20,722)**	**$ 120**	**$ 35,221**	**$ 10,077**	**$ 45,298**
			FY 2011			
Intragovernmental Non-Marketable						
Nuclear Waste Fund	$ 48,611	$ (21,937)	$ 54	$ 26,728	$ 8,415	$ 35,143
D&D Fund	4,372	171	44	4,587	174	4,761
U.S. Enrichment Corporation Fund	1,593	3	10	1,606	1	1,607
Power marketing administrations	291	2	2	295	-	295
Petroleum Pricing Violation Escrow Fund (Note 2)	75	-	-	75	-	75
Subtotal	**$ 54,942**	**$ (21,761)**	**$ 110**	**$ 33,291**	**$ 8,590**	**$ 41,881**
Petroleum Pricing Violation Escrow Fund (Note 2)	181	-	-	181	-	181
Total investments and related interest, net	**$ 55,123**	**$ (21,761)**	**$ 110**	**$ 33,472**	**$ 8,590**	**$ 42,062**

Pursuant to statutory authorizations, the Department invests monies in Treasury securities and commercial certificates of deposit that are secured by the Federal Deposit Insurance Corporation. The Department's investments primarily involve the Nuclear Waste Fund (NWF) and the Uranium Enrichment Decontamination and Decommissioning (D&D) Fund. Fees collected from owners and generators of spent nuclear fuel and high-level radioactive waste and fees collected from domestic utilities are deposited into the respective funds. Funds in excess of those needed to pay current program costs are invested in Treasury securities.

Upon privatization of the U.S. Enrichment Corporation (USEC) on July 28, 1998, OMB and Treasury designated the Department as successor to USEC for purposes of disposition of balances remaining in the USEC Fund. These funds are invested in Treasury securities.

The federal government does not set aside assets to pay for expenditures associated with the funds for which the Department holds Treasury securities. These Treasury securities are an asset to the Department and a liability to Treasury. Because the Department and Treasury are both parts of the federal government, these assets and liabilities offset each other from the standpoint of the federal government as a whole. For this reason, they do not represent an asset or a liability in the U.S. Government-wide financial statements. Treasury securities provide the Department with authority to draw upon the U.S. Treasury to make expenditures, subject to available appropriations and OMB apportionments. When the Department requires redemption of these securities, the federal government finances those expenditures out of accumulated cash balances by raising taxes or other receipts, by borrowing from the public, repaying less debt, or by curtailing other expenditures. This is the same way the federal government finances all other expenditures.

5. Accounts Receivable, Net

($ IN MILLIONS)	FY 2012			FY 2011		
	RECEIVABLE	ALLOWANCE	NET	RECEIVABLE	ALLOWANCE	NET
Intragovernmental	$ 673	$ -	$ 673	$ 807	$ -	$ 807
Nuclear Waste Fund	3,242	-	3,242	3,247	-	3,247
Power marketing administrations	513	-	513	550	(40)	510
Other	178	(63)	115	199	(63)	136
Subtotal	**$ 3,933**	**$ (63)**	**$ 3,870**	**$ 3,996**	**$ (103)**	**$ 3,893**
Total accounts receivable	**$ 4,606**	**$ (63)**	**$ 4,543**	**$ 4,803**	**$ (103)**	**$ 4,700**

Intragovernmental accounts receivable primarily represent amounts due from other federal agencies for reimbursable work performed pursuant to the Economy Act, Atomic Energy Act, and other statutory authority.

Non-intragovernmental receivables primarily represent amounts due for NWF fees. NWF receivables are supported by contracts and agreements with owners and generators of spent nuclear fuel and high-level radioactive waste that contribute resources to the fund. Other receivables due from the public include reimbursable work billings and other trade receivables, and other miscellaneous receivables.

6. Regulatory Assets

($ IN MILLIONS)	FY 2012	FY 2011
Intragovernmental		
Refinanced and additional appropriated capital	$ 5,471	$ 5,492
Non-operating regulatory assets	2,665	3,036
Residential exchange program scheduled and refund amounts	3,493	3,640
Conservation and fish and wildlife projects	576	519
Other regulatory assets	248	211
Subtotal	**$ 6,982**	**$ 7,406**
Total regulatory assets	**$ 12,453**	**$ 12,898**

The Department's PMAs record certain amounts as assets in accordance with the Financial Accounting Standards Board's Accounting Standards Codification (FASB ASC) 980, *Regulated Operations*. The provisions of this standard require that regulated enterprises reflect rate actions of the regulator in their financial statements, when appropriate. These rate actions can provide reasonable assurance of the existence of an asset, reduce or eliminate the value of an asset, or impose a liability on a regulated enterprise. In order to defer incurred costs under this standard, a regulated entity must have the statutory authority to establish rates that recover all costs, and those rates must be charged to and collected from customers.

REFINANCED AND ADDITIONAL APPROPRIATED CAPITAL

BPA is responsible for paying Treasury for transmission and power generating assets that were funded by appropriations, including those of the U.S. Army Corps of Engineers (Corps) and Bureau of Reclamation (Reclamation). In accordance with ASC 980, BPA records a regulatory asset based on this deferred cost that must be repaid to Treasury for those assets owned by the Corps and Reclamation. This regulatory asset is amortized between 68 and 75 years on a straight-line method based on the estimated service lives of the assets. The *Consolidated Balance Sheets* include an intragovernmental regulatory asset and a corresponding intragovernmental debt for refinanced and additional appropriations (see Note 12).

NON-OPERATING REGULATORY ASSETS

BPA is responsible for repayment of debt for two terminated nuclear projects (Energy Northwest Nuclear Projects Nos. 1 and 3) and one hydro facility (Northern Wasco hydro project). These assets are amortized over the term of the outstanding debt (see Note 12). Also included are smaller amounts for derivative instruments related to unrealized losses from BPA's derivative portfolio.

RESIDENTIAL EXCHANGE PROGRAM SCHEDULED AND REFUND AMOUNTS

REP Scheduled Amounts reflect the costs of REP Scheduled Amounts representing REP benefits payable under the 2012 REP Settlement Agreement that will be recovered through BPA's rates through 2028. REP Refund Amounts is the amount recoverable in future rate periods that reduces the REP benefit payments through 2019 as set forth in the 2012 REP Settlement Agreement.

Regulatory assets and corresponding liabilities were established for the future exchange benefits and refunds associated with these disputes related to the Residential Exchange Program.

Under the provisions of the 2012 Settlement Agreement, beginning in fiscal year 2012, the IOUs receive a fixed schedule of REP benefit payments (Scheduled Amounts) of $4.066 billion, which will be paid over a 17 year period. REP Scheduled Amounts of $2.993 billion represent the present value of the remaining fixed schedule of REP benefits payable as of September 30, 2012, which are to be recovered in rates through 2028. Also included are REP Refund Amounts of $500.1 million as of September 30, 2012, which represent the remaining REP benefit payments to be recovered in rates through 2019. BPA will recognize the refund and reduce expense in each year it is applied, until the Refund Amount is returned or eliminated (see Note 14).

CONSERVATION AND FISH AND WILDLIFE PROJECTS

Conservation projects consist of the costs of capitalized conservation measures and are amortized over periods from 5 to 20 years. Fish and wildlife projects consist of the costs of capitalized fish and wildlife measures and are amortized over a period of 15 years.

OTHER REGULATORY ASSETS

Other regulatory assets primarily include accrued liabilities related to outstanding legal claims and settlement agreements (recovered and amortized through future rates over a period as established by the BPA Administrator); spacer damper replacement program costs to replace deteriorated spacer dampers and are being recovered in rates, (amortized over 25 to 30 years); Trojan nuclear facility decommissioning and site restoration costs reflecting amounts to be recovered in future rates for funding the Trojan asset retirement obligation liability; capital bond premiums reflecting losses related to refinanced debt, (amortized over the life of the new debt instruments). In fiscal year 2011, BPA recognized an impairment charge of $20.6 million in deferred spacer damper replacement program costs.

7. Direct Loans and Loan Guarantees, Net

($ IN MILLIONS)	FY 2012	FY 2011
Pre-FCRA loans	$ 7	$ 7
FCRA Direct loans		
ATVM	6,609	4,428
Title XVII	4,067	1,297
Total direct loans and 100% guarantee loans, net	**$ 10,683**	**$ 5,732**
FCRA Guarantee loans (guaranteed value)		
Title XVII	2,370	1,410
Total direct loans and loan guarantees, net	**$ 13,053**	**$ 7,142**

PRE-FCRA LOANS

The Department has two loans outstanding that were issued prior to the Federal Credit Reform Act of 1990 (FCRA). These loans are presented net of an allowance for loss of $26 million as of September 30, 2012 and $26 million as of September 30, 2011.

FCRA DIRECT LOANS AND LOAN GUARANTEES

The Department's direct loan obligations made post-fiscal year 1991, and the resulting direct loans, are governed by the FCRA. These FCRA loans are valued at the net present value of expected future cash flows, discounted at the interest rate of Treasury marketable securities. These are known as the subsidy costs, which include interest rate differentials, delinquencies, defaults, fees, and other cash flow items. The subsidy costs are intended to estimate the long-term cost to the U.S. Government of its loan programs. These costs are recognized in the year the loan is disbursed. A subsidy re-estimate is performed annually at September 30. The subsidy re-estimates takes into account all factors that may have affected the estimated cash flows. Any adjustment resulting from the re-estimate is recognized as a subsidy expense.

The net present value of the FCRA direct loans is not necessarily representative of proceeds that might be expected if these loans were sold on the open market.

Interest revenue is accrued on a monthly basis on the loan balance outstanding at the interest rate assigned to that loan at the time of disbursement, net of any interest on non-performing loans over 90 days.

The Department operates the following FCRA direct loan and loan guarantee programs:

- Advanced Technology Vehicle Manufacturing (ATVM) Loan Program
- Title XVII Loan Guarantee Program for Innovative Technologies (Title XVII)

ATVM

Section 136 of the Energy Independence and Security Act of 2007 established the ATVM Incentive Program which authorizes direct loans to support the development of advanced technology vehicles and associated components in the U.S. The ATVM program provides loans to automobile and automobile part manufacturers for the cost of re-equipping, expanding, or establishing manufacturing facilities in the U.S. to produce advanced technology vehicles or qualified components, and for associated engineering integration costs. An automobile manufacturer applicant must demonstrate that the average adjusted fuel economy for its light duty fleet exceeds that of its entire fleet average for model year (MY) 2005, or if the applicant is a new automobile manufacturer, it must demonstrate that its ATVM vehicle meets or exceeds the industry adjusted average for model year 2005 for equivalent vehicles. All individual ATVM vehicles must be rated at or above 125% of the fuel economy standards for vehicles with substantially similar attributes for MY 2005. The fiscal year 2009 Continuing Resolution (CR) enacted on September 30, 2008, appropriated $7.5 billion to support a maximum of $25 billion in loans under the ATVM.

The ATVM Program issues direct loans which are funded by the FFB with interest rates that are equal to the cost of funds to the Treasury for obligations of comparable maturity. The total subsidy cost for an ATVM direct loan is comprised of default subsidy, financing subsidy, and fees. The loan and subsidy are obligated at the time the conditional commitment is issued.

In determining the credit subsidy, the Department estimates a base borrower interest rate from the budget assumption yield curve used to discount cash flows that generates a zero financing subsidy when determining the final subsidy cost at the point of obligation. This base interest rate is used for calculating the subsidy cost only. Actual interest rates that borrowers pay are not affected. During the interest rate re-estimate, the actual interest rates and the discount rates are updated and will true-up the difference in the Treasury interest rates assumed in the original subsidy cost, and the actual Treasury rates at the point of disbursement, when the borrower interest rates are set.

The Department has received warrants in connection with two of the ATVM loans made. The Department has determined that the warrants have no value until the periods of vesting are reached or until certain conditions precedent occur. Once warrants vest, the values of the warrants will be added to the cash flows for re-estimation of the loans with warrants.

As of September 30, 2012, approximately $8.4 billion in loans has been obligated for five borrowers that have been approved and total disbursements have amounted to $7.1 billion.

TITLE XVII

The Energy Policy Act of 2005 (EPAct05) authorizes the Department to issue loan guarantees to eligible projects that "avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases" and "employ new or significantly improved technologies as compared to technologies in service in the U.S. at the time the guarantee is issued." Title XVII of EPAct05 provides broad authority for the Department to guarantee loans that support early commercial use of advanced technologies if "there is reasonable prospect of repayment of the principal and interest on the obligation by the borrower."

Under the Full-Year Continuing Appropriations Act of 2011, P.L. No. 112-10 (FY 2011 CR), Congress made available approximately $170 million in appropriated funds to pay the Credit Subsidy Costs of loan guarantees for renewable energy or efficient end-use energy technologies. An additional $1.5 billion in loan guarantee authority, where the applicants are obligated to pay the Credit Subsidy Costs for qualifying loan guarantees, is available under the FY 2011 CR and the Omnibus Appropriations Act, 2009, P.L. No. 111-8, as amended by Section 408 of the Supplemental Appropriations Act, 2009, P.L. No. 111-32. The Consolidated Appropriations Act, 2012, P.L. 112-74, amended Section 1702 of Title XVII to provide that the Department may combine an appropriation of Credit Subsidy Cost with a direct payment from the borrower to cover the total Credit Subsidy Cost of a loan guarantee. For nuclear power, front-end nuclear and advanced fossil projects, Section 1703 continues to operate as “self-pay” program whereby borrowers pay the calculated subsidy cost.

In addition to the original program (Section 1703), the ARRA established a new Section 1705 of Title XVII and in fiscal year 2009, appropriated $5.965 billion to pay for the subsidy costs of loan guarantees for certain renewable energy systems, electric power transmission systems, and leading edge biofuel projects that commence construction no later than September 30, 2011. Public Law 111-47 required $2 billion of the subsidy funds to be transferred to the Department of Transportation to fund the “Cash for Clunkers” program. Public Law 111-226 required $1.5 billion of the subsidy funds to be rescinded. The loan and subsidy are obligated at the time the loan closes.

Both Section 1703 and 1705 programs are authorized to issue loan guarantees for up to 100 percent of a debt obligation, which must not exceed 80 percent of eligible project costs. In cases where the Department issues a 100 percent guarantee, the Final Rule requires that the FFB provide the funding. For the purpose of determining the credit subsidy, the Department models these loan guarantees as direct loans to reflect the economic reality to the federal government as a whole. Under Title XVII, the total subsidy cost for a direct loan is comprised of default subsidy and financing subsidy (as specified in the

authorizing statute where fees offset administrative, not subsidy, costs).

In implementing the 1705 program, the Department also established the Financial Institution Partnership Program (FIPP) which supported loans for conventional renewable energy generation projects with commercial financing. Under FIPP, the Department provided a guarantee for up to 80 percent of a loan. The goal of FIPP was to leverage the human and financial capital of private sector financial institutions in accelerating the loan application process, while balancing risk between the Department and private sector partners participating in the program. The subsidy related to FIPP loans was obligated at the time the loans closed.

In determining the credit subsidy, the Department estimates a base borrower interest rate from the budget assumption yield curve used to discount cash flows that generate a zero financing subsidy when determining the final subsidy cost at the point of obligation. The Department then adds a spread to that interest rate estimate to reflect any spread that the FFB may charge based on the terms and conditions of the loan guarantee agreement. This base interest rate is used for calculating the subsidy cost only. Actual interest rates that borrowers pay are not affected. During the interest rate re-estimate, the actual interest rates and the discount rates are updated and will true-up the difference in the Treasury interest rates assumed in the original subsidy cost, and the actual Treasury rates at the point of disbursement, when the borrower interest rates are set.

The Department has received warrants in connection with one of the Title XVII loans made. The Department has determined that the warrants have no value until the periods of vesting are reached or until certain conditions precedent occur. Once warrants vest, the values of the warrants will be added to the cash flows for re-estimation of the loans with warrants.

As of September 30, 2012, conditional commitments to issue guarantees have been issued to four projects totaling $10.6 billion under the Section 1703 program. As of September 30, 2012, approximately $15.6 billion has been obligated to 28 projects under the Section 1705 program. Twenty-one projects with 100% guarantees of loans under the Section 1705 program, totaling approximately $9.9 billion have been obligated, of which $5.3 billion has been disbursed. Seven projects receiving partial guarantees of loans under the Section 1705 FIPP totaling approximately $5.6 billion have been committed, of which $3.0 billion has been disbursed.

Three borrowers of loans guaranteed under Section 1705 are in bankruptcy. The present value of the estimated future cash flows for these loans is reflected in the balance sheet and tables in this footnote.

Direct Loans and 100% Loan Guarantees Obligated and Disbursed Post 1991

($ IN MILLIONS)	LOANS RECEIVABLE, GROSS	INTEREST RECEIVABLE	ALLOWANCE FOR SUBSIDY COST (PRESENT VALUE)	VALUE OF ASSETS RELATED TO LOANS	DISBURSED IN FISCAL YEAR
	FY 2012				
ATVM	$ 6,940	$ 6	$ (337)	$ 6,609	$ 2,176
Title XVII	5,294	27	(1,254)	4,067	3,276
Total loans	**$ 12,234**	**$ 33**	**$ (1,591)**	**$ 10,676**	**$ 5,452**
	FY 2011				
ATVM	$ 4,912	$ 6	$ (490)	$ 4,428	$ 2,452
Title XVII	2,023	11	(737)	1,297	1,544
Total loans	**$ 6,935**	**$ 17**	**$ (1,227)**	**$ 5,725**	**$ 3,996**

Subsidy Expense for Direct Loans and 100% Loan Guarantees by Program and Component

($ IN MILLIONS)	INTEREST DIFFERENTIAL	DEFAULTS	FEES AND OTHER COLLECTIONS	OTHER	TOTAL
			FY 2012		
Subsidy expense for new direct loans disbursed					
ATVM	$ -	$ 840	$ (2)	$ -	$ 838
Title XVII	(115)	607	-	-	492
Total	**$ (115)**	**$ 1,447**	**$ (2)**	**$ -**	**$ 1,330**
	INTEREST RE-ESTIMATES	**TECHNICAL RE-ESTIMATES**	**TOTAL RE-ESTIMATES**		**TOTAL DIRECT LOAN SUBSIDY EXPENSE**
Re-estimates					
ATVM	$ (135)	$ (767)	$ (902)		$ (64)
Title XVII	(54)	93	39		531
Total	**$ (189)**	**$ (674)**	**$ (863)**		**$ 467**

($ IN MILLIONS)	INTEREST DIFFERENTIAL	DEFAULTS	FEES AND OTHER COLLECTIONS	OTHER	TOTAL
			FY 2011		
Subsidy expense for new direct loans disbursed					
ATVM	$ -	$ 1,120	$ (2)	$ -	$ 1,118
Title XVII	(52)	287	-	-	235
Total	**$ (52)**	**$ 1,407**	**$ (2)**	**$ -**	**$ 1,353**
	INTEREST RE-ESTIMATES	**TECHNICAL RE-ESTIMATES**	**TOTAL RE-ESTIMATES**		**TOTAL DIRECT LOAN SUBSIDY EXPENSE**
Re-estimates					
ATVM	$ -	$ (1,027)	$ (1,027)		$ 91
Title XVII	(2)	406	404		639
Total	**$ (2)**	**$ (621)**	**$ (623)**		**$ 730**

Subsidy Rates for Direct Loans and 100% Loan Guarantees by Program and Component

	INTEREST DIFFERENTIAL	DEFAULTS	FEES AND OTHER COLLECTIONS	OTHER	TOTAL
			FY 2012		
ATVM	0.0%	0.0%	0.0%	0.0%	0.0%
Title XVII	0.0%	0.0%	0.0%	0.0%	0.0%
			FY 2011		
ATVM	0.0%	23.03%	(0.10)%	0.0%	22.93%
Title XVII	(3.38)%	18.36%	0.0%	0.0%	14.98%

Rates are the weighted-average of the individual loan subsidy rates for that program. The subsidy rates disclosed pertain only to the current year's cohorts. These rates cannot be applied to the direct loans disbursed during the current reporting year to yield the subsidy expense. The subsidy expense for new loans reported in the current year could result from disbursements of loans from both current year cohorts and prior year(s) cohorts. The subsidy expense reported in the current year also includes re-estimates.

Schedule for Reconciling Subsidy Cost Allowance Balances (Post-1991 Direct Loans and 100% Loan Guarantees)

($ IN MILLIONS)	FY 2012	FY 2011
Beginning balance of the subsidy cost allowance	$ 1,227	$ 507
Add: subsidy expense for direct loans disbursed during the reporting years by component		
Interest rate differential costs	(115)	(52)
Default costs (net of recoveries)	1,447	1,407
Fees and other collections	(2)	(2)
Total of the above subsidy components	$ 1,330	$ 1,353
Adjustments:		
Subsidy allowance amortization	(103)	(10)
Ending balance of subsidy cost allowance before re-estimates	$ 2,454	$ 1,850
Add or subtract subsidy re-estimates by component		
Interest rate re-estimates	(189)	(2)
Technical/default re-estimates	(674)	(621)
Ending balance of subsidy cost allowance	**$ 1,591**	**$ 1,227**

Guaranteed Loans Outstanding

($ IN MILLIONS)	OUTSTANDING PRINCIPAL OF GUARANTEED LOANS FACE VALUE	AMOUNT OF OUTSTANDING PRINCIPAL GUARANTEED
	FY 2012	
Title XVII	$ 2,963	$ 2,370
	FY 2011	
Title XVII	$ 1,762	$ 1,410

New Guaranteed Loans Disbursed

($ IN MILLIONS)	PRINCIPAL OF GUARANTEED LOANS FACE VALUE	AMOUNT OF PRINCIPAL GUARANTEED
	FY 2012	
Title XVII	$ 1,264	$ 1,011
	FY 2011	
Title XVII	$ 1,670	$ 1,336

Liability for Loan Guarantees, Present Value Method

($ IN MILLIONS)	FY 2012	FY 2011
Title XVII	$ 157	$ 86

Subsidy Expense for New Loan Guarantees by Program and Component

($ IN MILLIONS)	INTEREST SUPPLEMENTS	DEFAULTS	FEES AND OTHER COLLECTIONS	OTHER	TOTAL
			FY 2012		
Subsidy expense for new loan guarantees Title XVII	$ -	$ 66	$ -	$ -	$ 66
	INTEREST RE-ESTIMATES	TECHNICAL RE-ESTIMATES	TOTAL RE-ESTIMATES		TOTAL LOAN GUARANTEE SUBSIDY EXPENSE
Re-estimates Title XVII	$ 14	$ (14)	-		$ 66
($ IN MILLIONS)	INTEREST SUPPLEMENTS	DEFAULTS	FEES AND OTHER COLLECTIONS	OTHER	TOTAL
			FY 2011		
Subsidy expense for new loan guarantees Title XVII	$ -	$ 72	$ -	$ -	$ 72
	INTEREST RE-ESTIMATES	TECHNICAL RE-ESTIMATES	TOTAL RE-ESTIMATES		TOTAL LOAN GUARANTEE SUBSIDY EXPENSE
Re-estimates Title XVII	$ 2	$ 7	$ 9		$ 81

Subsidy Rates for Direct Loans and 100% Loan Guarantees by Program and Component

($ IN MILLIONS)	INTEREST SUPPLEMENTS	DEFAULTS	FEES AND OTHER COLLECTIONS	OTHER	TOTAL
			FY 2012		
Title XVII	0.0%	0.0%	0.0%	0.0%	0.0%
			FY 2011		
Title XVII	0.0%	7.56%	0.0%	0.0%	7.56%

Rates are the weighted-average of the individual loan subsidy rates for that program. The subsidy rates disclosed pertain only to the current year's cohorts. These rates cannot be applied to the guaranteed loans disbursed during the current reporting year to yield the subsidy expense. The subsidy expense for new loans reported in the current year could result from disbursements of loans from both current year cohorts and prior year(s) cohorts. The subsidy expense reported in the current year also includes re-estimates.

Schedule for Reconciling Loan Guarantee Liability Balances (Post-1991 Loan Guarantees)

($ IN MILLIONS)	FY 2012	FY 2011
Beginning balance of the loan guarantee liability	$ 86	$ 4
Add: subsidy expense for guaranteed loans disbursed during the reporting years by component		
Default costs (net of recoveries)	66	72
Total of the above subsidy components	$ 66	$ 72
Adjustments:		
Interest Accumulation on the liability balance	5	1
Ending balance of loan guarantee liability before re-estimates	$ 157	$ 77
Add or subtract subsidy re-estimates by component		
Interest rate re-estimates	14	2
Technical/default re-estimates	(14)	7
Ending balance of loan guarantee liability	**$ 157**	**$ 86**

Administrative Expenses

($ IN MILLIONS)	FY 2012	FY 2011
Direct loan program - ATVM	$ 10	$ 10
Loan guarantee program - Title XVII	$ 61	$ 62

8. Inventory, Net

Inventory includes stockpile materials consisting of crude oil held in the Strategic Petroleum Reserve (SPR) and the Northeast Home Heating Oil Reserve, nuclear materials, highly enriched uranium, and other inventory consisting primarily of operating materials and supplies.

STRATEGIC PETROLEUM RESERVE

The SPR consists of crude oil stored in salt domes, terminals, and pipelines. As of September 30, 2012, and September 30, 2011, the SPR contained crude oil with a historical cost of $20,637 million and $20,668 million, respectively. The SPR provides a response mechanism should a severe oil disruption occur. Included in the SPR is six million barrels of crude oil held for future Department of Defense (DoD) use. The fiscal year 1993 Defense Appropriations Act authorized the Department to acquire, transport, store, and prepare for ultimate drawdown of crude oil for DoD. The crude oil purchased with DoD funding is commingled with the Department's stock and is valued at its historical cost of $123 million at September 30, 2012, and September 30, 2011 (see Notes 2 and 14).

NORTHEAST HOME HEATING OIL RESERVE

The Northeast Home Heating Oil Reserve was established in fiscal year 2000 pursuant to the Energy Policy and Conservation Act. The Reserve contains petroleum distillate in the New England, New York, and New Jersey geographic areas. In June 2012, the SPR purchased heating oil. The value of the reserve was $141 million as of September 30, 2012 and zero as of September 30, 2011.

NUCLEAR MATERIALS

Nuclear materials include weapons materials and related components, including those in the custody of the DoD

under Presidential Directive, and materials used for research and development purposes. Certain surplus plutonium carried at zero value (a provision for disposal is included in environmental liabilities) has significant arms control and nonproliferation value and is instrumental to the U.S. in ensuring that Russia continues toward the disposition of its weapons-grade plutonium.

The Department currently has natural uranium inventories of 13,339 metric tons (MTU) of uranium hexafluoride (UF6). As of September 30, 2012, this material can be divided into two stockpiles of U.S.-origin (5,234 MTU of UF6) and Russian origin material (8,105 MTU of UF6).

The Department has bartered since 2009 for certain contractor services at Portsmouth with uranium inventory. Barter for services with USEC totaled 1,473 MTU (UF6). In addition, under the D&D contract awarded in the fall of 2010 and a new Secretarial Determination to comply with the 1996 Privatization Act, an additional 825 MTU was bartered with Fluor, Babcock and Wilcox LLC in fiscal year 2011. The 2011 Secretarial determination concluded that bartering up to 1,600 MTU per year through fiscal year 2013 would not have an adverse impact on the domestic uranium mining, conversion or enrichment industry. A new Secretarial Determination issued in May 2012 concluded that bartering up to 2,400 MTU per year of UF6 through fiscal year 2021, with an additional 400 MTU allocated to NNSA contracts would not have an adverse impact on the domestic uranium mining, conversion or enrichment industry.

The nuclear materials inventory includes numerous items for which future use and disposition decisions have not been made. Decisions for most of these items will be made through analysis of the economic benefits and costs, and the environmental impacts of the various use and disposition alternatives. The carrying value of these items is not significant to the nuclear materials stockpile inventory balance. The Department will recognize disposition liabilities and record the material at net realizable value when disposal as waste is identified as the most likely alternative and disposition costs can be reasonably estimated. Inventory values are reduced by costs associated with decay or damage.

The nuclear materials inventory also includes highly enriched uranium (HEU). The Nuclear Weapons Council declared in December 1994, leading to the Secretary of Energy's announcement in February 1996, that 174.3 MTU of the Department's HEU were excess to national security needs. Most of this material (about 153 MTU) will be blended for sale as low enriched uranium (LEU) and used over time as commercial or research nuclear reactor fuel to recover its value. The remaining portion (about 21 MTU) of the material is already in the form of irradiated fuel or other waste forms and will be disposed of directly as waste. In November 2005, the Secretary of Energy declared that the NNSA would remove up to 200 MTU of HEU, in the coming decades, from further use as fissile material in nuclear weapons. Out of the 200 MTU, approximately 20 MTU will be down-blended to LEU for use in commercial or research reactors, 20 MTU will be used for research and 160 MTU will be provided to Naval Reactors for programmatic use. Approximately 8 MTU of the Naval Reactors material has been rejected by Naval Reactors and re-designated for down-blending and sale as LEU fuel. Down-blending of this material will occur over the next 10 to 30 years.

9. General Property, Plant, and Equipment, Net

($ IN MILLIONS)	ACQUISITION COSTS	ACCUMULATED DEPRECIATION	NET BOOK VALUE	ACQUISITION COSTS	ACCUMULATED DEPRECIATION	NET BOOK VALUE
	FY 2012			FY 2011		
Land and land rights	$ 2,009	$ (930)	$ 1,079	$ 1,904	$ (910)	$ 994
Structures and facilities	39,937	(25,903)	14,034	37,763	(24,327)	13,436
Internal use software	715	(536)	179	646	(472)	174
Equipment	18,155	(11,660)	6,495	17,191	(11,087)	6,104
Natural resources	103	(15)	88	103	(14)	89
Construction work in process	10,904	-	10,904	9,943	-	9,943
Total general property, plant & equipment	**$ 71,823**	**$ (39,044)**	**$ 32,779**	**$ 67,550**	**$ (36,810)**	**$ 30,740**

10. Other Non-Intragovernmental Assets

($ IN MILLIONS)	FY 2012	FY 2011
Purchased generating capability	$ 3,318	$ 2,604
Prepaid pension plan costs (Note 16)	130	113
Prepayments and advances	232	538
Non-Federal nuclear decommissioning trusts	236	199
Oil due from others	34	-
Other	343	386
Total other non-intragovernmental assets	**$ 4,293**	**$ 3,840**

PURCHASED GENERATING CAPABILITY

BPA contracted to acquire all of the generating capability of one nuclear power plant and one hydroelectric project. The contracts to acquire the generating capability of the facilities require BPA to pay all or part of the facilities operating, maintenance, and debt service costs. BPA recognizes expenses for these projects based upon the total project cash funding requirements. These assets in the *Consolidated Balance Sheets* are related to non-federal debt associated with the generation of assets and are amortized over the term of the outstanding debt (see Note 12).

NON-FEDERAL NUCLEAR DECOMMISSIONING TRUSTS

BPA recognizes an asset that represents trust fund balances for decommissioning and site restoration costs. Decommissioning costs for Columbia Generating Station (CGS) are charged to operations over the operating life of the project. External trust funds for decommissioning and site restoration costs are funded monthly for CGS. The trust funds are expected to provide for decommissioning at the end of the project's safe storage period in accordance with the Nuclear Regulatory Commission (NRC) requirements. The NRC requires that this period be no longer than 60 years from the time the plant stops operating. In May 2012, the NRC renewed CGS's operating license for an additional 20 years and the license now expires in 2043.Trust fund requirements for CGS are based on an NRC decommissioning cost estimate and the license termination date. The trusts are funded and managed by BPA in accordance with the NRC requirements and site certification agreements.

OIL DUE FROM OTHERS

Due to Hurricane Isaac, the SPR contracted with oil companies to loan SPR oil in exchange for the return of contracted plus premium barrels related to the exchange. In September 2012, the SPR delivered 998,008 barrels of oil from the reserve in exchange for 1,018,556 barrels to be returned back to the reserve by December 2012. As of September 30, 2012, the oil due to the reserve was valued at $34 million.

OTHER

Other non-intragovernmental assets include special purpose corporations' trust funds that are held in separate trust accounts for the construction of transmission assets; settlements receivable; unrealized gains from BPA's derivative portfolio, which includes physical power purchase and sale contracts, power exchange contracts, and power and heat rate option contracts; funding agreements for certain joint transmission projects; and a long term investment held in trust with restricted use under BPA's lease purchase agreements.

11. Liabilities Not Covered By Budgetary Resources

($ IN MILLIONS)	FY 2012	FY 2011
Intragovernmental		
Debt (Note 12)	$ 12,731	$ 12,386
Other	15	14
Total intragovernmental	**$ 12,746**	**$ 12,400**
Debt (Note 12)	6,127	5,763
Nuclear Waste Fund deferred revenues (Note 13)	32,030	29,990
Environmental liabilities (Note 15)	266,826	248,297
Pension and other actuarial liabilities (Note 16)	31,537	30,304
Capital leases (Note 17)	77	17
Other liabilities		
Residential exchange - scheduled amounts (Note 14)	2,993	3,075
Environment, safety, and health compliance activities (Note 14)	1,319	1,860
Accrued annual leave for Federal employees	146	148
Other	68	54
Contingencies and commitments (Note 18)	19,853	19,147
Total liabilities not covered by budgetary resources	**$ 373,722**	**$ 351,055**
Total liabilities covered by budgetary resources	24,911	20,366
Total liabilities	**$ 398,633**	**$ 371,421**

12. Debt

($ IN MILLIONS)	BEGINNING BALANCE	NET BORROWINGS	ENDING BALANCE	BEGINNING BALANCE	NET BORROWINGS	ENDING BALANCE
	FY 2012			FY 2011		
Intragovernmental - not covered (Note 11)						
Borrowing from Treasury	$ 3,104	$ 508	$ 3,612	$ 2,601	$ 503	$ 3,104
Appropriated capital	3,772	(10)	3,762	3,817	(45)	3,772
Refinanced & additional appropriations	3,908	(88)	3,820	3,831	77	3,908
Capitalization adjustment	1,602	(65)	1,537	1,667	(65)	1,602
Subtotal	**$ 12,386**	**$ 345**	**$ 12,731**	**$ 11,916**	**$ 470**	**$ 12,386**
Intragovernmental - covered						
Borrowing from Treasury	$ -	$ 4	$ 4	$ -	$ -	$ -
Borrowing from FFB	6,921	5,187	12,108	2,931	3,990	6,921
Subtotal	**$ 6,921**	**$ 5,191**	**$ 12,112**	**$ 2,931**	**$ 3,990**	**$ 6,921**
Debt held by the public (Note 11)	5,763	364	6,127	5,915	(152)	5,763
Total debt	**$ 25,070**	**$ 5,900**	**$ 30,970**	**$ 20,762**	**$ 4,308**	**$ 25,070**

BORROWING FROM TREASURY

BPA is authorized by Congress, to issue to Treasury and have outstanding at any one time, up to $7.7 billion of interest-bearing debt with terms and conditions comparable to debt issued by U.S. government corporations. The debt may be issued to finance BPA's capital programs, which include Corps and Reclamation direct–funded capital investments. Of the $7.7 billion, $750 million can be issued to finance Northwest Power Act related expenses and $1.25 billion is restricted for conservation and renewable resources. The Western Area Power Administration has authority to borrow up to $3.25 billion from Treasury for planning, constructing, financing, operating, or maintaining new or upgraded electric power transmission lines and facilities; and for delivering or facilitating the delivery of power generated by renewable energy.

The Department is authorized to borrow from Treasury if cash previously collected is not enough to cover interest expense related to the loan programs. As of September 30, 2012, the Department used this authority for the first time. The maturity of the debt was September 30, 2040 and the interest rate was 4.341%. Borrowings from Treasury

related to loan programs are considered covered by budgetary resources as there is no congressional action necessary to pay the debt.

BORROWING FROM THE FFB

To finance its loan programs, the Department is required to use the FFB for the ATVM program and the 100% loan guarantees of the Title XVII program. As of September 30, 2012 and September 30, 2011, the maturity range of the debt was from August 5, 2013 to September 28, 2040 and August 15, 2016 to September 28, 2040, respectively. The interest rate range as of September 30, 2012 and September 30, 2011 was from 1.000 percent to 4.723 percent and from 1.000 percent to 4.723 percent, respectively. All debt from the FFB is considered covered by budgetary resources as there is no congressional action necessary to pay the debt.

APPROPRIATED CAPITAL

Appropriated capital owed represents the balance of appropriations provided to the Department's PMAs for construction, operation, and maintenance of power facilities that will be repaid to Treasury's General Fund and the Department of the Interior's (Interior) Reclamation Fund. The amount owed also includes accumulated interest on the net unpaid federal investment in the power projects. The federal investment in these facilities is to be repaid within 50 years from the time the facilities are placed in service or are commercially operational. Replacements of federal investments are generally expected to be repaid over their useful service lives. There is no requirement for repayment of a specific amount of federal investment on an annual basis.
Each of the PMAs, except for BPA, receives an annual appropriation to fund construction, operation, and maintenance expenses. These appropriated funds are repaid to Treasury's General Fund and Interior from the revenues generated from the sale of power and transmission services. To the extent that funds are not available for payment, such unpaid annual net deficits become payable from the subsequent years' revenues prior to any repayment of federal investment. The Department treats these appropriations as a debt owed to Treasury's General Fund and Interior, and as such, the *Consolidated Statements of Changes in Net Position* do not reflect these funds as appropriated capital used.

Except for the appropriation refinancing asset described in Note 6 and in the next paragraph, the Department's financial statements do not reflect the federal investment in power generating facilities owned by the Corps; Interior, Reclamation; and the Department of State, International Boundary and Water Commission. The Department's PMAs, except BPA, are responsible for collecting, and remitting to Treasury, revenues resulting from the sale of hydroelectric power generated by these facilities (see Note 28). BPA makes annual payments to Treasury from its net proceeds.

REFINANCED AND ADDITIONAL APPROPRIATIONS

As discussed in Note 6, BPA refinanced its unpaid capital appropriations as of September 30, 1996, and is responsible for the repayment of additional appropriated capital investment after the-Refinancing Act. Repayment amounts were determined based on the date the respective facilities were placed in service using the weighted-average service lives of the associated investments, not to exceed 50 years. BPA repays amounts owed to Treasury's General Fund and Interior's Reclamation Fund. Federal appropriations may be paid early without penalty. In fiscal year 2012, BPA paid maturing federal appropriations for fiscal years 2012 through 2017.

CAPITALIZATION ADJUSTMENT

Capitalization adjustment is the difference between BPA's appropriated debt before and after refinancing per the BPA Refinancing Section of the Omnibus Consolidated Rescissions and Appropriations Act of 1996 (Refinancing Act), 16 U.S.C. 838(I). The adjustment is being amortized over the remaining period of repayment so that total net interest expense is equal to what it would have been in the absence of the Refinancing Act.

DEBT HELD BY THE PUBLIC

Debt held by the public includes liabilities associated with the BPA non-operating facilities discussed in Note 6, and the BPA purchased generating capability discussed in Note 10.

BPA has also agreed to fund debt service on Conservation and Renewable Energy System and City of Tacoma Conservation bonds issued to finance conservation programs sponsored by BPA.

The following table summarizes future principal and interest payments required for the debt described above.

($ IN MILLIONS) FISCAL YEAR	BORROWING FROM TREASURY	BORROWING FROM FFB	APPROPRIATED CAPITAL	REFINANCED APPROPRIATIONS	CAPITALIZATION ADJUSTMENT	DEBT HELD BY THE PUBLIC
2013	$ 349	$ 866	$ 47	$ -	$ -	$ 497
2014	103	1,603	109	-	-	590
2015	210	1,004	204	-	-	596
2016	30	907	142	-	-	595
2017	36	799	224	-	-	588
2018+	2,888	6,929	3,036	3,820	1,537	3,261
Total	**$ 3,616**	**$ 12,108**	**$ 3,762**	**$ 3,820**	**$ 1,537**	**$ 6,127**

13. Deferred Revenues and Other Credits

($ IN MILLIONS)	FY 2012	FY 2011
Intragovernmental	$ 96	$ 64
Nuclear Waste Fund (Note 11)	$ 32,030	$ 29,990
Power marketing administrations	1,301	1,091
Reimbursable work advances	317	321
Other	558	313
Subtotal	**$ 34,206**	**$ 31,715**
Total deferred revenues and other credits	**$ 34,302**	**$ 31,779**

NUCLEAR WASTE FUND

NWF revenues are accrued based on fees assessed against owners and generators of high-level radioactive waste and spent nuclear fuel and interest accrued on investments in Treasury securities. These revenues are recognized as a financing source as costs are incurred for NWF activities. Revenues that exceed the NWF expenses are deferred.

POWER MARKETING ADMINISTRATIONS

PMA deferred revenues and other credits primarily represent advances and unearned revenues. Primary components include 1) regulatory liabilities primarily related to accumulated plant removal costs collected through rates as part of depreciation and CGS decommissioning and site restoration costs; 2) generation interconnection agreement funds held as security for network upgrades that will be returned as credits against future transmission service; 3) customer reimbursable projects that consist of advances received from customers where either the customer or BPA will own the resulting asset; 4) unearned revenues from customers related to the third alternating current intertie capacity project; 5) derivative instruments and 6) fiber optic leasing fees that reflect unearned revenue related to the leasing of the fiber optic cable.

14. Other Liabilities

($ IN MILLIONS)	FY 2012	FY 2011
Intragovernmental		
Oil held for Department of Defense (Notes 2 and 8)	$ 123	$ 123
Petroleum Pricing Violation Escrow Fund (Note 2)	248	247
Downward re-estimates on loans outstanding	995	1,071
Other	112	70
Total other intragovernmental liabilities	**$ 1,478**	**$ 1,511**
Environment, safety, and health compliance activities (Notes 11, 25 and 26)	$ 1,319	$ 1,860
Accrued payroll, benefits, and withholding taxes	1,290	1,316
Residential exchange	3,588	3,732
Petroleum Pricing Violation Escrow Fund (Note 2)	8	9
Asset retirement obligations	161	176
Other	357	280
Subtotal	**$ 6,723**	**$ 7,373**
Total other liabilities	**$ 8,201**	**$ 8,884**

DOWNWARD RE-ESTIMATES ON LOANS OUTSTANDING

FCRA requires that the present value of loans outstanding be updated at the end of each fiscal year. If the present value of any loan increases (i.e., the government's cost of the loan is lower than previously estimated), a downward re-estimate is recorded. The downward re-estimate results in excess subsidies collected that must be returned to the Treasury's general fund in the following fiscal year.

ENVIRONMENT, SAFETY, AND HEALTH COMPLIANCE ACTIVITIES

The Department's environment, safety, and health (ES&H) liability represents those activities necessary to bring facilities and operations into compliance with existing ES&H laws and regulations (e.g., Occupational Safety and Health Act; Clean Air Act; Safe Drinking Water Act). Types of activities included in the estimate relate to the following: upgrading site-wide fire and radiological programs; nuclear safety upgrades; industrial hygiene and industrial safety; safety related maintenance; emergency preparedness programs; life safety code improvements;

and transportation of radioactive and hazardous materials. The estimate covers corrective actions expected to be performed in future years for programs outside the purview of the Department's Environmental Management (EM) Program. ES&H activities within the purview of the EM program are included in the environmental liability estimate. The September 30, 2012, change in the ES&H liability is due to: (1) additional corrective actions, activities, or programs that are required to improve the facilities' state of compliance and move them toward full compliance, or conformance with all applicable ES&H laws, regulations, agreements, and the Department's orders; (2) revised cost estimates for existing ES&H activities; and (3) costs of work performed during the year.

ACCRUED PAYROLL, BENEFITS, AND WITHHOLDING TAXES

Accrued payroll and benefits represent amounts owed to the Department's federal and contractor employees for accrued payroll, unfunded accrued annual leave for federal employees, funded accrued annual leave for contractor employees, payroll withholdings owed to state and local governments, and Thrift Savings Plan withholdings and employer contributions.

RESIDENTIAL EXCHANGE

In order to provide qualifying regional utilities, primarily Investor Owned Utilities (IOUs), access to benefits from the Federal Columbia River Power System, Congress established the Residential Exchange Program (REP) in Section 5(c) of the Northwest Power Act. Whenever a Pacific Northwest electric utility offers to sell power to BPA at the utility's average system cost of resources, BPA purchases such power and offers, in exchange, to sell an equivalent amount of power at BPA's priority firm exchange rate to the utility for resale to that utility's residential and small farm consumers. REP costs are forecasted for each year of the rate period and included in the revenue requirement for establishing rates. The cost of this program is collected through rates. Program costs are recognized when incurred net of the purchase and sale of power under the REP.

In fiscal year 2008, BPA conducted the 2007 Supplemental Wholesale Power Rate Case (WP-07 Supplemental Rate Case) to resolve outstanding claims and address associated judicial rulings related to prior REP billings. In 2009, BPA conducted the 2010 Wholesale Power and Transmission Rate Adjustment Proceeding (WP-10 Rate Case), continuing the policies established in WP-07 Supplemental Rate Case. In connection with those filings, Lookback Amounts due to and due from BPA customers were identified and recorded as regulatory amounts. Such Lookback Amounts were collected from identified IOU customers and were being returned to the Consumer Owned Utilities (COUs) over time.

In fiscal year 2011, the BPA administrator signed the 2012 Residential Exchange Program Settlement Agreement (Settlement Agreement), resolving disputes related to the REP. The Settlement Agreement provides for fixed "Scheduled Amounts" payable to the IOUs, as well as fixed "Refund Amounts" payable to the COUs. The Settlement Agreement eliminates the Lookback Amounts as of September 30, 2011, and replaces them with the Refund Amounts for amounts overpaid by the COUs. These amounts do not reduce rates but are reflected as credits to qualifying COUs' bills as designated in the Settlement Agreement. BPA utilizes the rates process to reduce the IOUs' benefits and thus reduce the expense in the year it is applied.

Under the provisions of the Settlement Agreement, beginning in fiscal year 2012, the IOUs' Residential Exchange benefits are being reduced through the rates process to reflect the Scheduled Amounts through fiscal year 2028. The Residential Exchange Schedule amounts liability was $2,993 million and $3,075 million as of September 30, 2012 and September 30, 2011 respectively and is offset with a regulatory asset (see Notes 6 and 11).

The 2012 Refund Amounts are to be provided as credits on COUs' monthly bills through fiscal year 2019. The Residential Exchange Refund Amounts liability, which are offset by regulatory assets, were $500 million and $565 million as of September 30, 2012, and September 30, 2011, respectively (see Note 6).

Also included within the Residential Exchange Program liabilities as of September 30, 2012, is $94 million related to true-up of interim agreements with interest and other smaller items.

ASSET RETIREMENT OBLIGATIONS

Asset retirement obligations (AROs) represent BPA's legal obligations related to dismantlement and restoration costs on non-federally owned or operated nuclear facilities. The AROs relate primarily to CGS decommissioning and site restoration, terminated Energy Northwest Project Nos. 1 and 4 site restoration, and decommissioning costs for the former Trojan nuclear power plant, which has been partially dismantled. The liability is adjusted for any revisions, expenditures and the passage of time. During fiscal year 2012, the ARO for CGS was decreased by $22.0 million primarily due to a revised cost estimate following the relicensing of the facility for an additional 20 years.

OTHER LIABILITIES

Other liabilities consist primarily of custodial and non-custodial deposit funds, suspense accounts, receipts due to Treasury, and contract advances.

15. Environmental Cleanup and Disposal Liabilities

($ IN MILLIONS)	FY 2012	FY 2011
Beginning balance	$ 250,569	$ 250,209
Changes to environmental cleanup and disposal liability estimates (Notes 25 and 26)	25,262	10,184
Costs applied to reduction of legacy environmental liabilities (Note 24)	(5,524)	(7,881)
Capital expenditures related to remediation activities	(1,906)	(1,943)
Ending environmental cleanup and disposal liabilities	**$ 268,401**	**$ 250,569**
Unfunded environmental liabilities (Note 11)	$ 266,826	$ 248,297
Funded environmental liabilities	1,575	2,272
Total environmental cleanup and disposal liabilities	**$ 268,401**	**$ 250,569**

After World War II, the U.S. developed a massive industrial complex to research, produce, and test nuclear weapons and commercial nuclear power reactors. The nuclear complex was comprised of nuclear reactors, chemical processing buildings, metal machining plants, laboratories, and maintenance facilities.

At all sites where these activities took place, some environmental contamination occurred. This contamination was caused by the production, storage, and use of radioactive materials and hazardous chemicals, which resulted in contamination of soil, surface water, and groundwater. In particular, the environmental legacy of nuclear weapons production also includes thousands of contaminated buildings and large volumes of waste and special nuclear materials requiring treatment, stabilization, and disposal. Approximately one-half million cubic meters of radioactive high-level, mixed, and low-level wastes must be stabilized, safeguarded, and dispositioned. Additionally, a quantity of plutonium sufficient to fabricate thousands of nuclear weapons must be safely disposed.

Furthermore, the Nuclear Waste Policy Act of 1982 (the Act) established the Department's responsibility to provide for permanent disposal of the Nation's high-level radioactive waste and spent nuclear fuel. The Act requires all owners and generators of high-level nuclear waste and spent nuclear fuel, including the Department, to pay their respective shares of the full cost of the program. To that end, the Act establishes a fee on owners and generators that the Department must collect and annually assess to determine its adequacy. The Department's liability reflects its share of the estimated future costs of the program based on its inventory of high-level waste and spent nuclear fuel. The Department's liability does not include the portion of the cost attributable to other owners and generators.

In addition to the assumptions and uncertainties discussed above, the following key assumptions and uncertainties relate to the Department's estimates:

- The Department has identified approximately 10,500 potential release sites from which contaminants could migrate into the environment. Although virtually all of these sites have been at least partially characterized, final remedial action and regulatory decisions have not been made for many sites. Site-specific assumptions regarding the amount and type of contamination and the remediation technologies that will be utilized were used in estimating the environmental liability related to these sites.
- Cost estimates for management of the Department's high-level waste have been predicated upon assumptions as to the timing and rate of acceptance of the waste at a geologic repository. Changes in high-level waste disposition plans could cause Departmental project costs to increase.
- Estimates are based on remedies considered technically and environmentally reasonable and achievable by local project managers and appropriate regulatory authorities.
- Estimated cleanup costs at sites for which there is no current feasible remediation approach are excluded from the estimates, although applicable stewardship and monitoring costs for these sites are included. An example of such a site is the nuclear explosion test area at the Nevada National Security Site. The Department has not been required via regulation to establish remediation activities for these sites.

Changes to the Department's estimates during fiscal years 2012 and 2011 resulted from inflation adjustments to reflect constant dollars for the current year; improved and updated estimates for the same scope of work, including changes resulting from deferral or acceleration of work; revisions in technical approach or scope; regulatory changes; and cleanup activities performed.

The Department's liabilities also include the estimated cleanup and post-closure responsibilities, including surveillance and monitoring activities, soil and groundwater remediation, and disposition of excess material for sites. The Department is responsible for the post-closure activities at many of the closure sites as well as other sites (former uranium mills and certain sites remediated by the U.S. Army Corps of Engineers). The costs for these post-closure activities are estimated for a period of 75 years after the balance sheet date, i.e., through

2087 in fiscal year 2012 and through 2086 in fiscal year 2011. While some post-cleanup monitoring and other long-term stewardship activities post 2087 are included in the liability, there are others the Department expects to continue beyond 2087 for which the costs cannot reasonably be estimated. Also included in these liabilities are estimates for the disposition of various materials. Surplus plutonium is the most significant material requiring disposition.

A portion of the environmental liability at various field sites includes anticipated costs for facilities managed by the Department's ongoing program operations which will ultimately require stabilization, deactivation, and decommissioning. The estimate is largely based upon a cost-estimating model. Site-specific estimates are used, in lieu of the cost-estimating model, when available. Cost estimates for ongoing program facilities are updated each year. For facilities newly contaminated since fiscal year 1997, environmental liability costs are allocated to the periods benefiting from the operations of the facilities. Facilities cleanup costs allocated to future periods and not included in the liability amounted to $808 million at September 30, 2012, and $920 million at September 30, 2011.

Estimating the Department's environmental cleanup liability requires making assumptions about future activities and is inherently uncertain. The future course of the Department's environmental cleanup and disposal will depend on a number of fundamental technical and policy choices, many of which have not been made. The cost and environmental implications of alternative choices can be profound. For example, some contaminated sites and facilities could be restored to a condition suitable for any desired use; they could also be restored to a point where they pose no near-term health risks to surrounding communities but are essentially surrounded by fences and left in place. Achieving the former conditions would have a higher cost but may, or may not, warrant the costs or be legally required. The estimates reflect applicable decisions and current expectations as to the extent of cleanup and site and facility reuse, which include consideration of Congressional mandates, regulatory direction, and stakeholder input. The environmental liability estimates include contingency estimates intended to account for the uncertainties associated with the technical cleanup scope of the program. The environmental liability estimates are dependent on annual funding levels and achievement of work as scheduled. Congressional appropriations at lower than anticipated levels or unplanned delays in project completion would cause increases in life-cycle costs.

All environmental liabilities as of September 30, 2012, and September 30, 2011, are stated in fiscal year 2012 dollars and fiscal year 2011 dollars, respectively, as required by generally accepted accounting principles for federal entities. Future inflation could cause actual costs to be substantially higher than the recorded liability.

HANFORD SITE

The Department's Hanford Site covers 586-square-miles in the desert of southeastern Washington State. The area is home to nine former production reactors and their associated processing facilities that were built beginning in 1943. The reactors were used from 1944 until 1987 to produce plutonium, a man-made, radioactive, chemical element needed for atomic weapons. Production facilities at Hanford generated billions of gallons of liquid waste and millions of tons of solid waste which must now be cleaned up, removed, or remediated. Hanford cleanup is expected to be completed between 2050 and 2066. The major activities comprising the environmental liabilities at Hanford include the following:

- The Waste Treatment Plant (WTP) is a multi-year construction project and once complete will process and treat 56 million gallons of tank waste currently stored in 177 underground tanks. This project is undergoing a rebaselining that is expected to be completed in FY 2013. The rebaselining will result in a revised liability estimate.
- River Corridor Closure includes remediation of 820 contaminated waste sites (including liquid waste sites, solid waste sites, and burial grounds), deactivation, decontamination, decommissioning, and demolition of 520 excess facilities/structures that are adjacent to the Columbia River; and the placement of four reactors into an interim safe storage condition.

SAVANNAH RIVER SITE

The Savannah River Site (SRS), located in South Carolina, is 310 square miles in size with 1,000 facilities concentrated within only 10 percent of the total land area. SRS was constructed during the early 1950s to produce the basic materials used in the fabrication of nuclear weapons, primarily tritium and plutonium-239, in support of our nation's defense programs.

The SRS cleanup strategy is to eliminate or minimize nuclear materials, spent nuclear fuel, and waste through safe stabilization, treatment, and/or disposition; reduce the costs of continuing operations and surveillance and maintenance; and decommission facilities, as well as remediate groundwater and contaminated soils consistent with regulatory agreements. The Department's completion strategy provides a comprehensive risk-based approach to the legacy cleanup project, such as disposition of radioactive liquid waste through vitrification of the high activity component at the site's Defense Waste Processing Facility, and decommissioning of all facilities that are not required for continuing missions. SRS cleanup is expected to be completed between 2038 and 2042. The major activities comprising the environmental liabilities at SRS include the following:

- Radioactive Liquid Waste Stabilization and Disposition project includes safely and effectively treating, stabilizing and disposing of approximately 37 million

gallons of legacy radioactive waste currently stored in 47 underground storage tanks.
- Surplus plutonium disposition program provides the capability to convert the nation's surplus weapons-grade plutonium into a form suitable for use in commercial nuclear reactors and includes the construction, operation, and the decontamination and demolition of the Mixed Oxide (MOX) Fuel Fabrication Facility and supporting facilities. The disposition of surplus plutonium from stockpile reductions through the MOX program is an important part of the United States' efforts to make sure that plutonium can no longer be readily used for nuclear weapons purposes. The activities satisfy commitments under treaty with Russia.

IDAHO NATIONAL LABORATORY SITE

The Idaho National Laboratory (Idaho) is an extensive research and engineering complex that has been the center of nuclear energy research since 1949. It occupies 890 square miles in southeastern Idaho. The Idaho Site has fulfilled numerous DOE missions including the design and testing of 52 nuclear reactors, the largest concentration of reactors in the world, and reprocessing spent nuclear fuel to recover fissile materials. The world's first usable electricity from nuclear energy was produced by Idaho in 1951. These activities resulted in an inventory of high-level, transuranic, mixed low-level and low-level wastes. The legacy cleanup scope is scheduled to be completed between 2035 and 2042. The major activities comprising the environmental liabilities at Idaho include the following:

- The Spent Nuclear Fuel Stabilization and Disposition project includes stabilizing legacy spent nuclear fuel and managing the receipt of off-site spent nuclear fuel shipments.
- The Radioactive Liquid Tank Waste Stabilization and Disposition Project is treating and disposing the sodium-bearing tank wastes, closing the tank farm tanks, as well as maintaining the Idaho Nuclear Technology and Engineering Center. This project also includes activities to support the preparation of stored high-level waste calcine for final disposition off-site.

GASEOUS DIFFUSION PLANTS

The Department constructed and operated three gaseous diffusion plants (GDPs) located in Oak Ridge, Tennessee, Portsmouth, Ohio, and Paducah, Kentucky to enrich uranium. The plants had a long history of enriching uranium for defense and commercial nuclear power needs. Their mission was to produce low-assay enriched uranium for use as commercial nuclear reactor fuel and resulted in radioactive and chemical contamination at the sites and beyond the sites' boundaries. Presently, the sites are transitioning from primarily enrichment operations to shared missions with environmental cleanup, waste management, depleted uranium conversion, deactivation and decommissioning, re-industrialization, and long-term stewardship. The cleanup scope is scheduled to be completed between 2040 and 2044. The major activities comprising the environmental liabilities at the GDPs include the following:

- Portsmouth and Paducah Nuclear Material Stabilization and Disposition-Depleted Uranium Hexafluoride Conversion projects includes the design, permitting, constructing, and operating of the depleted uranium hexafluoride conversion facilities at the Portsmouth and Paducah sites. These facilities will convert the material into a more stable form of depleted uranium oxide suitable for reuse or disposition.
- Both Portsmouth and Paducah Nuclear Facility D&D projects include environmental cleanup and risk reduction through surveillance and maintenance activities, and decontamination and decommissioning of inactive or excess facilities at the Portsmouth and Paducah sites.
- At the Oak Ridge site, a major cleanup priority is the D&D of the K-25 and K-27 gaseous diffusion process buildings due to the safety implications of the buildings' deteriorating condition.

ENVIRONMENTAL LIABILITY ESTIMATES FOR OTHER SITES

Environmental liabilities exist for other sites and activities across the Department. The cleanup activities at these sites are similar to those mentioned above, such as soil and groundwater remediation; waste retrieval, treatment, and disposal; nuclear reactor and other facilities decontamination and decommissioning; etc. The Department's environmental liability also includes waste dispositioning; program costs, such as mission support, technology development, and program direction; and post-closure long-term surveillance and maintenance activities.

16. Pension and Other Actuarial Liabilities

($ IN MILLIONS)	FY 2012	FY 2011
Contractor pension plans	$ 17,936	$ 16,205
Contractor postretirement benefits other than pensions	13,488	13,988
Contractor disability and life insurance plans	17	16
Federal Employees' Compensation Act	96	95
Total pension and other actuarial liabilities (Note 11)	**$ 31,537**	**$ 30,304**

Most of the Department's major contractors sponsor defined benefit pension plans which promise to pay specified benefits, such as a percentage of the final average pay for each year of service to their employees. The Department's allowable costs under these contracts include reimbursement of annual contractor contributions to these pension plans. Most of the contractors also sponsor postretirement benefits other than pensions (PRB) consisting of predominantly postretirement health care benefits. The Department approves, for cost reimbursement purposes, these contractors' pension and postretirement benefit plans and is responsible for the allowable costs of funding the plans. The Department also reimburses these contractors for employee disability insurance plans, and estimates are recorded as unfunded liabilities for these plans.

CONTRACTOR PENSION PLANS

The Department follows FASB ASC 715, Compensation – Retirement Benefits, for contractor plans for which the Department has a continuing obligation to reimburse allowable costs. As of September 30, 2012, the Department reports contractor pension assets (i.e., aggregate of net assets for all contractor plans' with plan assets in excess of the projected benefit obligation) of $119 million and contractor pension liabilities (i.e., aggregate of net liabilities for all contractor plans' with projected benefit obligations in excess of the plan assets) of $17.936 billion. The Department has a continuing obligation to reimburse allowable costs for a variety of contractor-sponsored pension plans (38 qualified and 13 nonqualified). In this regard, benefit formulas consist of final average pay (40 plans), career average pay (7 plans), and dollar per month of service (4 plans). Twenty of the plans cover nonunion employees only; 7 cover union employees only; and 24 cover both union and nonunion employees.

For qualified defined benefit pension plans, the Department's current funding policy is to reimburse contractors for contributions made by the contractors to defined benefit pension plans sponsored by the contractors. Contractors are required to make contributions to their plans as required by the Internal Revenue Code, the Employee Retirement Income Security Act (ERISA), as amended, and consistent with Departmental policy. For nonqualified plans, the funding policy is pay-as-you-go.

Plan assets generally include cash and equivalents, stocks, corporate bonds, government bonds, real estate, venture capital, international investments, and insurance contracts. There are three plans that have securities of the employer or related parties included in the plan assets. No assets are expected to be returned to the employers during the next fiscal year.

Assumptions and Methods – Contractors use their own actuarial assumptions for determining required contributions to employee pension plans. However, in order to provide consistency among the Department's various contractors, the Department requires the use of certain standardized actuarial assumptions for financial reporting purposes. These standardized assumptions include the discount rates, mortality assumptions, and an expected long-term rate of return on plan assets, salary scale, and any other economic assumption consistent with an expected long-term inflation rate of 3.0 percent for the entire U.S. economy with adjustments to reflect regional or industry rates as appropriate. In most cases, ERISA valuation actuarial assumptions for demographic assumptions were used.

The following specific assumptions and methods were used to determine the net periodic cost. The weighted average discount rate was 4.5 percent for FY 2012 and 5.0 percent for FY 2011; the weighted average long-term rate of return on assets was 7.47 percent for FY 2012 and 7.60 percent for FY 2011; and the average rate of compensation increase was 4.3 percent for FY 2012 and 4.6 percent for FY 2011. The average long-term rate of return on assets shown above is the average rate for all of the contractor plans. Each contractor develops its own average long-term rate of return on assets based on the specific investment profile of the specific plans it sponsors. Therefore, there is no one overall approach to setting the rate of return for each of the contractors' plans.

The weighted average discount rates used to determine the benefit obligations as of September 30, 2012, and September 30, 2011, were 3.75 percent and 4.5 percent, respectively.

The aggregate September 30, 2012, accumulated benefit obligation and aggregate fair value of plan assets for plans with accumulated benefit obligations in excess of plan assets are $41.183 billion and $27.342 billion, respectively. The aggregate September 30, 2012, projected benefit obligation and aggregate fair value of plan assets for plans with projected benefit obligations in excess of plan assets are $45.279 billion and $27.342 billion, respectively.

Since the Department reports under Federal accounting requirements, newly measured net prior service costs/(credits) and net (gains)/losses are recognized immediately as components of net periodic cost rather than classified as other comprehensive income under FASB ASC 715 and later amortized and included as components of net periodic cost. All components of the net periodic cost are recognized in the Consolidated Statements of Net Costs. Service costs are recorded by program and all other net periodic costs are recorded as costs not assigned (see Note 25). If the Department classified these costs as other comprehensive income, the amortization of the net transition (asset)/obligation, the net prior service cost/(credit), and the net (gain)/loss for the defined benefit pension plans that would have been included in the net periodic cost would have been $0 million, $13 million, and $965 million in FY 2012, and $0 million, $23 million, and $693 million in FY 2011, respectively. An additional

amortization of $119 million due to curtailments and settlements would also have been included in FY 2012. The estimated amortization of the net prior service cost/(credit), and the net (gain)/loss that would have been included in the net periodic cost in FY 2013 are ($15) million, and $1.110 billion, respectively.

CONTRACTOR POSTRETIREMENT BENEFITS OTHER THAN PENSIONS

The Department follows FASB ASC 715, Compensation – Retirement Benefits, for contractor plans for which the Department has a continuing obligation to reimburse allowable costs. The Department accrues the cost of PRB during the years that the employees render service. As of September 30, 2012, the Department reports contractor PRB assets of $11 million and contractor PRB liabilities of $13.488 billion. Generally, the PRB plans are unfunded, and the Department's funding policy is to fund on a pay-as-you-go basis. There are five contractors, however, that are prefunding benefits in part as permitted by law. The Department's contractors sponsor a variety of postretirement benefits other than pensions. Benefits consist of medical (40 contractors), dental (17 contractors), life insurance (23 contractors), and Medicare Part B premium reimbursement (4 contractors). Forty of the contractors sponsor a point of service plan, a Preferred Provider Organization (PPO), a Health Maintenance Organization (HMO), or similar plan. Seventeen of these also have a traditional indemnity or similar plan.

Assumptions and Methods - In order to provide consistency among the Department's various contractors, certain standardized actuarial assumptions were used. These standardized assumptions include medical and dental trend rates, discount rates, and mortality assumptions.

The following specific assumptions and methods, with respect to trends in the costs of medical and dental benefit plans, were used in determining the PRB estimates. The medical trend rates for a point of service plan, a self-insured HMO, a PPO, or similar plan grade from 9.0 percent in 2012 down to 5.0 percent in 2022 and later for under age 65; 8.0 percent in 2012 down to 5.0 percent in 2020 and later for age 65 and older and for non-Part D prescription drug benefits. The medical trend rates for a traditional indemnity plan, fully-insured HMO, or similar plan, grade from 9.5 percent in 2012 down to 5.0 percent in 2023 and later for any age on a combined basis. Separate trend rates were used this year for a Medicare Advantage (MA) plan depending on the current per member per month (PMPM) level of employer cost that grade from 72.5 percent, 38.75 percent, or 22.0 percent (interpolated/extrapolated as necessary for other PMPM level of employer cost) for employer cost of $50, $100, or $200, respectively, down to 5.0 percent by 2023 and later. The trend rates for Part D prescription drug plans (PDP) grade from 8.0 percent in 2012 down to 5.0 percent in 2020 and later. The medical trend rates or combination of rates used to determine the PRB estimates are dependent on each of the contractor's specific plan design and impact of health care reform if applicable. The dental trend rates at all ages grade from 5.75 percent in 2012 down to 5.0 percent in 2015 and later.

The weighted average discount rates of 4.5 percent for FY 2012 and 5.0 percent for FY 2011, and the weighted average long-term rate of return on assets of 5.30 percent for FY 2012 and 5.56 percent for FY 2011 were used to determine the net periodic cost. The rate of compensation increase was the same rate as each contractor used to determine pension contributions. The average long-term rate of return on assets shown above is the average rate for all of the contractor plans. Each contractor develops its own average long-term rate of return on assets based on the specific investment profile of the specific plans it sponsors. Therefore, there is no one overall approach to setting the rate of return for each of the contractors' plans.

The weighted average discount rates used to determine the benefit obligation as of September 30, 2012, and September 30, 2011, were 3.75 percent and 4.5 percent, respectively.

The September 30, 2012, aggregate accumulated benefit obligation and aggregate fair value of plan assets for plans with accumulated benefit obligations in excess of plan assets are $13.624 billion and $136 million, respectively.

Since the Department reports under Federal accounting requirements, newly measured net prior service costs/(credits) and net (gains)/losses are recognized immediately as components of net periodic cost rather than classified as other comprehensive income under FASB ASC 715 and later amortized and included as components of net periodic cost. All components of the net periodic cost are recognized in the Consolidated Statements of Net Costs. Service costs are recorded by program and all other net periodic costs are recorded as costs not assigned (see Note 25). If the Department classified these costs as other comprehensive income, the amortization of the net prior service cost/(credit) and the net (gain)/loss for the PRB plans that would have been included in the net periodic cost would have been ($289) million and $144 million in FY 2012, and ($197) million and $121 million in FY 2011, respectively. Additional amortization of ($85) million and $2 million due to curtailments and settlements would also have been included in FY 2012 and 2011, respectively. The estimated amortization of the net prior service cost/(credit) and the net (gain)/loss that would have been included in the net periodic cost in FY 2013 are ($484) million and $253 million, respectively.

The FY 2012 and FY 2011 values reflect the impact of the passage of health care reform legislation in March 2010. Changes in the law that potentially affect contractor postretirement benefit plans include an excise tax on high-cost health plans, closing of the Medicare Part D coverage gap, changes in payments to Medicare Advantage plans, elimination of lifetime benefit maximums, coverage of

dependent children to age 26, and temporary federal reimbursement of certain costs under the Early Retiree Reinsurance Program. Adjustments to the liabilities reflect the contractors' best estimates given the limited guidance available on implementation of the new laws. Liabilities in future years may need to be adjusted further as additional guidance is issued under the laws.

On December 8, 2003, the Medicare Prescription Drug, Improvement and Modernization Act of 2003 was signed into law. The law provides for a Federal subsidy to sponsors of retiree healthcare benefit plans that provide a benefit at least actuarially equivalent to the benefit established by the law. There are currently 26 contractors that have concluded that their plans are at least actuarially equivalent [including 3 that also have plans providing a Medicare Part D PDP or MA plan]. There are 8 plans that do not benefit retirees over 65, 3 plans have determined they are not actuarially equivalent, and 2 plans provide a PDP or MA plan. Generally, the Department has reflected the impact of the subsidy as a reduction to the employers' cost of the benefits.

($IN MILLIONS)	PENSION BENEFITS		OTHER POSTRETIREMENT BENEFITS	
	FY 2012	FY 2011	FY 2012	FY 2011
NET AMOUNT RECOGNIZED IN THE BALANCE SHEET				
Accumulated benefit obligation	$ 42,184	$ 36,503		
Effect of future compensation increases	4,100	3,930		
Benefit obligation	**$ 46,284**	**$ 40,433**	$ 13,632	$ 14,148
Plan assets	28,467	24,330	155	171
Net amount recognized in the balance sheet (net funded status)	**$ (17,817)**	**$ (16,103)**	**$ (13,477)**	**$ (13,977)**
RECONCILIATION OF AMOUNTS RECOGNIZED IN THE BALANCE SHEET				
Asset (prepaid pension plan costs) (Note 10)	$ 119	$ 102	$ 11	$ 11
Liability	(17,936)	(16,205)	(13,488)	(13,988)
Net amount recognized in the balance sheet (net funded status)	**$ (17,817)**	**$ (16,103)**	**$ (13,477)**	**$ (13,977)**
COMPONENTS OF NET PERIODIC COSTS				
Service costs (Note 26)	$ 970	$ 904	$ 278	$ 275
Interest costs	1,805	1,800	565	624
Expected return on plan assets	(1,829)	(1,815)	(9)	(9)
(Gain)/loss due to curtailments, settlements or special termination benefits	(148)	12	(63)	2
Net prior service cost/(credit)	(134)	4	(1,542)	(681)
Net (gain)/loss	2,542	2,757	675	(639)
Total net periodic costs	**$ 3,206**	**$ 3,662**	**$ (96)**	**$ (428)**
CONTRIBUTIONS AND BENEFIT PAYMENTS				
Employer contributions (Note 26)	$ 1,492	$ 972	$ 395	$ 385
Participant contributions	43	25	90	81
Benefit payments	1,597	1,533	490*	472*

* Includes $7 million paid from plan assets for FY 2012, and $8 million paid from plan assets for FY 2011. For FY 2012, gross benefit payments were $503 million including $13 million of Federal Medicare subsidy. This resulted in net benefit payments of $490 million for FY 2012. For FY 2011, gross benefit payments were $485 million including $13 million of Federal Medicare subsidy. This resulted in net benefit payments of $472 million for FY 2011.

($ IN MILLIONS)	PENSION BENEFITS	OTHER POSTRETIREMENT BENEFITS
Expected contributions for fiscal year ending September 30, 2013		
Employer contributions	$ 1,278	$ 481
Participant contributions	74	118

($ IN MILLIONS)	PENSION BENEFITS	OTHER POSTRETIREMENT BENEFITS		
		GROSS PAYMENT	LESS FEDERAL MEDICARE PART D SUBSIDY	NET PAYMENT
ESTIMATED FUTURE BENEFIT PAYMENTS				
Fiscal Year 2013	$ 1,740	$ 604	$ 12	$ 592
Fiscal Year 2014	1,840	652	13	639
Fiscal Year 2015	1,950	707	15	692
Fiscal Year 2016	2,050	762	16	746
Fiscal Year 2017	2,163	817	18	799
Fiscal Year 2018 to 2022	12,393	4,840	118	4,722

The following chart shows the average target allocation for the 38 pension benefit plans and five other postretirement benefit plans with assets. The weighted average actual FY 2012 and FY 2011 allocations of assets are also shown.

ASSET CATEGORY	PENSION BENEFITS			OTHER POSTRETIREMENT BENEFITS		
	TARGET ALLOCATION	PERCENT OF PLAN ASSETS AT END FY 2012	PERCENT OF PLAN ASSETS AT END FY 2011	TARGET ALLOCATION	PERCENT OF PLAN ASSETS AT END FY 2012	PERCENT OF PLAN ASSETS AT END FY 2011
Cash and Equivalents	2.60%	3.70%	2.90%	0.20%	0.30%	0.20%
US Government Bonds	13.00%	13.00%	16.00%	3.90%	3.10%	4.70%
State and Municipal Government Bonds	0.70%	0.50%	0.50%	0.00%	1.20%	0.00%
Foreign Government Bonds	0.40%	0.90%	0.50%	0.00%	0.00%	0.20%
High-yield Corporate Bonds	1.10%	1.40%	1.40%	0.00%	0.00%	0.00%
Corporate Bonds other than high-yield	10.10%	15.50%	12.80%	4.10%	2.70%	4.20%
Small Cap Domestic Equities	3.50%	4.20%	3.90%	0.10%	0.10%	0.50%
Mid Cap Domestic Equities	3.60%	5.20%	5.10%	0.50%	0.50%	1.60%
Large Cap Domestic Equities	23.20%	20.50%	24.20%	0.90%	0.80%	3.30%
International Equities	21.40%	21.10%	17.10%	0.10%	1.40%	4.80%
Real Estate Investment Funds	2.40%	2.40%	2.60%	1.10%	0.00%	0.00%
Other Real Estate	0.20%	0.40%	0.40%	1.20%	0.00%	0.00%
Mortgage-Backed Securities	1.40%	2.60%	2.70%	0.00%	1.40%	0.80%
Asset-Backed Commercial Paper	0.00%	0.10%	0.10%	0.00%	0.00%	0.00%
Derivatives, including Collateralized Debt Obligations and Credit Default Swaps	0.00%	0.60%	0.90%	0.00%	0.00%	0.00%
Private Investment Funds, including Hedge Funds	5.60%	5.70%	6.10%	0.00%	0.00%	0.00%
Insurance Contracts (general accounts)	0.10%	0.50%	0.60%	76.60%	76.50%	70.50%
Insurance Contracts (separate accounts)	0.00%	0.10%	0.10%	11.30%	11.30%	8.10%
Employer Securities	0.30%	0.20%	0.20%	0.00%	0.00%	0.00%
Aggregate Bond Index, Long Bond Index	1.00%	1.00%	1.10%	0.00%	0.00%	0.00%
Other	9.40%	0.40%	0.80%	0.00%	0.70%	1.10%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Each contractor develops its own investment policies and strategies for the plans it sponsors. Therefore, there is no one overall investment policy for the contractors' plans. Generally, their objectives provide for benefit security for plan participants through the maximization of total returns while limiting risk and providing liquidity coverage of benefit payments.

The following chart shows the allocation of the assets for the 38 pension benefit plans with assets among the levels in the fair value hierarchy.

($ IN MILLIONS)		QUOTED PRICES IN ACTIVE MARKETS FOR IDENTICAL ASSETS	SIGNIFICANT OBSERVABLE INPUTS	SIGNIFICANT UNOBSERVABLE INPUTS
Asset Class	**Total**	**(Level 1)**	**(Level 2)**	**(Level 3)**
Cash and Equivalents	$ 1,041	$ 234	$ 370	$ 437
US Government Bonds	3,701	501	2,986	214
State and Municipal Government Bonds	149	18	131	-
Foreign Government Bonds	264	7	257	-
High-yield Corporate Bonds	392	33	359	-
Corporate Bonds other than high-yield	4,414	290	4,124	-
Small Cap Domestic Equities	1,187	919	234	34
Mid Cap Domestic Equities	1,468	1,194	274	-
Large Cap Domestic Equities	5,824	4,491	1,333	-
International Equities	6,017	4,344	1,673	-
Real Estate Investment Funds	693	84	105	504
Other Real Estate	116	-	-	116
Mortgage-Backed Securities	748	40	708	-
Asset-Backed Commercial Paper	17	-	17	-
Derivatives	181	17	166	(2)
Private Investment Funds	1,621	282	141	1,198
Insurance Contracts (general account)	129	-	68	61
Insurance Contracts (separate account)	42	-	42	-
Employer Securities	67	67	-	-
Aggregate Bond Index, Long Bond Index	297	-	297	-
Other	99	33	57	9
Total Assets	**$ 28,467**	**$ 12,554**	**$ 13,342**	**$ 2,571**

The following chart shows the reconciliation of the Level 3 assets for FY 2012 for the 38 pension benefit plans with assets.

($ IN MILLIONS)	CASH AND EQUIVA-LENTS	U.S. BONDS	SMALL CAP EQUITIES	REAL ESTATE INVESTMENT FUNDS	DERIVA-TIVES	OTHER REAL ESTATE	PRIVATE INVESTMENT FUNDS	INSURANCE CONTRACTS (GENERAL ACCOUNTS)	OTHER	TOTAL
Beginning Balance	$ 324	$ 197	$ -	$ 505	$ -	$ 93	$ 1,080	$ 70	$ 9	$ 2,278
Actual return on plan assets:										
Relating to assets still held at the reporting date	199	17	-	44	-	(1)	126	(9)	-	376
Relating to assets sold during the period	-	-	-	-	-	-	13	-	-	13
Purchases, sales, and settlements	-	-	-	7	-	23	2	-	-	32
Transfers in and/or out of Level 3	(86)	-	34	(52)	-	(2)	(23)	-	-	(129)
Other	-	-	-	-	(2)	3	-	-	-	1
Ending Balance	**$ 437**	**$ 214**	**$ 34**	**$ 504**	**$ (2)**	**$ 116**	**$ 1,198**	**$ 61**	**$ 9**	**$ 2,571**

Pension assets included in Level 1 of the fair value hierarchy are valued daily based on quoted prices in active markets. Assets included in Level 2 are valued using significant observable inputs other than quoted prices in active markets. US Government Bonds and Corporate Bonds included in Level 2 assets are generally part of collective investment funds valued at the net asset values of the funds based on the quoted prices of the underlying securities in active markets. Other bonds in these categories are valued based on interest rates and yield curves observable at commonly quoted intervals or at bid evaluation prices for securities traded on OTC markets as provided by independent pricing vendors. Domestic and International Equities included in Level 2 assets are generally part of collective investment funds valued at the net asset values of the funds based on the quoted prices of the underlying securities in active markets. Assets included in Level 3 are valued using significant unobservable inputs. Private Investment Funds and Real Estate Funds included in Level 3 assets are generally priced by the fund general partners, verified by independent third-party appraisers, and audited by

independent auditing firms. The actual market values are generally only determinable by negotiations between independent parties pursuant to sales transactions. Assets held in Life Insurance Company General Accounts under Level 3 are generally credited guaranteed interest rates under the contracts or are valued based on the values of the underlying asset holdings of the accounts.

The $155 million of assets in the five other postretirement benefit plans include $136 million of investments in insurance contracts of which $117 million is valued using significant unobservable inputs (Level 3). The balance of the Level 3 insurance contracts decreased by $2 million during FY 2012 from $119 million to $117 million due to the return on assets still held at the reporting date. The remaining assets in the other postretirement benefit plans are invested in asset classes similar to the assets of the pension plans. None of the other assets in the other postretirement benefit plans were valued using unobservable inputs.

Other Postretirement Benefit assets included in Level 1 of the fair value hierarchy are valued daily based on quoted prices in active markets. International Equities in mutual funds employ fair value pricing in accordance with SEC requirements to reflect market events where the exchange on which they are traded is closed prior to the close of US mutual funds. Assets held in Life Insurance Company General and Separate Accounts under Levels 2 and 3 of the fair value hierarchy are generally credited guaranteed interest rates based on customized fixed income indices.

Some of the Department's contractors' plan assets are invested in investment funds, which are recorded based on the net asset value (NAV) per share (or its equivalent), are reported by the underlying funds without further adjustment, as a practical expedient of fair value. Generally, the fair value of the investment in a privately offered investment fund represents the amount that the investor could reasonably expect to receive from the investment fund if the investment is withdrawn at the measurement date based on the NAV. These investments are redeemable at NAV under ordinary terms of the agreements and based on the operation of the underlying funds. However, it is possible that these redemption rights may be restricted or eliminated by the funds in the future in accordance with the underlying fund agreements. The terms of any fund agreements may vary by contractor.

17. Capital Leases

($ IN MILLIONS)	FY 2012	FY 2011
SUMMARY OF ASSETS UNDER CAPITAL LEASE		
Power line equipment	$ 412	$ 367
Buildings and improvements	22	22
ADP equipment	307	342
Contruction work in progress	265	80
Other assets	104	138
Total capital lease assets	**$ 1,110**	**$ 949**
Less accumulated depreciation	(208)	(272)
Net assets under capital leases	**$ 902**	**$ 677**

($ IN MILLIONS) FISCAL YEAR	POWER LINE EQUIPMENT	OTHER	TOTAL
2013	$ 33	$ 34	$ 67
2014	33	32	65
2015	233	9	242
2016	241	2	243
2017	18	2	20
2018+	609	1	610
Total future lease payments	**$ 1,167**	**$ 80**	**$ 1,247**
Less imputed interest	(348)	-	(348)
Less executory costs	(36)	-	(36)
Net capital lease liability	**$ 783**	**$ 80**	**$ 863**
Lease liabilities covered by budgetary resources			$ (786)
Lease liabilities not covered by budgetary resources (Note 11)			(77)
Total capital lease liability			**$ (863)**

18. Contingencies and Commitments

($ IN MILLIONS)	FY 2012	FY 2011
Unfunded contingencies		
Spent nuclear fuel litigation	$ 19,733	$ 19,113
Other	120	34
Subtotal (Note 11)	**$ 19,853**	**$ 19,147**
Funded contingencies		
Other	-	28
Total contingencies and commitments	**$ 19,853**	**$ 19,175**

The Department is a party in various administrative proceedings, legal actions, and tort claims which may ultimately result in settlements or decisions adverse to the federal government. The Department has accrued contingent liabilities where losses are determined to be probable and the amounts can be estimated. Other significant contingencies exist where a loss is reasonably possible or where the loss is probable and an estimate cannot be determined. In some cases, a portion of any loss that may occur may be paid from Treasury's Judgment Fund. The Judgment Fund is a permanent, indefinite appropriation available to pay judgments against the government. The following are significant contingencies:

SPENT NUCLEAR FUEL LITIGATION

In accordance with the NWPA, the Department entered into contracts with more than 45 utilities in which, in return for payment of fees into the NWF, the Department agreed to begin disposal of spent nuclear fuel (SNF) by January 31, 1998. Because the Department has no facility available to receive SNF under the NWPA, it has been unable to begin disposal of the utilities' SNF as required by the contracts. Significant litigation claiming damages for partial breach of contract has ensued as a result of this delay.

To date, 31 suits have been settled involving utilities that collectively produce about 76 percent of the nuclear-generated electricity in the United States. Under the terms of the settlements, the Judgment Fund, 31 U.S.C. 1304, paid $1.92 billion to the settling utilities for delay damages they have incurred through September 30, 2012. In addition, sixteen cases have been resolved by final judgments. Six of those cases resulted in an award of no damages by the trial court and the remaining ten cases resulted in a total of $687.8 million in damages that have been paid.

The Department's spent nuclear fuel litigation liability is updated to include the effects of final judgments and settlements as well as payments to date from the Judgment Fund. Additional payments under these settled and adjudicated cases may be made if the utilities incur additional costs before the Department permanently disposes of the spent nuclear fuel. The Department believes its assumptions and methodology provide a reasonable basis for the contingent liability estimate.

Twenty-seven cases remain pending either in the Court of Federal Claims or in the Court of Appeals for the Federal Circuit. Liability is probable in these cases, and in many of these cases orders have already been entered establishing the government's liability and the only outstanding issue to be litigated is the amount of damages to be awarded. The industry is reported to estimate that damages for all utilities with which the Department has contracts ultimately will be at least $50 billion. The Department believes that the industry's estimate is highly inflated and that the disposition of the 55 cases that have either been settled or subject to a judgment in the trial court suggests that the government's ultimate liability is likely to be significantly less than that estimate. Accordingly, based on these settlement estimates, the total liability estimate is $22.3 billion. After deducting the amount paid as of September 30, 2012, under these settlements and as a result of final judgments, a total of $2.6 billion, the remaining liability is estimated to be approximately $19.7 billion. Under current law, any damages or settlements in this litigation will be paid out of the Judgment Fund. The Department's contingent liability estimate for SNF litigation is reported net of amounts paid to date from the Judgment Fund.

The Department previously reported several developments that made it difficult to reasonably predict the amount of the government's likely liability. The courts have since resolved that jurisdiction for these cases is appropriate in the Court of Federal Claims and that the government cannot assert the unavoidable delays defense, under which, if it were applicable, the government would not be liable for any damages. Furthermore, in fiscal year 2009 the Administration determined Yucca Mountain was not a workable solution and established a Blue Ribbon Commission in January 2010 to evaluate alternatives. The Commission submitted a final report in January 2012 with their recommendations on these issues for consideration by the Administration and Congress, as well as interested state, tribal and local governments, other stakeholders, and the public. Future determinations on how the Department will meet its obligations under the standard contracts could materially decrease or increase the spent nuclear fuel litigation liability.

ALLEGED EXPOSURES TO RADIOACTIVE AND/OR TOXIC SUBSTANCES

A number of class action and/or multiple plaintiff tort suits have been filed against current and former DOE contractors in which the plaintiffs seek damages for alleged exposures to radioactive and/or toxic substances as a result of the historic operations of the Department's nuclear facilities. The most significant of these cases arise out of operations of the facilities at Rocky Flats, Colorado; Hanford, Washington; Mound, Ohio; and Brookhaven, New York. Collectively, in these cases, damages in excess of $102 billion are sought.

These cases are being vigorously defended. Trials have been held in the Rocky Flats litigation and the Hanford litigation. In the Rocky Flats litigation, although the jury returned a substantial verdict in favor of the plaintiffs, the court of appeals vacated the judgment and remanded the matter to the district court. The United States Supreme Court denied plaintiffs' petition for a writ of certiorari on June 25, 2012. The case is now proceeding in the district court. In the Hanford litigation, following rulings by the court of appeals, seven of twelve "bellwether" plaintiffs' claims were resolved in favor of the defendants, relatively small judgments in favor of two "bellwether" plaintiffs were affirmed, and three "bellwether" plaintiffs' claims were remanded to the district court for further proceedings. Proceedings on the remaining Hanford plaintiffs' claims are now continuing through court-ordered mediation and trials.

HANFORD SITE NATURAL RESOURCES DAMAGES

The Confederated Tribes of the Yakama Nation filed suit in September 2002 against DOE and the Department of Defense alleging natural resources damages in the 1100 area of the Hanford site. The Yakama have since amended their complaint to add the 100 and 300 areas to the suit, alleging additional natural resources damages. In addition, the States of Washington and Oregon, as well as the Confederated Tribes of the Umatilla and the Nez Perce tribe, have joined the suit. The case is in pre-trial phase. The district court has denied the government's motion to dismiss two of the plaintiffs' claims on the ground that they are not ripe, but has stayed any proceedings on one of those claims. The case remains stayed while settlement negotiations continue. Potential losses to the Department cannot be estimated at this time.

CLEANUP AND WASTE DISPOSAL AT WEST VALLEY

The State of New York filed a complaint for a declaratory judgment and monetary relief, raising claims under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the West Valley Demonstration Project Act (WVDPA), and the NWPA. This case involves a dispute between the Department and the State of New York concerning their respective obligations for cleanup and waste disposal at West Valley. The parties have agreed upon a tentative settlement of these claims that includes claims under the WVDPA for which Congress previously allocated a 90% share for the federal government in 1980. Additionally, the settlement only determines cost allocation and not actual clean-up costs, as those decisions will be made pursuant to separate processes.

On August 17, 2010, the court approved and entered a Consent Decree resolving or preserving CERCLA and WVDPA Act claims. The Consent Decree makes no decisions with respect to the actual cleanup actions for the WVDP or the Western New York Nuclear Services Center (Center). Instead, the Consent Decree commits the United States and New York to follow a complex cost allocation formula for all future actions at the WVDP and the Center, based entirely on the final actions selected by the parties via the appropriate public process. The Consent Decree did not resolve a claim for liability of the high-level radioactive waste disposal fee pursuant to the NWPA. The parties have submitted a proposed briefing schedule to the district court to dismiss that claim, providing opening briefs are due January 4, 2013 and briefing concludes March 15, 2013. While the Department is confident that the Government's Motion to Dismiss will prevail, it is extremely difficult to estimate the possible financial risks to the Department. If an adverse outcome occurs, the estimated loss could be approximately $325 million.

REFUNDS TO UTILITY COMPANIES

The Bonneville Power Administration (BPA) and the Western Area Power Administration (WAPA) were parties to proceedings at the FERC that sought refunds for sales into markets operated by the California Independent System Operator (ISO) and the California Power Exchange (PX) during the California energy crisis of 2000-2001. BPA, along with a number of other governmental utilities, challenged FERC's refund authority over governmental utilities. In BPA v. FERC, 422 F.3d 908 (9th Cir. 2005) the Ninth Circuit Court found that governmental utilities, like BPA and WAPA, were not subject to FERC's statutory refund authority. As a consequence of the Court's decision, three California investor-owned utilities along with the State of California filed breach of contract claims in the U.S. Court of Federal Claims against BPA and WAPA. The complaints, filed in March of 2007, alleged that BPA and WAPA were contractually obligated to pay refunds on transactions where the agencies received amounts in excess of mitigated market clearing prices established by FERC.

A trial on the liability portion of plaintiffs' contractual breach claim commenced in July 2010 and concluded in August 2010. Post trial briefs were filed during fall 2010 and closing arguments were held in February 2011. In May 2012, the Court of Federal Claims issued an opinion in the trial on liability issues and held that BPA breached its contracts with the California parties by failing to pay refunds for amounts owed in excess of the mitigated market clearing prices during the refund period. Whether the amounts owed include interest is a contested issue. Assuming the amounts owed do include interest, such refund amounts could amount up to approximately $52

million if ultimately determined to be based on the differences between the mitigated market clearing prices and the prices actually transacted during this period. While this ruling does not establish a specific liability in this matter, BPA recorded a liability in this amount. A trial to determine the amount of damages is currently scheduled for June 2013.

The plaintiffs' contractual breach was premised in part upon a November 2009 order where FERC found that as a consequence of establishing a new just and reasonable rate for the purpose of calculating refunds for jurisdictional utilities, it also retroactively reset the prices under the ISO and PX tariffs for all market participants. BPA and WAPA have separately appealed the November 2009 order to the Ninth Circuit Court. In August 2012, subsequent to the ruling of the Court of Federal Claims described above, the Ninth Circuit Court issued a decision on this appeal and held that establishing a new price for purposes of calculating refunds did not retroactively revise the rate for all market participants. The United States Department of Justice, representing BPA and WPA in this matter, expects to file a motion to reconsider the May 2012 decision of the Court of Federal Claims based upon the recent Ninth Circuit Court ruling.

PADUCAH AND PORTSMOUTH NATURAL RESOURCE DAMAGES

As a result of releases of hazardous substances at the Paducah and Portsmouth Sites, the States of Ohio and Kentucky have potential claims against the Department under CERCLA for damages to natural resource (e.g., ground water) caused by such releases. The Department has had preliminary discussions with Ohio about a possible settlement of its claims for natural resource damages at the Portsmouth site. Kentucky has indicated that it desires a "tolling" agreement with respect to potential claims for natural resource damages at the Paducah site. A tolling agreement would suspend the statute of limitations for the filing of the state's claims for a mutually agreeable period of time. The Department will continue its discussions with the states about their potential claims for natural resource damages. Although the Department will be liable for at least some natural resource damages at the sites, it is unable to prepare an estimate of such damages and has not included a provision for damages in the consolidated financial statements.

PURCHASE POWER AND TRANSMISSION COMMITMENTS AND IRRIGATION ASSISTANCE

The PMAs have entered into commitments to sell expected generation for future dates. When the PMAs forecast a resource shortage based on expected obligations and the historical water record for the Columbia River basin, they take a variety of steps to cover the shortage including entering into power commitments. If appropriate, the PMAs will enter into long-term commitments to purchase power for future delivery. The PMAs record expenses associated with these purchases in the periods that power is received. BPA has several power purchase agreements with wind-powered and other generating facilities that are not included as payments are based on the variable amount of future energy generated and there are no minimum payments required.

Federal statute requires Western Area Power Administration (Western) and Bonneville Power Administration (BPA) repay the U.S. Treasury the portion of Reclamation's original capital costs allocated to irrigation purposes, which were determined by the Secretary of the Interior to be beyond the ability of the irrigation customers to repay. As a result, Western and BPA include a schedule of irrigation assistance costs in each respective power system's power repayment study to demonstrate repayment of principal within the allowable repayment period. These repayment amounts do not incur or accumulate interest from the date that Reclamation determines the irrigators' inability to pay. Future irrigation assistance payments are scheduled over a maximum of 66 years since the time the irrigation facilities were completed and placed in service.

Although these repayments will be recovered through power sales, they do not represent an operating cost of the individual power systems nor a liability on the consolidated balance sheets due to factors such as the variable payment schedule. Accordingly, when paid these distributions reduce accumulated net revenues in the consolidated statements of net cost.

The following table summarizes future purchase power and transmission commitments and irrigation assistance. The table includes firm purchase power agreements of known cost that are currently in place to assist in meeting expected future obligations under long-term power sales contracts.

($ IN MILLIONS) FISCAL YEAR	PURCHASE POWER AND TRANSMISSION	IRRIGATION ASSISTANCE
2013	$ 208	$ 139
2014	144	63
2015	115	85
2016	100	85
2017	82	57
2018+	257	2,174
Total	**$ 906**	**$ 2,603**

The Northwest Power Act directs BPA to protect, mitigate and enhance fish and wildlife resources to the extent they are affected by federal hydroelectric projects on the Columbia River and its tributaries. BPA makes expenditures and incurs other costs for fish and wildlife projects that are consistent with the Northwest Power Act and that are consistent with the Pacific Northwest Power and Conservation Council's Columbia River Basin Fish and Wildlife Program. In addition, certain fish species are listed under the Endangered Species Act (ESA) as threatened or endangered. BPA is financially responsible for

expenditures and other costs arising from conformance with the ESA and certain biological opinions (BiOp) prepared by the National Oceanic and Atmospheric Administration Fisheries Service and the U.S. Fish and Wildlife Service in furtherance of the ESA. BPA's total commitment including timing of payments under the Northwest Power Act, ESA, and BiOp is not fixed or determinable. However, the estimate as of September 30, 2012, of long-term fish and wildlife agreements with a contractual commitment which BPA has entered is $911.9 million. These agreements will expire at various dates between fiscal years 2018 and 2025.

19. Earmarked Funds

($ IN MILLIONS)	FY 2012					
	NUCLEAR WASTE FUND	D&D FUND	USEC	PMAs	OTHER	TOTAL
BALANCE SHEET						
ASSETS						
Fund balance with Treasury	$ 1	$ 5	$ -	$ 1,731	$ 1,196	$ 2,933
Investments and related interest, net	28,771	4,189	1,608	397	1	34,966
Accounts receivable, net	3,255	-	-	808	3	4,066
Direct loans and loan guarantees, net	-	-	-	1	-	1
Inventory, net	-	-	-	121	154	275
General property plant and equipment, net	-	-	-	8,142	28	8,170
Regulatory assets	-	-	-	12,453	-	12,453
Other assets	3	56	-	3,866	-	3,925
Total Assets	**$ 32,030**	**$ 4,250**	**$ 1,608**	**$ 27,519**	**$ 1,382**	**$ 66,789**
LIABILITIES AND NET POSITION						
Accounts payable	$ -	$ 97	$ -	$ 575	$ 23	$ 695
Debt	-	-	-	18,858	-	18,858
Deferred revenues and other credits	32,030	-	-	1,413	2	33,445
Environmental cleanup and disposal liabilities	-	13,871	-	4	-	13,875
Pensions and other actuarial liabilities	-	-	-	54	-	54
Obligations under capital leases	-	-	-	786	-	786
Other liabilities	-	-	-	3,875	16	3,891
Contingencies and commitments	-	-	-	81	-	81
Unexpended appropriations	-	-	-	1	22	23
Cumulative results of operations	-	(9,718)	1,608	1,872	1,319	(4,919)
Total Liabilities and Net Position	**$ 32,030**	**$ 4,250**	**$ 1,608**	**$ 27,519**	**$ 1,382**	**$ 66,789**
STATEMENT OF NET COST						
Program costs	$ 9	$ (25)	$ -	$ 4,200	$ 95	$ 4,279
Less earned revenues	(12)	(277)	-	(4,479)	(34)	(4,802)
Net program costs	$ (3)	$ (302)	$ -	$ (279)	$ 61	$ (523)
Costs not assigned	-	204	-	-	-	204
Net cost of operations	**$ (3)**	**$ (98)**	**$ -**	**$ (279)**	**$ 61**	**$ (319)**
STATEMENT OF CHANGES IN NET POSITION						
Cumulative results of operations, beginning balance	$ -	$ (9,863)	$ 1,606	$ 1,856	$ 1,318	$ (5,083)
Appropriations used	-	-	-	2	6	8
Non-exchange revenue	-	-	2	-	-	2
Donations and forfeitures of cash	-	-	-	38	-	38
Transfers - in/(out) without reimbursement	(3)	47	-	(319)	49	(226)
Imputed financing	-	-	-	1	-	1
Other	-	-	-	15	7	22
Net cost of operations	3	98	-	279	(61)	319
Cumulative results of operations, ending balance	**$ -**	**$ (9,718)**	**$ 1,608**	**$ 1,872**	**$ 1,319**	**$ (4,919)**
Unexpended appropriations, beginning balance	$ -	$ -	$ -	$ 3	$ 18	$ 21
Appropriations received	-	-	-	-	10	10
Other adjustments	-	-	-	-	-	-
Appropriations used	-	-	-	(2)	(6)	(8)
Unexpended appropriations, ending balance	**$ -**	**$ -**	**$ -**	**$ 1**	**$ 22**	**$ 23**

Earmarked Funds (continued)

($ IN MILLIONS)	FY 2011 NUCLEAR WASTE FUND	D&D FUND	USEC	PMAs	OTHER	TOTAL
BALANCE SHEET						
ASSETS						
Fund balance with Treasury	$ 2	$ 5	$ -	$ 1,535	$ 1,328	$ 2,870
Investments and related interest, net	26,728	4,587	1,606	294	2	33,217
Accounts receivable, net	3,261	-	-	829	3	4,093
Direct loans and loan guarantees, net	-	-	-	1	-	1
Inventory, net	-	-	-	113	10	123
General property plant and equipment, net	-	-	-	7,458	27	7,485
Regulatory assets	-	-	-	12,898	-	12,898
Other assets	2	50	-	3,316	2	3,370
Total Assets	**$ 29,993**	**$ 4,642**	**$ 1,606**	**$ 26,444**	**$ 1,372**	**$ 64,057**
LIABILITIES AND NET POSITION						
Accounts payable	$ 2	$ 127	$ -	$ 516	$ 14	$ 659
Debt	-	-	-	18,149	-	18,149
Deferred revenues and other credits	29,990	-	-	1,193	3	31,186
Environmental cleanup and disposal liabilities	-	14,377	-	12	-	14,389
Pensions and other actuarial liabilities	1	-	-	57	1	59
Obligations under capital leases	-	-	-	590	-	590
Other liabilities	-	1	-	4,035	18	4,054
Contingencies and commitments	-	-	-	33	-	33
Unexpended appropriations	-	-	-	3	18	21
Cumulative results of operations	-	(9,863)	1,606	1,856	1,318	(5,083)
Total Liabilities and Net Position	**$ 29,993**	**$ 4,642**	**$ 1,606**	**$ 26,444**	**$ 1,372**	**$ 64,057**
STATEMENT OF NET COST						
Program costs	$ 18	$ (112)	$ -	$ 4,113	$ 161	$ 4,180
Less earned revenues	(29)	(317)	-	(4,854)	(3,371)	(8,571)
Net program costs	$ (11)	$ (429)	$ -	$ (741)	$ (3,210)	$ (4,391)
Costs not assigned	(2)	904	-	13	-	915
Net cost of operations	**$ (13)**	**$ 475**	**$ -**	**$ (728)**	**$ (3,210)**	**$ (3,476)**
STATEMENT OF CHANGES IN NET POSITION						
Cumulative results of operations, beginning balance	$ -	$ (9,463)	$ 1,601	$ 2,093	$ 1,147	$ (4,622)
Appropriations used	-	-	-	4	5	9
Non-exchange revenue	-	-	5	-	2	7
Donations and forfeitures of cash	-	-	-	9	-	9
Transfers - in/(out) without reimbursement	(13)	40	-	(993)	276	(690)
Imputed financing	-	-	-	1	-	1
Other	-	35	-	14	(3,322)	(3,273)
Net cost of operations	13	(475)	-	728	3,210	3,476
Cumulative results of operations, ending balance	**$ -**	**$ (9,863)**	**$ 1,606**	**$ 1,856**	**$ 1,318**	**$ (5,083)**
Unexpended appropriations, beginning balance	$ -	$ -	$ -	$ 6	$ 12	$ 18
Appropriations received	-	-	-	-	11	11
Other adjustments	-	-	-	1	(1)	-
Appropriations used	-	-	-	(4)	(4)	(8)
Unexpended appropriations, ending balance	**$ -**	**$ -**	**$ -**	**$ 3**	**$ 18**	**$ 21**

NUCLEAR WASTE FUND
The NWPA requires the owners and generators of nuclear waste to pay their share of the NWF and, to that end, establishes a fee for electricity generated and sold by civilian nuclear power reactors which the Department must collect and annually assess to determine its adequacy. A special fund within Treasury was created to account for the collection of fees. Fees are invested in Treasury securities and any interest earned is available to pay costs incurred by the NWF. The NWPA requires annual financial statements to be prepared.

DECONTAMINATION AND DECOMMISSIONING FUND
The Energy Policy Act of 1992 established the D&D fund to pay for the costs of decontamination and decommissioning of gaseous diffusion facilities through collection of revenues derived from domestic utility assessments and government appropriations. The Energy Policy Act also requires that balances in the D&D fund be invested in Treasury securities and any interest earned would be available to pay the costs of environmental remediation.

U.S. ENRICHMENT CORPORATION
Upon privatization of USEC on July 28, 1998, OMB and Treasury designated the Department as successor to USEC for purposes of disposition of balances remaining in the USEC fund. These funds are invested in Treasury securities.

POWER MARKETING ADMINISTRATIONS
The PMAs are funded primarily from four sources. These include contract and borrowing authority, direct receipts generated from the sale of power, annual appropriations from the Department of the Interior's Reclamation Fund, and appropriations from Treasury's General Fund. In most instances, the annual appropriations from the Reclamation Fund and the General Fund are repaid to Interior and Treasury, respectively, from the receipts generated from power sales.

20. Gross Cost, Intragovernmental

($ IN MILLIONS)	FY 2012	FY 2011
Imputed costs, Compensation Program for Occupational Illnesses - Department of Labor (Notes 25 and 26)	$ 1,651	$ 4,300
Interest costs on debt (Note 12)		
Borrowing from Treasury	187	257
Borrowing from FFB	533	298
Power marketing administrations' appropriated capital - Treasury	117	81
Power marketing administrations' appropriated capital - Department of the Interior	175	166
Imputed costs, Judgment Fund payments made by Treasury		
Spent nuclear fuel contingency (Notes 25 and 26)	966	798
Other Judgment Fund payments (Notes 25 and 26)	10	24
Federal employee benefits		
Agency share of employee retirement benefits - OPM	321	316
Imputed costs, employee retirement benefits - OPM (Note 26)	102	116
Federal Insurance Contributions Act (FICA) employer contributions - Treasury	65	66
Other intragovernmental costs		
Defense agencies	157	189
General Services Administration	162	160
All other agencies	333	300
Total intragovernmental gross costs with other federal agencies	**$ 4,779**	**$ 7,071**
Costs with the public	60,293	50,251
Total gross costs	**$ 65,072**	**$ 57,322**

21. Gross Cost by Strategic Goals

($ IN MILLIONS)	FY 2012	FY 2011
Transform Our Energy Systems		
Deploy the technologies we have	$ 11,184	$ 13,116
Discover the new solutions we need	3,866	4,004
Lead the National conversation on energy	171	195
Total program costs for transform our energy systems	**$ 15,221**	**$ 17,315**
The Science and Engineering Enterprise		
Extend our knowledge of the natural world	$ 3,630	$ 3,512
Deliver new technologies to advance our mission	1,290	1,338
Sustain a world-leading technical workforce	23	22
Total program costs for the science and engineering enterprise	**$ 4,943**	**$ 4,872**
Secure Our Nation		
Support the U.S. nuclear stockpile and future military needs	$ 6,953	$ 6,187
Reduce global nuclear dangers	1,735	1,751
Apply our capabilities for other critical national security missions	1,261	1,192
Support responsible civilian nuclear power development and fuel cycle management	201	221
Complete environmental remediation of our legacy and active sites	5,400	7,347
Total program costs for secure our nation	**$ 15,550**	**$ 16,698**
Total program costs for strategic objectives	**$ 35,714**	**$ 38,885**

TRANSFORM OUR ENERGY SYSTEMS

Goal: Catalyze the timely, material, and efficient transformation of the nation's energy system and secure U.S. leadership in clean energy technologies. Objectives include:

- **Deploy the technologies we have** - Advance new approaches for improving the efficiency of our nation's homes, buildings, facilities and vehicles.
- **Discover the new solutions we need** – Pursue technologies that can have the greatest impact on national energy goals and avoid technologies of limited applicability or resource.
- **Lead the national conversation on energy** – Ensure the processes of informing, shaping, and supporting energy and related environmental policies are underpinned by sound techno-economic principles and analyses.

THE SCIENCE AND ENGINEERING ENTERPRISE

Goal: Maintain a vibrant U.S. effort in science and engineering as a cornerstone of our economic prosperity with clear leadership in strategic areas. Objectives include:

- **Extend our knowledge of the natural world –** Address fundamental questions in the physical sciences and produce novel hardware and theoretical and analytical tools with applications well beyond the specific science.
- **Deliver new technologies to advance our mission –** Foster the development of new technologies to make major contributions to our energy, environment, and security missions.
- **Sustain a world-leading technical workforce –** Invest in current and future scientists by creating conditions that allow today's researchers to be as productive as possible, as well as ensure an adequate supply of tomorrow's researchers.

SECURE OUR NATION

Goal: Enhance nuclear security through defense, nonproliferation, and environmental efforts. Objectives include:

- **Support the U.S. nuclear stockpile and future military needs –** Keep the U.S. stockpile safe and reliable without further nuclear testing.
- **Reduce global nuclear dangers –** Maintain effective and credible international nuclear safeguards and export controls.
- **Apply our capabilities for other critical national security missions –** Provide the scientific and technical knowledge to enable national security agencies to understand and counter dangers arising from foreign nuclear weapons programs, the spread of nuclear capabilities to additional countries, and the potential exploitation of nuclear materials by terrorists.
- **Support responsible civilian nuclear power development and fuel cycle management –** Support the development of a new International framework for nuclear cooperation and strengthen International safeguards and export controls to support safe and secure deployment of nuclear power globally.
- **Complete environmental remediation of our legacy and active sites –** Reduce the footprint of our contaminated sites while bringing to bear the Department's formidable research and development assets to develop and deploy transformational technologies.

22. Earned Revenues

($ IN MILLIONS)	INTRA-GOVERNMENTAL	PUBLIC	DEFERRED REVENUE ADJUSTMENT	TOTAL
	FY 2012			
Transform Our Energy Systems				
Power Marketing Administrations	$ (108)	$ (4,034)	$ -	$ (4,142)
Loan Programs	(205)	(265)	(103)	(573)
Petroleum reserve oil sales	-	(5)	-	(5)
Other	-	(1)	-	(1)
Earned revenues for transform our energy systems	**(313)**	**(4,305)**	**(103)**	**(4,721)**
The Science and Engineering Enterprise				
Isotopes program	-	(29)	-	(29)
Earned Revenue for the science and engineering enterprise	**-**	**(29)**	**-**	**(29)**
Secure Our Nation				
Nuclear Waste Fund	(1,355)	(696)	2,039	(12)
D&D Fund	(108)	(169)	-	(277)
Other	(100)	(1)	-	(101)
Earned revenues for secure our nation	**(1,563)**	**(866)**	**2,039**	**(390)**
Reimbursable programs	(3,525)	(643)	-	(4,168)
Other programs				
FERC (Note 23)	-	(310)	-	(310)
Other (Note 23)	(2)	(42)	-	(44)
Earned revenues for other programs	**(2)**	**(352)**	**-**	**(354)**
Total earned revenues	**$ (5,403)**	**$ (6,195)**	**$ 1,936**	**$ (9,662)**
	FY 2011			
Transform Our Energy Systems				
Power Marketing Administrations	$ (268)	$ (4,229)	$ -	$ (4,497)
Loan Programs	(161)	(164)	(11)	(336)
Petroleum reserve oil sales (Note 26)	-	(3,566)	-	(3,566)
Other	-	(1)	-	(1)
Earned revenues for transform our energy systems	**(429)**	**(7,960)**	**(11)**	**(8,400)**
The Science and Engineering Enterprise				
Isotopes program	**(1)**	(31)	-	(32)
Earned Revenue for the science and engineering enterprise	**(1)**	**(31)**	**-**	**(32)**
Secure Our Nation				
Nuclear Waste Fund	(1,340)	(707)	2,018	(29)
D&D Fund	(142)	(175)	-	(317)
Other	(23)	(6)	-	(29)
Earned revenues for secure our nation	**(1,505)**	**(888)**	**2,018**	**(375)**
Reimbursable programs	(3,533)	(635)	-	(4,168)
Other programs				
FERC (Note 23)	-	(317)	-	(317)
Other (Note 23)	(3)	(37)	-	(40)
Earned revenues for other programs	**(3)**	**(354)**	**-**	**(357)**
Total earned revenues	**$ (5,471)**	**$ (9,868)**	**$ 2,007**	**$ (13,332)**

POWER MARKETING ADMINISTRATIONS

The Department's four PMAs market electricity generated primarily by federal hydropower projects. Preference for the sale of power is given to public bodies and cooperatives. Revenues from selling power and transmission services are used to repay Treasury annual appropriations, interest on the capital investment repayment, borrowings from Treasury, operation and maintenance costs as well as other payment obligations. Revenues collected by the Southeastern, Southwestern, and Western Area Power Administrations on behalf of other agencies are reported as custodial activity (see Note 28).

LOAN PROGRAMS
The loan program is required to collect administrative fees for the Title XVII loan program from the borrowers. Those fees are recognized as earned when an expense is accrued. Fees of $36 million and $36 million were earned as of September 30, 2012 and September 30, 2011, respectively. The program also earns interest on the loans made to borrowers and on the cash balances held with Treasury. Interest on cash balances of $205 million and $161 million and on loans from the borrower of $229 million and $128 million were earned as of September 30, 2012 and September 30, 2011, respectively. Amortization of the subsidy (see Note 7) is an adjustment made to the earned revenue and was $(103) million and $(11) million as of September 30, 2012 and September 30, 2011, respectively.

NUCLEAR WASTE FUND
The NWPA requires the Department to assess fees against owners and generators of high-level radioactive waste and spent nuclear fuel to fund the costs associated with management and disposal activities under the Act. Fees of $746 million and $751 million were assessed as of September 30, 2012, and September 30, 2011, respectively. Interest earned on fees owed and on accumulated funds in excess of those needed to pay current program costs totaled $1,304 million and $1,296 million as of September 30, 2012, and September 30, 2011, respectively. Adjustments are made annually to defer the recognition of revenues until earned (i.e., when costs are incurred).

D&D FUND
The Department assessed fees to domestic utilities to pay for the costs for decontamination and decommissioning the Department's gaseous diffusion facilities used for uranium enrichment services. Accumulated funds in excess of those needed to pay current program costs are invested in Treasury securities. Interest earned on these investments totaled $108 million and $142 million as of September 30, 2012 and September 30, 2011, respectively. Gains on the transfer of uranium to USEC in exchange for environmental clean-up services totaled $169 million as of September 30, 2012, and $175 million as of September 30, 2011 respectively.

REIMBURSABLE PROGRAMS
The Department performs work for other federal agencies and private companies on a reimbursable work basis and on a cooperative work basis.

The Department's policy is to establish prices for materials and services provided to public entities at the Department's full cost. In some cases, the full cost information reported by the Department in accordance with SFFAS No. 4, *Managerial Cost Accounting Concepts and Standards for the Federal Government,* exceeds revenues. This results from implementation of provisions contained in the Economy Act of 1932, as amended; the Atomic Energy Act of 1954, as amended; and the National Defense Authorization Act for Fiscal Year 1999, which provide the Department with the authority to charge customers an amount less than the full cost of the product or service. Costs attributable to generating intragovernmental reimbursable program revenues were $3,651 million and $3,692 million as of September 30, 2012, and September 30, 2011, respectively.

FEDERAL ENERGY REGULATORY COMMISSION
FERC is an independent regulatory organization within the Department that regulates essential aspects of electric, natural gas and oil pipeline industries, and non-federal hydropower industries. It ensures that the rates, terms, and conditions of service for segments of the electric and natural gas and oil pipeline industries are just and reasonable; it authorizes the construction of natural gas pipeline facilities; and it ensures that hydropower licensing administration and safety actions are consistent with the public interest. FERC assesses most of its administrative program costs as an annual charge to each regulated entity (see Note 23).

23. Other Programs

($ IN MILLIONS)	FY 2012	FY 2011
Federal Energy Regulatory Commission		
Program costs	$ 310	$ 317
Less earned revenues (Note 22)	(310)	(317)
	$ -	$ -
Environment, safety and health	437	439
Inspector General	48	49
Other programs		
Program costs	$ 20	$ 21
Less earned revenues (Note 22)	(44)	(40)
	$ (24)	$ (19)
Total net cost for other programs	**$ 461**	**$ 469**

24. Costs Applied to Reduction of Legacy Environmental Liabilities

Costs applied to reduction of legacy environmental liabilities are current year operating expenditures for the remediation of contaminated facilities and wastes generated from past operations. These amounts are excluded from current year program expenses since the expense was accrued in prior years when the Department recorded the environmental liabilities.

25. Costs Not Assigned

($ IN MILLIONS)	FY 2012	FY 2011
Spent nuclear fuel contingency (Notes 18)		
Judgment Fund payments (Notes 20 and 26)	$ 966	$ 798
Change in estimates (Note 26)	620	3,731
Current year spent nuclear fuel contingency costs	$ 1,586	$ 4,529
Change in environmental liability estimates (Notes 15 and 26)	25,262	10,184
Changes in contractor pension and PRB estimates (Note 26)	1,851	2,052
Change in unfunded safety and health liabilities (Notes 11, 14 and 26)	(541)	150
Change in occupational illness program (Notes 20 and 26)	1,651	4,300
Other Judgment Fund payments (Notes 20 and 26)	10	24
Other	34	(4)
Total costs not assigned	**$ 29,853**	**$ 21,235**

CHANGES IN CONTRACTOR PENSION AND PRB ESTIMATES

The changes in contractor pension and PRB estimates are comprised of all the components of contractor pension and PRB net periodic costs except for service costs [i.e., interest costs; expected return on plan assets; (gain)/loss due to curtailments, settlements, or special termination benefits; net prior service cost/(credit); and net (gain)/loss including impacts of changes in actuarial assumptions]. Service costs are not included since they are recorded by program (see Notes 16 and 26).

COMPENSATION PROGRAM FOR OCCUPATIONAL ILLNESSES

The Energy Employees Occupational Illness Compensation Program Act (EEOICPA) authorized compensation for certain illnesses suffered by employees of the Department, its predecessor agencies, and contractors who performed work for the nuclear weapons program. EEOICPA covers illnesses associated with exposure to radiation, beryllium, or silica. In general, each eligible employee and survivors of deceased employees will receive compensation for the disability or death of that employee in the amount of $150,000 plus the costs of medical care.

The National Defense Authorization Act of 2005 amended the EEOICPA to grant workers' compensation benefits to

covered employees and their families for illness and death arising from exposure to toxic substances at the Department's facilities. The amendment also makes it possible for uranium workers, as defined under Section 5 of the Radiation Exposure Compensation Act, to receive compensation for illnesses due to toxic substance exposure at a uranium mine or mill covered under that Act.

As of September 30, 2005, the law makes payments under these programs the responsibility of the Department of Labor. Therefore, the liability is recorded by the Department of Labor and changes in the total liability are recognized by the Department as an imputed cost and an imputed financing source. The FY 2012 liability estimate increased primarily due to a lower interest rate used to discount losses.

26. Reconciliation of Net Cost of Operations to Budget

($ IN MILLIONS)	FY 2012		FY 2011	
RESOURCES USED TO FINANCE ACTIVITIES				
Obligations incurred (Note 27)	$ 37,662		$ 48,906	
Less spending authority from offsetting collections and recoveries	(11,558)		(11,254)	
Less offsetting receipts (Note 27)	(4,132)		(7,306)	
Net obligations		**$ 21,972**		**$ 30,346**
Imputed financing from costs absorbed by others				
Increase in occupational illnesses liability (Notes 20 and 25)	$ 1,651		$ 4,300	
OPM imputed costs (Note 20)	102		116	
Payments made from Treasury's Judgment Fund (Notes 20 and 25)	976		822	
Total imputed costs absorbed by others		$ 2,729		$ 5,238
Transfers-in/(out) without reimbursement		(189)		(742)
Nuclear Waste Fund offsetting receipts, deferred		2,879		3,240
Other		60		10
Total resources used to finance activities		**$ 27,451**		**$ 38,092**
RESOURCES USED TO FINANCE ACTIVITIES NOT PART OF NET COST OF OPERATIONS				
Change in budgetary resources obligated for orders but not yet provided	$ 15,065		$ 4,457	
Resources that finance the acquisition of assets	(12,700)		(9,977)	
Credit program collection and receipts that increase liabilities	2,051		1,489	
Resources that fund expenses recognized in prior periods	(5,508)		(7,843)	
Other resources and adjustments	1,358		2,710	
Total resources used to finance items not part of Net Cost of Operations		**$ 266**		**$ (9,164)**
NET COST OF ITEMS THAT DO NOT REQUIRE OR GENERATE RESOURCES IN CURRENT PERIOD				
Contractor Pension and PRB plans				
Contractor pension and PRB estimate changes (Note 25)	$ 1,851		$ 2,052	
Current year pension and PRB service costs (Notes 16 and 25)	1,248		1,179	
Current year pension and PRB employer contributions (Note 16)	(1,887)		(1,357)	
Total pension and PRB plans	$ 1,212		$ 1,874	
Change in environmental liability estimates (Notes 15 and 25)	25,262		10,184	
Change in spent nuclear fuel contingency (Note 25)	620		3,731	
Change in unfunded safety and health liabilities (Notes 11, 14 and 25)	(541)		150	
Upward/Downward reestimates of credit subsidy expense	(1,310)		(1,493)	
Change in other unfunded liabilities	101		885	
Depreciation of property, plant and equipment	1,839		1,743	
Amortization of premiums and discounts on Treasury investments	(736)		(997)	
Revaluation of assets and liabilities for loans	(98)		(10)	
Other amortization	181		185	
Gain on sale of SPRO oil (Note 22)	-		(2,284)	
Other	1,163		1,094	
Total net cost of items that do not require or generate resources in current period		**$ 27,693**		**$ 15,062**
NET COST OF OPERATIONS		**$ 55,410**		**$ 43,990**

NUCLEAR WASTE FUND OFFSETTING RECEIPTS, DEFERRED

The Department defers the recognition of revenues related to the fees paid by owners and generators of spent nuclear fuel, and the interest earned on the invested balance of these funds, to the extent that the receipts exceed current year costs for developing and managing a permanent repository for spent nuclear fuel generated by civilian reactors. In addition, market value adjustments for Treasury securities of the NWF are not recognized as revenues in the current period unless redeemed by the Department. The gross amount of receipts and interest collected are reported as offsetting receipts on the *Combined Statements of Budgetary Resources*. Therefore, a reconciling amount is reported for the portion of the offsetting receipts for which revenues are not recognized in the current period.

27. Combined Statements of Budgetary Resources

The *Statements of Budgetary Resources* are presented on a combined, rather than a consolidated, basis in accordance with OMB guidance.

DETAILS OF OBLIGATIONS INCURRED ($ IN MILLIONS)	FY 2012	FY 2011
Direct		
Category A (by quarter)	$ 13,830	$ 14,564
Category B (by project)	15,411	25,884
Sub-total direct obligations incurred	**$ 29,241**	**$ 40,448**
Exempt from apportionment	3,704	3,721
Reimbursable		
Category A (by quarter)	28	39
Category B (by project)	4,689	4,698
Sub-total reimbursable obligations incurred	**$ 4,717**	**$ 4,737**
Total obligations incurred (Note 26)	**$ 37,662**	**$ 48,906**

UNOBLIGATED BALANCES NOT AVAILABLE ($ IN MILLIONS)	FY 2012	FY 2011
Loan funds reserved for future defaults	$ 3,494	$ 4,555
Offsetting collections reserved for repayment of borrowing authority	152	-
Strategic Petroleum Reserve mandatory appropriations not apportioned	-	3,238
Prior year deobligations in excess of apportioned amount	68	27
Energy Supply and Conservation unapportioned balances	-	11
Reimbursable work/collections in excess of amount anticipated	17	4
Expired appropriations	266	12
Other amounts not apportioned	13	1
Total unobligated balances not available (Note 3)	**$ 4,010**	**$ 7,848**

Unobligated balances not available represent budgetary resources that have not been apportioned to the Department.

DETAILS OF UNPAID OBLIGATIONS ($ IN MILLIONS)	FY 2012	FY 2011
Undelivered orders	$ 29,489	$ 45,709
Accounts payable and other liabilities	7,546	8,175
Total unpaid obligations (Note 3)	**$ 37,035**	**$ 53,884**

RECONCILIATION TO APPROPRIATIONS RECEIVED ON THE STATEMENT OF CHANGES IN NET POSITION ($ IN MILLIONS)	FY 2012	FY 2011
Appropriations on the Combined Statements of Budgetary Resources:		
Definite appropriations	$ 25,928	$ 29,324
Permanent indefinite appropriations	448	58
Total appropriations on the Combined Statements of Budgetary Resources	$ 26,376	$ 29,382
Adjustments to take the SBR from net appropriations to appropriations received:		
Rescissions and other amounts precluded from obligation	791	565
Appropriation transfers	(5)	-
Less other adjustments:		
Special and trust fund appropriated receipts	(622)	(900)
Appropriated capital owed	(12)	(13)
Other	-	(3)
Appropriations received on the Statements of Changes in Net Position	**$ 26,528**	**$ 29,031**

PERMANENT INDEFINITE APPROPRIATIONS

The Department is authorized to use indefinite appropriations per the FCRA. These amounts are used to fund upward re-estimates on the FCRA loans.

RECONCILIATION TO THE BUDGET (FY 2011) ($ IN MILLIONS)	BUDGETARY RESOURCES	OBLIGATIONS INCURRED	DISTRIBUTED OFFSETTING RECEIPTS	NET OUTLAYS
Combined Statements of Budgetary Resources as published	$ 63,021	$ 48,906	$ (7,306)	$ 34,672
OMB adjustments made to exclude:				
U.S. Enrichment Corporation	-	-	-	26
Non-budgetary Credit Reform Financing Accounts	(15,822)	(11,229)	-	(3,322)
Expired accounts	(12)	-	-	-
Other	5	(2)	-	(6)
Budget of the United States Government	**$ 47,192**	**$ 37,675**	**$ (7,306)**	**$ 31,370**

The FY 2011 Combined Statements of Budgetary Resources are reconciled to the President's Budget that was published in February 2012. The President's Budget containing actual FY 2012 balances is expected to be published and available on the OMB web site, www.whitehouse.gov/omb/budget, in February 2013. Budgetary resources and obligations incurred are reconciled to the Departmental balances as published in the Appendix to the Budget; distributed offsetting receipts and net outlays are reconciled to the Departmental balances in the Federal Program by Agency and Account section of the Analytical Perspectives Volume of the President's Budget.

The non-budgetary credit reform financing accounts are reported separately in the President's Budget and are not reflected in the budget surplus or deficit.

BORROWING AUTHORITY

The Department's borrowing authority reflected in the *Combined Statements of Budgetary Resources* represents the amount of borrowing authority for the current fiscal year's obligations, which may or may not have been converted to cash. The borrowing authority available at September 30, 2012 and September 30, 2011, is $5.97 billion and $12.27 billion for the Department's loan program, $4.28 billion and $4.76 billion for BPA, and $3.06 billion and $3.09 billion for WAPA, respectively. The amounts available are authority that has not been converted to cash.

28. Custodial Activities

POWER MARKETING ADMINISTRATIONS

The Southeastern, Southwestern, and Western Area Power Administrations are responsible for collecting and remitting to Treasury and the Department of the Interior revenues attributable to the hydroelectric power projects owned and operated by the Department of Defense, the Corps; the Department of the Interior, Bureau of Reclamation; and the Department of State, International Boundary and Water Commission. These revenues are reported as custodial activities of the Department.

FEDERAL ENERGY REGULATORY COMMISSION

FERC is responsible for billing regulated companies annual charges as a custodian for certain federal agencies. These include: 1) the Corps for licensees to provide maintenance and operations of dams owned by the U.S. and

maintenance for operations of headwater or other navigable waters owned by the U.S.; 2) Bureau of Reclamation for the occupancy and use of public lands and national parks owned by the U.S. and for Indian Tribal Trust Funds from licensees for the reservation of Indian land; 3) Treasury for revenues collected based on penalties, interest, and administrative charges for overdue accounts receivables and for civil penalties; and 4) payments to states collected from licensees for the occupancy and use of national forests and public lands from development within the boundaries of any state.

Consolidating Schedules

U.S. Department of Energy Consolidating Schedules - Balance Sheets

As of September 30, 2012 and 2011 *(See independent auditors' report)*

($ IN MILLIONS)	FEDERAL ENERGY REGULATORY COMMISSION	POWER MARKETING ADMINISTRATIONS	ALL OTHER DOE PROGRAMS	ELIMINATIONS	CONSOLIDATED
	FY 2012				
ASSETS:					
Intragovernmental Assets:					
Fund Balance with Treasury	$ 164	$ 1,731	$ 36,530	$ -	$ 38,425
Investments and Related Interest, Net	-	397	34,643	-	35,040
Accounts Receivable, Net	-	295	1,675	(1,297)	673
Regulatory Assets	-	5,471	-	-	5,471
Other Assets	-	-	93	(62)	31
Total Intragovernmental Assets	**$ 164**	**$ 7,894**	**$ 72,941**	**$ (1,359)**	**$ 79,640**
Investments and Related Interest, Net	-	-	181	-	181
Accounts Receivable, Net	11	513	3,346	-	3,870
Direct Loans and Loan Guarantees, Net	-	1	10,682	-	10,683
Inventory, Net:					
Strategic Petroleum and Home Heating Oil Reserve	-	-	20,778	-	20,778
Nuclear Materials	-	-	21,120	-	21,120
Other Inventory	-	121	433	-	554
General Property, Plant, and Equipment, Net	9	8,142	24,628	-	32,779
Regulatory Assets	-	6,982	-	-	6,982
Other Non-Intragovernmental Assets	-	3,866	427	-	4,293
Total Assets	**$ 184**	**$ 27,519**	**$ 154,536**	**$ (1,359)**	**$ 180,880**
LIABILITIES:					
Intragovernmental Liabilities:					
Accounts Payable	$ 2	$ 68	$ 290	$ (239)	$ 121
Debt	-	12,731	12,112	-	24,843
Deferred Revenues and Other Credits	-	6	152	(62)	96
Other Liabilities	5	25	2,506	(1,058)	1,478
Total Intragovernmental Liabilities	**$ 7**	**$ 12,830**	**$ 15,060**	**$ (1,359)**	**$ 26,538**
Accounts Payable	13	507	3,708	-	4,228
Loan Guarantee Liability	-	-	157	-	157
Debt Held by the Public	-	6,127	-	-	6,127
Deferred Revenues and Other Credits	-	1,407	32,799	-	34,206
Environmental Cleanup and Disposal Liabilities	-	4	268,397	-	268,401
Pension and Other Actuarial Liabilities	3	54	31,480	-	31,537
Capital Leases	-	786	77	-	863
Other Non-Intragovernmental Liabilities	143	3,850	2,730	-	6,723
Contingencies and Commitments	-	81	19,772	-	19,853
Total Liabilities	**$ 166**	**$ 25,646**	**$ 374,180**	**$ (1,359)**	**$ 398,633**
NET POSITION:					
Unexpended Appropriations					
Unexpended Appropriations- Earmarked Funds	$ -	$ 1	$ 22	$ -	$ 23
Unexpended Appropriations - Other Funds	-	-	28,073	-	28,073
Cumulative Results of Operations					
Cumulative Results of Operations - Earmarked Funds	-	1,872	(6,791)	-	(4,919)
Cumulative Results of Operations - Other Funds	18	-	(240,948)	-	(240,930)
Total Net Position	**$ 18**	**$ 1,873**	**$ (219,644)**	**$ -**	**$ (217,753)**
Total Liabilities and Net Position	**$ 184**	**$ 27,519**	**$ 154,536**	**$ (1,359)**	**$ 180,880**

FEDERAL ENERGY REGULATORY COMMISSION	POWER MARKETING ADMINISTRATIONS	ALL OTHER DOE PROGRAMS	ELIMINATIONS	CONSOLIDATED
		FY 2011		
$ 55	$ 1,535	$ 46,130	$ -	$ 47,720
-	294	32,997	-	33,291
-	318	2,106	(1,617)	807
-	5,492	-	-	5,492
-	-	73	(40)	33
$ 55	**$ 7,639**	**$ 81,306**	**$ (1,657)**	**$ 87,343**
-	-	181	-	181
10	511	3,372	-	3,893
-	1	5,731	-	5,732
-	-	20,668	-	20,668
-	-	21,642	-	21,642
-	113	423	-	536
7	7,458	23,275	-	30,740
-	7,406	-	-	7,406
-	3,316	524	-	3,840
$ 72	**$ 26,444**	**$ 157,122**	**$ (1,657)**	**$ 181,981**
$ 4	$ 63	$ 578	$ (541)	$ 104
-	12,386	6,921	-	19,307
-	4	101	(41)	64
3	33	2,550	(1,075)	1,511
$ 7	**$ 12,486**	**$ 10,150**	**$ (1,657)**	**$ 20,986**
17	453	4,373	-	4,843
-	-	86	-	86
-	5,763	-	-	5,763
-	1,189	30,526	-	31,715
-	12	250,557	-	250,569
2	57	30,245	-	30,304
-	590	17	-	607
27	4,002	3,344	-	7,373
-	33	19,142	-	19,175
$ 53	**$ 24,585**	**$ 348,440**	**$ (1,657)**	**$ 371,421**
$ -	$ 3	$ 18	$ -	$ 21
29	-	37,712	-	37,741
-	1,856	(6,939)	-	(5,083)
(10)	-	(222,109)	-	(222,119)
$ 19	**$ 1,859**	**$ (191,318)**	**$ -**	**$ (189,440)**
$ 72	**$ 26,444**	**$ 157,122**	**$ (1,657)**	**$ 181,981**

U.S. Department of Energy Consolidating Schedules of Net Cost

For the Years Ended September 30, 2012 and 2011

(See independent auditors' report)

($ IN MILLIONS)	FEDERAL ENERGY REGULATORY COMMISSION	POWER MARKETING ADMINISTRATIONS	ALL OTHER DOE PROGRAMS	ELIMINATIONS	CONSOLIDATED
			FY 2012		
STRATEGIC GOALS:					
Transform Our Energy Systems					
Program Costs	$ -	$ 3,967	$ 11,298	$ (44)	$ 15,221
Less: Earned Revenues	-	(4,177)	(588)	44	(4,721)
Net Cost of Transform Our Energy Systems	-	**(210)**	**10,710**	-	**10,500**
The Science and Engineering Enterprise					
Program Costs	-	-	4,962	(19)	4,943
Less: Earned Revenues	-	-	(29)	-	(29)
Net Cost of Science and Engineering Enterprise	-	-	**4,933**	**(19)**	**4,914**
Secure Our Nation					
Program Costs	-	-	15,550	-	15,550
Less: Earned Revenues	-	-	(390)	-	(390)
Net Cost of Secure Our Nation	-	-	**15,160**	-	**15,160**
Net Cost of Strategic Goals	-	**(210)**	**30,803**	**(19)**	**30,574**
OTHER PROGRAMS:					
Reimbursable Programs:					
Program Costs	-	241	3,999	(26)	4,214
Less: Earned Revenues	-	(302)	(3,892)	26	(4,168)
Net Cost of Reimbursable Programs	-	**(61)**	**107**	-	**46**
Other Programs:					
Program Costs	310	-	686	(181)	815
Less: Earned Revenues	(310)	-	(225)	181	(354)
Net Cost of Other Programs	-	-	**461**	-	**461**
Costs Applied to Reduction of Legacy Environmental Liabilities	-	(8)	(5,516)	-	(5,524)
Costs Not Assigned	-	-	29,853	-	29,853
Net Cost of Operations	**$** -	**$ (279)**	**$ 55,708**	**$ (19)**	**$ 55,410**

FEDERAL ENERGY REGULATORY COMMISSION	POWER MARKETING ADMINISTRATIONS	ALL OTHER DOE PROGRAMS	ELIMINATIONS	CONSOLIDATED
		FY 2011		
$ -	$ 3,840	$ 13,502	$ (27)	$ 17,315
-	(4,512)	(3,915)	27	(8,400)
-	**(672)**	**9,587**	**-**	**8,915**
-	-	4,892	(20)	4,872
-	-	(32)	-	(32)
-	**-**	**4,860**	**(20)**	**4,840**
-	-	16,731	(33)	16,698
-	-	(375)	-	(375)
-	**-**	**16,356**	**(33)**	**16,323**
-	**(672)**	**30,803**	**(53)**	**30,078**
-	279	4,018	(40)	4,257
-	(342)	(3,866)	40	(4,168)
-	**(63)**	**152**	**-**	**89**
317	-	678	(169)	826
(317)	-	(209)	169	(357)
-	**-**	**469**	**-**	**469**
-	(6)	(7,875)	-	(7,881)
-	13	21,222	-	21,235
$ -	**$ (728)**	**$ 44,771**	**$ (53)**	**$ 43,990**

U.S. Department of Energy Consolidating Schedules of Changes in Net Position

For the Years Ended September 30, 2012 and 2011

(See independent auditors' report)

($ IN MILLIONS)	FEDERAL ENERGY REGULATORY COMMISSION	POWER MARKETING ADMINISTRATIONS	ALL OTHER DOE PROGRAMS	ELIMINATIONS	CONSOLIDATED
	FY 2012				
CUMULATIVE RESULTS OF OPERATIONS:					
Beginning Balances	$ (10)	$ 1,856	$ (229,048)	$ -	$ (227,202)
Budgetary Financing Sources:					
Appropriations Used	$ -	$ 2	$ 35,382	$ -	$ 35,384
Non-Exchange Revenue	-	-	55	-	55
Donations and Forfeitures of Cash	-	-	11	-	11
Transfers - In/(Out) Without Reimbursement	-	(174)	(13)	9	(178)
Other Financing Sources (Non-Exchange):					
Donations and Forfeitures of Cash	-	38	-	-	38
Transfers - In/(Out) Without Reimbursement	(30)	(145)	(5)	(9)	(189)
Imputed Financing from Costs Absorbed by Others	14	1	2,714	-	2,729
Other	44	15	(1,127)	(19)	(1,087)
Total Financing Sources	**$ 28**	**$ (263)**	**$ 37,017**	**$ (19)**	**$ 36,763**
Net Cost of Operations	-	279	(55,708)	19	(55,410)
Net Change	**$ 28**	**$ 16**	**$ (18,691)**	**$ -**	**$ (18,647)**
Total Cumulative Results of Operations	**$ 18**	**$ 1,872**	**$ (247,739)**	**$ -**	**$ (245,849)**
UNEXPENDED APPROPRIATIONS:					
Beginning Balances	$ 29	$ 3	$ 37,730	$ -	$ 37,762
Budgetary Financing Sources:					
Appropriations Received	$ -	$ -	$ 26,528	$ -	$ 26,528
Appropriations Transferred - In/(Out)	-	-	9	-	9
Other Adjustments	(29)	-	(790)	-	(819)
Appropriations Used	-	(2)	(35,382)	-	(35,384)
Total Budgetary Financing Sources	**$ (29)**	**$ (2)**	**$ (9,635)**	**$ -**	**$ (9,666)**
Total Unexpended Appropriations	**$ -**	**$ 1**	**$ 28,095**	**$ -**	**$ 28,096**
Net Position	**$ 18**	**$ 1,873**	**$ (219,644)**	**$ -**	**$ (217,753)**

FEDERAL ENERGY REGULATORY COMMISSION	POWER MARKETING ADMINISTRATIONS	ALL OTHER DOE PROGRAMS	ELIMINATIONS	CONSOLIDATED
		FY 2011		
$ (9)	$ 2,093	$ (222,937)	$ -	$ (220,853)
$ 2	$ 4	$ 37,716	$ -	$ 37,722
-	-	59	-	59
-	-	15	-	15
-	(288)	(14)	-	(302)
-	9	6	-	15
(19)	(705)	(18)	-	(742)
16	1	5,221	-	5,238
-	14	(4,325)	(53)	(4,364)
$ (1)	**$ (965)**	**$ 38,660**	**$ (53)**	**$ 37,641**
-	728	(44,771)	53	(43,990)
$ (1)	**$ (237)**	**$ (6,111)**	**$ -**	**$ (6,349)**
$ (10)	**$ 1,856**	**$ (229,048)**	**$ -**	**$ (227,202)**
$ 32	$ 6	$ 46,961	$ -	$ 46,999
$ -	$ -	$ 29,031	$ -	$ 29,031
-	-	3	-	3
(1)	1	(549)	-	(549)
(2)	(4)	(37,716)	-	(37,722)
$ (3)	**$ (3)**	**$ (9,231)**	**$ -**	**$ (9,237)**
$ 29	**$ 3**	**$ 37,730**	**$ -**	**$ 37,762**
$ 19	**$ 1,859**	**$ (191,318)**	**$ -**	**$ (189,440)**

U.S. Department of Energy Combining Schedules of Budgetary Resources

For the Years Ended September 30, 2012 and 2011

(See independent auditors' report)

($ IN MILLIONS)	FEDERAL ENERGY REGULATORY COMMISSION	POWER MARKETING ADMINISTRATIONS	ALL OTHER DOE PROGRAMS	COMBINED
		FY 2012		
BUDGETARY RESOURCES:				
Unobligated Balance Brought Forward, October 1	$ 20	$ 500	$ 13,595	$ 14,115
Recoveries of Prior Year Unpaid Obligations	1	9	1,683	1,693
Other Changes in Unobligated Balance	-	-	(1,069)	(1,069)
Unobligated Balance from Prior Year Budget Authority, Net	$ 21	$ 509	$ 14,209	$ 14,739
Appropriations	3	108	26,265	26,376
Borrowing Authority	-	806	4	810
Contract Authority	-	1,272	-	1,272
Spending Authority from Offsetting Collections	305	2,695	5,095	8,095
Total Budgetary Resources	**$ 329**	**$ 5,390**	**$ 45,573**	**$ 51,292**
STATUS OF BUDGETARY RESOURCES:				
Obligations Incurred	$ 308	$ 4,639	$ 32,715	$ 37,662
Unobligated Balance, End of Year:				
Apportioned	$ 21	$ 576	$ 9,005	$ 9,602
Exempt from Apportionment	-	9	9	18
Unapportioned	-	166	3,844	4,010
Total Unobligated Balance, End of Year	**$ 21**	**$ 751**	**$ 12,858**	**$ 13,630**
Total Budgetary Resources	**$ 329**	**$ 5,390**	**$ 45,573**	**$ 51,292**
CHANGE IN OBLIGATED BALANCE:				
Unpaid Obligations, Brought Forward, October 1	$ 34	$ 3,060	$ 50,790	$ 53,884
Uncollected Customer Payments from Federal Sources, Brought Forward, October 1	-	(368)	(6,788)	(7,156)
Obligated Balance, Start of Year, Net	**$ 34**	**$ 2,692**	**$ 44,002**	**$ 46,728**
Obligations Incurred	308	4,639	32,715	37,662
Outlays, Gross	(305)	(4,632)	(47,881)	(52,818)
Change in Uncollected Customer Payments from Federal Sources	-	(3)	1,664	1,661
Recoveries of Prior Year Unpaid Obligations	(1)	(9)	(1,683)	(1,693)
Obligated Balance, End of Year:				
Unpaid Obligations, End of Year	$ 36	$ 3,058	$ 33,941	$ 37,035
Uncollected Customer Payments from Federal Sources, End of Year	-	(371)	(5,124)	(5,495)
Obligated Balance, End of Year, Net	**$ 36**	**$ 2,687**	**$ 28,817**	**$ 31,540**
BUDGET AUTHORITY AND OUTLAYS, NET:				
Budget Authority, Gross	$ 308	$ 4,881	$ 31,364	36,553
Actual Offsetting Collections	(305)	(4,406)	(6,815)	(11,526)
Change in Uncollected Customer Payments from Federal Sources	-	(3)	1,664	1,661
Budget Authority, Net	**$ 3**	**$ 472**	**$ 26,213**	**$ 26,688**
Outlays, Gross	$ 305	$ 4,632	$ 47,881	52,818
Actual Offsetting Collections	(305)	(4,406)	(6,815)	(11,526)
Outlays, Net	$ -	$ 226	$ 41,066	$ 41,292
Distributed Offsetting Receipts	(179)	(510)	(3,443)	(4,132)
Agency Outlays, Net	**$ (179)**	**$ (284)**	**$ 37,623**	**$ 37,160**

FEDERAL ENERGY REGULATORY COMMISSION	POWER MARKETING ADMINISTRATIONS	ALL OTHER DOE PROGRAMS	COMBINED
	FY 2011		
$ 12	$ 488	$ 12,809	$ 13,309
3	-	184	187
-	-	(35)	(35)
$ 15	$ 488	$ 12,958	$ 13,461
6	122	29,254	29,382
-	1,048	10,152	11,200
-	1,288	-	1,288
297	2,428	4,965	7,690
$ 318	**$ 5,374**	**$ 57,329**	**$ 63,021**
$ 298	$ 4,874	$ 43,734	$ 48,906
$ 19	$ 484	5,735	$ 6,238
-	15	14	29
1	1	7,846	7,848
$ 20	**$ 500**	**$ 13,595**	**$ 14,115**
$ 318	**$ 5,374**	**$ 57,329**	**$ 63,021**
$ 46	$ 2,898	$ 54,701	$ 57,645
-	(357)	(6,234)	(6,591)
$ 46	**$ 2,541**	**$ 48,467**	**$ 51,054**
298	4,874	43,734	48,906
(307)	(4,712)	(47,461)	(52,480)
-	(11)	(554)	(565)
(3)	-	(184)	(187)
$ 34	$ 3,060	$ 50,790	$ 53,884
-	(368)	(6,788)	(7,156)
$ 34	**$ 2,692**	**$ 44,002**	**$ 46,728**
$ 303	$ 4,886	$ 44,371	49,560
(298)	(4,160)	(6,044)	(10,502)
-	(11)	(554)	(565)
$ 5	**$ 715**	**$ 37,773**	**$ 38,493**
$ 307	$ 4,712	$ 47,461	52,480
(298)	(4,160)	(6,044)	(10,502)
$ 9	$ 552	$ 41,417	41,978
(40)	(622)	(6,644)	(7,306)
$ (31)	**$ (70)**	**$ 34,773**	**$ 34,672**

U.S. Department of Energy Consolidating Schedules of Custodial Activities

For the Years Ended September 30, 2012 and 2011

(See independent auditors' report)

($ IN MILLIONS)	FEDERAL ENERGY REGULATORY COMMISSION	POWER MARKETING ADMINISTRATIONS	ALL OTHER DOE PROGRAMS	ELIMINATIONS	CONSOLIDATED
		FY 2012			
SOURCES OF COLLECTIONS:					
Cash Collections:					
Power Marketing Administrations	$ -	$ 783	$ -	$ -	$ 783
Federal Energy Regulatory Commission	178	-	-	-	178
Total Cash Collections	**$ 178**	**$ 783**	**$ -**	**$ -**	**$ 961**
Accrual Adjustment	1	(9)	-	-	(8)
Total Custodial Revenue	**$ 179**	**$ 774**	**$ -**	**$ -**	**$ 953**
DISPOSITION OF COLLECTIONS:					
Transferred to Others:					
Bureau of Reclamation	(7)	(408)	-	-	(415)
Department of the Treasury	(163)	(296)	-	-	(459)
Army Corps of Engineers	(8)	(80)	-	-	(88)
Others	-	-	-	-	-
Decrease/(Increase) in Amounts to be Transferred	(1)	10	-	-	9
Net Custodial Activity	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

FEDERAL ENERGY REGULATORY COMMISSION	POWER MARKETING ADMINISTRATIONS	ALL OTHER DOE PROGRAMS	ELIMINATIONS	CONSOLIDATED
		FY 2011		
$ -	$ 819	$ -	$ -	$ 819
48	-	-	-	48
$ 48	**$ 819**	**$ -**	**$ -**	**$ 867**
(20)	-	-	-	(20)
$ 28	**$ 819**	**$ -**	**$ -**	**$ 847**
(13)	(478)	-	-	(491)
(19)	(287)	-	-	(306)
(9)	(54)	-	-	(63)
(6)	-	-	-	(6)
19	-	-	-	19
$ -	**$ -**	**$ -**	**$ -**	**$ -**

Required Supplementary Stewardship Information (RSSI)

Supplementary Stewardship Reporting on Research and Development Costs for Fiscal Years 2012 through 2009. *UNAUDITED – See accompanying Auditors' Report.*

($ IN MILLIONS)	STRATEGIC GOALS	STRATEGIC OBJECTIVES	GPRA UNIT	DIRECT COST	FY2012 DEPRECIATION & OTHER	TOTAL
BASIC	Transform Our Energy Systems	Discover the new solutions we need	Geothermal Technology	$ -	$ -	$ -
			Biomass and Biorefinery	-	-	-
			Clean Coal	5	1	6
		Deploy the technologies we have	Natural Gas Technology	-	-	-
			Petroleum Technologies	-	-	-
			Electricity Delivery and Energy Reliability	6	1	7
			Building Technologies	9	1	10
			Bonneville Power Administration	9	-	9
	The Science and Engineering Enterprise	Extend Our Knowledge of the Natural World	High Energy Physics	711	126	837
			Basic Energy Sciences	1,411	278	1,689
			Biological and Environmental Research	263	49	312
			Nuclear Physics	456	131	587
			Isotope Program	19	-	19
		Deliver new technologies to advance our mission	Advanced Scientific Computing	330	88	418
			Biological and Environmental Research	494	52	546
			Fusion Energy	278	43	321
	Secure Our Nation	Reduce global nuclear dangers	Nonproliferation and Verification R&D	53	2	55
TOTAL BASIC				**$ 4,044**	**$ 772**	**$ 4,816**
APPLIED	Transform Our Energy Systems	Discover the new solutions we need	Solar Energy	$ 79	$ 3	$ 82
			Wind Energy	24	5	29
			Geothermal Technology	39	3	42
			Hydrogen and Fuel Cell Technologies	50	6	56
			Advanced Research Projects Agency - Energy	92	-	92
			Biomass and Biorefinery	78	10	88
			Water Power	4	-	4
			Vehicle Technologies	61	7	68
			New Nuclear Generation Technologies	139	16	155
			Clean Coal	213	52	265
		Deploy the technologies we have	Advanced Manufacturing Office	34	2	36
			Building Technologies	85	12	97
			Natural Gas Technology	7	1	8
			Petroleum Technologies	-	-	-
			Electricity Delivery and Energy Reliability	46	5	51
			Bonneville Power Administration	5	-	5
	Secure Our Nation	Support responsible civilian nuclear power development and fuel cycle management	Fuel Cycle R&D and International Framework	145	25	170
			Nuclear Waste Disposal	-	-	-
		Support the U.S. nuclear stockpile and future mililtary needs	Directed Stockpile Work	217	5	222
			Science Campaign	289	23	312
			Engineering Campaign	130	7	137
			Inertial Confinement Fusion Ignition	420	49	469
			Advanced Simulation and Computing Campaign	42	70	112
			Readiness Campaign	-	-	-
			Readiness in Technical Base and Facilities	-	-	-
			Pit Manufacturing and Certification Campaign	-	1	1
			Facilities and Infrastructure Recapitalization	26	-	26
		Reduce global nuclear dangers	Nonproliferation and Verification	215	15	230
		Apply our capabilities for other critical national security missions	Nuclear Counterterrorism Incident Response	48	5	53
			Counterterrorism and Counterproliferation	10	1	11
		Complete environmental remediation of our legacy and active sites	Legacy Footprint Reduction	11	-	11
			Tank Waste Completed	-	-	-
TOTAL APPLIED				**$ 2,509**	**$ 323**	**$ 2,832**
DEVELOPMENT	Transform Our Energy Systems	Discover the new solutions we need	Solar Energy	$ 79	$ 3	$ 82
			Wind Energy	35	6	41
			Geothermal Technology	19	1	20
			Hydrogen and Fuel Cell Technologies	32	3	35
			Advanced Research Projects Agency - Energy	39	-	39
			Biomass and Biorefinery	273	12	285
			Water Power	17	2	19
			Vehicle Technologies	171	18	189
			New Nuclear Generation Technologies	36	10	46
			Clean Coal	266	65	331
		Deploy the technologies we have	Advance Manufacturing Office	56	5	61
			Building Technologies	119	22	141
			Natural Gas Technology	9	1	10
			Petroleum Technologies	-	-	-
			Electricity Delivery and Energy Reliability	24	1	25
			Bonneville Power Administration	1	-	1
	Secure Our Nation	Support responsible civilian nuclear power development and fuel cycle management	Fuel Cycle R&D and International Framework	-	-	-
		Support the U.S. nuclear stockpile and future military needs	Readiness and Technical Base and Facilities	483	197	680
		Reduce global nuclear dangers	Nonproliferation and Verification R&D	38	2	40
			Nuclear Counterterrorism Incident Response	8	-	8
		Apply our capabilities for other critical national security missions	Naval Reactors	935	45	980
		Complete environmental remediation of our legacy and active sites	Legacy Footprint Reduction	22	-	22
			Tank Waste Completed	-	-	-
TOTAL DEVELOPMENT				**$ 2,662**	**$ 393**	**$ 3,055**
TOTAL R&D				**$ 9,215**	**$ 1,488**	**$ 10,703**

R&D totals for FY 2008 were $8,940.

FY2011			FY2010			FY2009		
DIRECT COST	DEPRECIATION & OTHER	TOTAL	DIRECT COST	DEPRECIATION & OTHER	TOTAL	DIRECT COST	DEPRECIATION & OTHER	TOTAL
$ -	$ -	$ -	$ -	$ -	$ -	$ 3	$ 1	$ 4
4	1	5	2	-	2	1	-	1
6	2	8	5	1	6	3	1	4
-	-	-	-	-	-	10	3	13
-	-	-	-	-	-	-	-	-
4	1	5	1	-	1	-	-	-
-	-	-	-	-	-	-	-	-
8	-	8	-	-	-	-	-	-
723	129	852	659	109	768	648	133	781
1,280	277	1,557	1,170	204	1,374	1,012	194	1,206
301	46	347	282	28	310	250	21	271
417	145	562	414	116	530	391	84	475
12	-	12	10	-	10	-	-	-
383	97	480	269	82	351	248	77	325
481	54	535	428	48	476	406	41	447
276	39	315	265	29	294	244	44	288
42	2	44	30	3	33	133	10	143
$ 3,937	**$ 793**	**$ 4,730**	**$ 3,535**	**$ 620**	**$ 4,155**	**$ 3,349**	**$ 609**	**$ 3,958**
$ 33	$ 1	$ 34	$ 44	$ 3	$ 47	$ 36	$ 4	$ 40
28	4	32	20	1	21	9	1	10
43	3	46	22	2	24	5	1	6
89	14	103	107	8	115	107	14	121
64	-	64	16	-	16	3	-	3
79	8	87	67	7	74	56	6	62
19	2	21	12	1	13	2	1	3
100	13	113	71	7	78	70	7	77
55	8	63	113	64	177	52	23	75
250	74	324	200	55	255	112	37	149
52	5	57	51	3	54	20	2	22
74	11	85	38	2	40	27	3	30
10	3	13	5	2	7	10	3	13
3	1	4	4	1	5	3	1	4
35	5	40	11	-	11	37	2	39
4	-	4	3	-	3	7	-	7
139	21	160	135	55	190	68	18	86
-	-	-	-	-	-	2	-	2
419	29	448	334	26	360	295	20	315
247	22	269	275	23	298	310	20	330
108	8	116	149	8	157	121	10	131
57	26	83	137	53	190	120	-	120
411	72	483	475	69	544	418	112	530
-	-	-	-	-	-	2	-	2
-	-	-	-	-	-	-	5	5
-	2	2	1	2	3	21	4	25
-	-	-	-	-	-	-	-	-
189	18	207	144	12	156	30	2	32
59	3	62	-	-	-	46	2	48
-	-	-	-	-	-	-	-	-
30	1	31	16	2	18	11	2	13
116	1	117	125	2	127	-	-	-
$ 2,713	**$ 355**	**$ 3,068**	**$ 2,575**	**$ 408**	**$ 2,983**	**$ 2,000**	**$ 300**	**$ 2,300**
$ 46	$ 2	$ 48	$ 41	$ 3	$ 44	$ 44	$ 6	$ 50
36	7	43	29	1	30	9	1	10
25	2	27	16	1	17	9	2	11
29	5	34	29	2	31	29	3	32
59	-	59	15	-	15	3	-	3
53	4	57	46	3	49	40	4	44
36	5	41	22	1	23	2	1	3
101	14	115	124	11	135	107	10	117
28	5	33	40	23	63	-	-	-
313	92	405	251	68	319	146	48	194
62	7	69	61	4	65	25	3	28
96	15	111	55	4	59	47	5	52
13	4	17	7	2	9	-	-	-
4	1	5	5	2	7	4	1	5
15	2	17	6	-	6	34	1	35
1	-	1	-	-	-	1	-	1
-	-	-	-	-	-	1	1	2
502	235	737	431	271	702	714	232	946
43	3	46	86	10	96	77	7	84
-	-	-	-	-	-	10	1	11
812	42	854	821	70	891	728	61	789
60	3	63	32	4	36	22	3	25
235	3	238	243	4	247	-	-	-
$ 2,569	**$ 451**	**$ 3,020**	**$ 2,360**	**$ 484**	**$ 2,844**	**$ 2,052**	**$ 390**	**$ 2,442**
$ 9,219	**$ 1,599**	**$ 10,818**	**$ 8,470**	**$ 1,512**	**$ 9,982**	**$ 7,401**	**$ 1,299**	**$ 8,700**

Investment in Research and Development

The Department's research and development programs are classified as Basic Research, Applied Research, and Development. Research and Development (R&D) program offices facilitate the creation, advancement, and deployment of the new technologies and support the Department's mission to ensure America's security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions. (Examples of R&D investments are discussed in the section on "Strategic Plan and Program Performance.")

Goal 1: Transform Our Energy Systems

(Basic, Applied, and Development)

The Office of Energy Efficiency and Renewable Energy (EERE) invests in high-value research and development, as well as deployment and promotion activities that would not be sufficiently conducted by the private sector. EERE works with public and private sector decision makers, partners, and other stakeholders to develop programs and policies to facilitate the technologies and practices through efficiency mechanisms such as appliance efficiency standards, model building codes, federal fleet initiatives, energy education activities, and financial assistance grants. Program activities include: Hydrogen Technology, Biomass & Biorefinery Systems R&D, Solar Energy, Wind Energy, Geothermal Technology, Water Power, Vehicle Technologies, Building Technologies, Advanced Manufacturing, Federal Energy Management Program, and Weatherization and Intergovernmental Activities.

As an example, the EERE Building Technologies program connects basic and applied sciences by developing the next generation of highly efficient technologies and practices for both residential and commercial buildings through Emerging Technologies R&D activities. Similarly, the EERE Advanced Manufacturing program connects basic and applied sciences and re-energizes the national labs by bringing together industry, national laboratories, and academia to spur innovations that work in real industrial environments to save energy and reduce emissions. It also integrates national laboratory, university, and industry activities by competitively awarding cost-shared funding to collaborative research teams that rely on industry's active participation to ensure that the technologies meet real-world criteria, thus accelerating technology commercialization.

The Advanced Research Projects Agency-Energy (ARPA-E) supports energy technology innovations that are aimed at enhancing the energy security of the United States through the development of transformational technologies. ARPA-E focuses on high-impact innovations, translating science into breakthrough technologies that promise genuine transformation in the way energy is generated, stored, and utilized. ARPA-E funds technologies that are not being supported by other parts of DOE or the private sector because of technical and financial uncertainty.

The Office of Fossil Energy (FE) mission is to enhance U.S. economic and energy security by managing and performing energy-related research that maximizes the efficient and environmentally sound production and use of fossil fuels; supporting the development of policy options that benefit the U.S. public by ensuring access to adequate supplies of affordable and clean energy; partnering with industry and others to advance clean and efficient fossil energy; maintaining strategic crude and heating oil supplies to protect the United States against sudden and major supply interruptions and shortages; and maximizing the value of certain government-owned oil and gas fields. Relative to the nation's coal resources, FE plays a leadership role in the development of clean coal technologies with a focus on Carbon Capture, Utilization and Storage (CCUS). CCUS is designed to enhance our energy security and reduce environmental concerns over the future use of coal by developing a portfolio of revolutionary technologies. The program, in partnership with the private sector, is focused on maximizing efficiency and environmental performance, while minimizing the costs of emerging technologies by pursuing two key strategies: (1) the capture, storage and utilization of carbon dioxide - a potent greenhouse gas, and (2) improving the efficiency of fossil energy systems. Past FE research in hydraulic fracturing and horizontal drilling facilitated the current shale gas boom that is benefiting the nation. Current research efforts focused on natural gas hydrates could potentially unlock vast quantities of natural gas that could benefit the nation for hundreds of years. Building off the early technological successes for producing shale gas, the program is now focusing on removing any remaining environmental concerns with the production of shale gas resources.

The Office of Nuclear Energy (NE) supports the diverse civilian nuclear energy programs of the U.S. government, leading federal efforts to research and develop nuclear energy technologies, including generation, safety, waste storage and management, and security technologies to help meet energy security, proliferation resistance, and climate goals. NE organizes its R&D activities along four main objectives that address challenges to expanding the use of nuclear power: (1) develop technologies and other solutions that can improve the reliability, sustain the safety, and extend the life of current reactors; (2) develop improvements in the affordability of new reactors to enable nuclear energy to help meet the administration's energy security and climate change goals; (3) develop sustainable nuclear fuel cycles; and (4) understanding and minimization of risks of nuclear proliferation and terrorism.

The Office of Electricity Delivery and Energy Reliability research and development initiatives focus on developing

the next generation of innovative technologies to improve the reliability, efficiency, flexibility, and security of the nation's electricity grid. Transmission reliability research advances technologies that can provide unprecedented information on transmission system health, enhancing system reliability and reducing the frequency and duration of operational disturbances. Advanced modeling research develops the computational tools and algorithms for real-time understanding of grid conditions. Research on energy storage technologies can reduce peak prices of electricity and increase asset utilization as well as improve accessibility to a variety of energy generation sources. Cybersecurity for energy delivery systems research is advancing resilient energy delivery systems that are designed, installed, operated and maintained to survive a cyber event while sustaining critical functions. Smart grid research is aimed at the distribution level of the grid, with a goal of self-healing from grid disturbances, improving reliability, and improved integration for greater system efficiency while enabling greater consumer participation in managing their energy use.

A Technology Innovation office within the Bonneville Power Administration (BPA) is used to focus and manage technology initiatives, as well as to help guide the development of a robust research and development portfolio, drawing from staff that are already engaged in BPA's dispersed research and development work. Current projects fall under categories of energy efficiency and interactability, renewable resource/wind integration, and transmission operations and control. An example is the Development and Demonstration of Advanced Lighting Technologies project, where the objective is to demonstrate the applicability of advanced, high-efficiency lighting technologies that can be controlled through energy management systems, lighting based control systems, and/or demand response control systems that utilize Internet protocol based remote control and command to allow the reduction of lighting loads.

Goal 2: The Science and Engineering Enterprise

(Basic)

The Office of Science supports research activities in the following areas: Advanced Scientific Computing Research relevant to the complex challenges faced by the Department and providing world class supercomputer and networking facilities for scientists; Basic Energy Sciences, including work in the natural sciences that emphasizes fundamental research in materials physics, chemistry, geosciences, and physical biosciences; Biological and Environmental Research, which provides the foundational science for alternative fuels, advanced climate predictions, terrestrial carbon sequestration, subsurface bio-geo-processes, and radiobiology at a range of scales from individual molecules to the whole Earth; Fusion Energy Sciences, including broad-based fundamental research efforts aimed at producing the knowledge needed to develop a fusion energy source, and to be among the world leaders in plasma physics and high energy density physics research; High Energy Physics activities directed at understanding the nature of matter and energy; Nuclear Physics activities directed at understanding the fundamental forces and particles of nature as manifested in nuclear matter; and Small Business Innovation Research/Technology Transfer support for energy related technologies.

Additionally, Science supports the operation of a geographically diverse suite of major facilities that provide thousands of researchers from universities, industry, and government laboratories unique tools to advance a wide range of sciences. These user facilities are operated on an open access, competitive merit review, basis, enabling scientists from every state and of many disciplines from academia, national laboratories, and industry to utilize the facilities' unique capabilities and sophisticated instrumentation.

Goal 3: Secure Our Nation

(Basic, Applied, and Development)

Although critical to the U.S. nuclear deterrent strategy, the nation has not deployed a new nuclear weapon in over 20 years, nor conducted an underground nuclear test since 1992. Instead, scientists at the National Nuclear Security Administration (NNSA) maintain the warheads in the stockpile well beyond their originally intended life by using sophisticated supercomputers, facilities, and computer codes that test and predict the safety, security, and reliability of U.S. weapons in NNSA laboratories.

The NNSA Proliferation Detection program provides technical expertise and leadership toward the development of next-generation nuclear detection technologies and methods to detect foreign nuclear materials and weapons production. This program develops the tools, technologies, and techniques used to detect, locate, and analyze the global proliferation of nuclear weapons technology with special emphasis on technology to detect the illicit diversion of special nuclear materials and support for U.S. commitments to international treaties such as the Nonproliferation Treaty.

The NNSA Nuclear Detonation Detection program develops and builds the nation's operational space-based sensors to detect and report world-wide nuclear detonations; produces and delivers advanced technology that enable operation of the nation's ground-based nuclear detection networks and develops tools, technologies, and related science for collecting and analyzing forensic information related to nuclear detonations.

The NNSA Naval Reactors program's research and development efforts support new reactor plant development, new technologies for future fleet application, and continued, reliable operation of the nuclear fleet.

The Office of Environmental Management maintains a Technology Development and Deployment program. The overall goal of this program is to eliminate technical barriers to cleanup by reducing technical uncertainty, improving safety performance by applying improved or new technologies, increasing confidence in achieving long-term cleanup goals, addressing emerging issues, and leveraging investments in scientific research conducted by other parts of the Department.

Required Supplementary Information (RSI)

UNAUDITED – See accompanying Auditors' Report

This section of the report provides required supplementary information for the Department on deferred maintenance and budgetary resources by major budget account.

Deferred Maintenance

Deferred maintenance information is a requirement under SFFAS No.6, Accounting for Property, Plant and Equipment, and SFFAS No. 14, Amendments to Deferred Maintenance, which requires deferred maintenance to be disclosed as of the end of each FY. Deferred maintenance is defined in SFFAS No. 6 as "maintenance that was not performed when it should have been or was scheduled to be and which, therefore, is put off or delayed for a future period." Estimates were developed for:

Buildings and Other Structures and Facilities	$4,719 million
Capital Equipment	119 million
Total	$4,838 million

Buildings and Other Structures and Facilities

The condition assessment survey (periodic inspections) method was used in measuring a deferred maintenance estimate for buildings and other structures and facilities except for some structures and facilities where a physical barrier was present (e.g., underground pipe systems). In those cases, where a deficiency is identified during normal operations and correction of the deficiency is past due, a deferred maintenance estimate would be applicable. Also, where appropriate, results from previous condition assessments have been adjusted to estimate current plant conditions. Deferred maintenance for excess property was reported only in situations where maintenance is needed for worker and public health and safety concerns.

The Department determines deferred maintenance and acceptable operating condition through various methods, including periodic condition assessments, physical inspections, review of work orders, manufacturer and engineering specification, and other methods.

As of September 30, 2012, an amount of $4,719 million of deferred maintenance was estimated to be required to return the facilities to acceptable operating condition. The percentage of active buildings above acceptable operating condition is estimated at 69 percent.

Capital Equipment

Pursuant to the cost/benefit considerations provided in SFFAS No. 6, the Department has determined that the requirements for deferred maintenance reporting on personal property (capital equipment) are not applicable to property items with an acquisition cost of less than $100,000, except in situations where maintenance is needed to address worker and public health and safety concerns.

Various methods were used for measuring deferred maintenance and determining acceptable operating condition for the Department's capital equipment including periodic condition assessments, physical inspections, review of work orders, manufacturer and engineering specification, and other methods, as appropriate.

An amount of $119 million of deferred maintenance was estimated to be needed as of September 30, 2012, to return capital equipment assets to acceptable operating condition.

Budgetary Resources by Major Account for Recovery Act (RA) & Non-Recovery Act Accounts

For the Year Ended September 30, 2012

($ IN MILLIONS)	Recovery Act Accounts				
	Innovative Tech LG, RA 019-20-0208	Fossil Energy R&D, RA 019-20-0213	Departmental Admin, RA 019-60-0228	Inspector General, RA 019-60-0236	Defense Environ Cleanup, RA 019-10-0251
BUDGETARY RESOURCES:					
Unobligated Balance, Brought Forward, Oct 1	$ 551	$ -	$ 31	$ 4	$ 1
Recoveries of Prior Year Unpaid Obligations	17	153	2	-	1
Other Changes in Unobligated Balance	-	-	-	-	-
Budget Authority, Gross	-	-	-	-	-
Total Budgetary Resources	$ 568	$ 153	$ 33	$ 4	$ 2
STATUS OF BUDGETARY RESOURCES:					
Obligations Incurred	$ -	$ -	$ 33	$ 4	$ -
Unobligated Balances Available	552	-	-	-	-
Unobligated Balances not Available	16	153	-	-	2
Total Budgetary Resources	$ 568	$ 153	$ 33	$ 4	$ 2
CHANGE IN OBLIGATED BALANCE:					
Obligated Balance, Start of Year, Net	$ 1,538	$ 3,016	$ 33	$ 2	$ 581
Obligations Incurred	-	-	33	4	-
Outlays, Gross	(559)	(405)	(45)	(6)	(504)
Change in Uncollected Customer Payments from Federal Sources	-	-	-	-	-
Recoveries of Prior Year Unpaid Obligations	(17)	(153)	(2)	-	(1)
Obligated Balance, End of Year	$ 962	$ 2,458	$ 19	$ -	$ 76
Agency Outlays, Net	$ 559	$ 405	$ 45	$ 6	$ 504

	Electricity Delivery and Energy Reliability, RA 019-20-0318	Adv Tech Vehicles Manufact LP, RA 019-20-0322	Energy Transformation Acceleration, RA 019-20-0336	Bonneville Power Administration Fund, RA 019-50-4045	WAPA, Borrowing Authority, RA 019-50-4404
BUDGETARY RESOURCES:					
Unobligated Balance, Brought Forward, Oct 1	$ -	$ 1	$ -	$ -	$ -
Recoveries of Prior Year Unpaid Obligations	9	-	7	-	9
Other Changes in Unobligated Balance	-	-	-	-	-
Budget Authority, Gross	-	-	-	279	152
Total Budgetary Resources	$ 9	$ 1	$ 7	$ 279	$ 161
STATUS OF BUDGETARY RESOURCES:					
Obligations Incurred	$ -	$ 1	$ -	$ 279	$ -
Unobligated Balances Available	-	-	-	-	-
Unobligated Balances not Available	9	-	7	-	161
Total Budgetary Resources	$ 9	$ 1	$ 7	$ 279	$ 161
CHANGE IN OBLIGATED BALANCE:					
Obligated Balance, Start of Year, Net	$ 2,656	$ -	$ 220	$ -	$ 126
Obligations Incurred	-	1	-	279	-
Outlays, Gross	(1,288)	-	(114)	(279)	(27)
Change in Uncollected Customer Payments from Federal Sources	-	-	-	-	-
Recoveries of Prior Year Unpaid Obligations	(9)	-	(7)	-	(9)
Obligated Balance, End of Year	$ 1,359	$ 1	$ 99	$ -	$ 90
Agency Outlays, Net	$ 1,288	$ -	$ 114	$ 279	$ (124)

	Energy Efficiency & Renewable Energy, RA 019-20-0321	Other Recovery Act Accounts	Innovative Tech Direct Loan Fin Acct, RA Non-Budgetary 019-20-4455	T17 Innovative Tech Guar Loan Fin Acct, RA Non-Budgetary 019-20-4577	Subtotal of Recovery Act Accounts
BUDGETARY RESOURCES:					
Unobligated Balance, Brought Forward, Oct 1	$ 11	$ 1	$ 1,498	$ 424	$ 2,522
Recoveries of Prior Year Unpaid Obligations	84	-	120	-	402
Other Changes in Unobligated Balance	-	-	(184)	-	(184)
Budget Authority, Gross	-	-	543	18	992
Total Budgetary Resources	$ 95	$ 1	$ 1,977	$ 442	$ 3,732
STATUS OF BUDGETARY RESOURCES:					
Obligations Incurred	$ -	$ -	$ 203	$ -	$ 520
Unobligated Balances Available	-	-	10	2	564
Unobligated Balances not Available	95	1	1,764	440	2,648
Total Budgetary Resources	$ 95	$ 1	$ 1,977	$ 442	$ 3,732
CHANGE IN OBLIGATED BALANCE:					
Obligated Balance, Start of Year, Net	$ 7,056	$ 631	$ 6,868	$ (347)	$ 22,380
Obligations Incurred	-	-	203	-	520
Outlays, Gross	(4,555)	(368)	(3,479)	-	(11,629)
Change in Uncollected Customer Payments from Federal Sources	-	1	509	66	576
Recoveries of Prior Year Unpaid Obligations	(84)	-	(120)	-	(402)
Obligated Balance, End of Year	$ 2,417	$ 264	$ 3,981	$ (281)	$ 11,445
Agency Outlays, Net	$ 4,555	$ 368	$ 2,378	$ (84)	$ 10,293

Non-Recovery Act Accounts				
Science 019-20-0222	SPR Petroleum Account 019-20-0233	Weapons Activities 019-05-0240	Other Defense Activities 019-10-0243	Defense Environ Cleanup 019-10-0251
$ 38	$ 3,243	$ 26	$ 25	$ 19
12	-	41	4	5
2		-	-	-
5,492	(500)	8,530	2,517	5,003
$ 5,544	$ 2,743	$ 8,597	$ 2,546	$ 5,027
$ 5,502	$ -	$ 8,386	$ 2,528	$ 4,947
39	2,743	204	18	77
3	-	7	-	3
$ 5,544	$ 2,743	$ 8,597	$ 2,546	$ 5,027
$ 3,927	$ 25	$ 3,258	$ 187	$ 2,052
5,502	-	8,386	2,528	4,947
(5,580)	(6)	(8,669)	(2,536)	(5,178)
23	-	38	52	-
(12)	-	(41)	(4)	(5)
$ 3,860	$ 19	$ 2,972	$ 227	$ 1,816
$ 4,999	$ 6	$ 7,315	$ 791	$ 5,178
Defense Nuclear Nonproliferation 019-05-0309	Naval Reactors 019-05-0314	Energy Efficiency & Renewable Energy 019-20-0321	Adv Tech Vehicles Manufact LP 019-20-0322	Bonneville Power Administration Fund 019-50-4045
$ 25	$ 5	$ 119	$ 4,064	$ 15
48	1	58	164	-
-	-	-	-	-
2,301	1,079	1,982	8	3,413
$ 2,374	$ 1,085	$ 2,159	$ 4,236	$ 3,428
$ 2,313	$ 1,070	$ 1,824	$ 7	$ 3,419
61	15	312	4,229	9
-	-	23	-	-
$ 2,374	$ 1,085	$ 2,159	$ 4,236	$ 3,428
$ 2,089	$ 269	$ 2,584	$ 1,128	$ 2,148
2,313	1,070	1,824	7	3,419
(2,525)	(1,026)	(2,134)	(849)	(3,366)
-	-	(10)	-	(19)
(48)	(1)	(58)	(164)	-
$ 1,829	$ 312	$ 2,206	$ 122	$ 2,182
$ 2,514	$ 1,026	$ 1,943	$ 849	$ 60
Construction, Rehab, Operation & Maintenance, WAPA 019-50-5068	Other Non-Recovery Act Budgetary Accounts	Subtotal of Non-Recovery Act Budgetary Accounts	Adv Tech Vehicles Manufact Direct Loan Fin Acct Non-Budgetary 019-20-4579	Combined Statement of Budgetary Resources Total
$ 310	$ 1,033	$ 8,922	$ 2,671	$ 14,115
-	227	560	731	1,693
-	(7)	(5)	(880)	(1,069)
699	4,807	35,331	230	36,553
$ 1,009	$ 6,060	$ 44,808	$ 2,752	$ 51,292
$ 639	$ 5,046	$ 35,681	$ 1,461	$ 37,662
370	979	9,056	-	9,620
-	35	71	1,291	4,010
$ 1,009	$ 6,060	$ 44,808	$ 2,752	$ 51,292
$ 272	$ 3,317	$ 21,256	$ 3,092	$ 46,728
639	5,046	35,681	1,461	37,662
(655)	(5,028)	(37,552)	(3,637)	(52,818)
14	(13)	85	1,000	1,661
-	(227)	(560)	(731)	(1,693)
$ 270	$ 3,095	$ 18,910	$ 1,185	$ 31,540
$ 38	$ (260)	$ 24,459	$ 2,408	$ 37,160

Auditors' Report

Memorandum from the Inspector General

Department of Energy
Washington, DC 20585

November 15, 2012

MEMORANDUM FOR THE SECRETARY

FROM: Gregory H. Friedman
Inspector General

SUBJECT: INFORMATION: Report on the Department of Energy's Fiscal Year 2012 Consolidated Financial Statements

Pursuant to requirements established by the *Government Management Reform Act of 1994*, the Office of Inspector General (OIG) engaged the independent public accounting firm of KPMG, LLP (KPMG) to perform the audit of the Department of Energy's (Department) Fiscal Year 2012 Consolidated Financial Statements.

KPMG audited the Department's consolidated balance sheets as of September 30, 2012 and 2011, and the related consolidated statements of net cost, changes in net position, and custodial activity, and combined statement of budgetary resources, for the years then ended. KPMG concluded that these consolidated financial statements are presented fairly, in all material respects, and in conformity with U.S. generally accepted accounting principles and has issued an unqualified opinion based on its audits and the reports of other auditors for the years ended September 30, 2012 and 2011.

As part of this review, auditors also considered the Department's internal controls over financial reporting and tested for compliance with certain provisions of applicable laws, regulations, contracts and grant agreements that could have a direct and material effect on the consolidated financial statements. The audit revealed certain deficiencies in internal control over financial reporting related to unclassified network and information systems security that were considered to be a significant deficiency. The following significant deficiency in the Department's system of internal controls is not considered a material weakness:

- Unclassified Network and Information Systems Security: Network vulnerabilities and weaknesses in access and other security controls in the Department's unclassified computer information systems continue to exist. The Department has taken steps to enhance its unclassified cyber security program, including oversight of cyber security reform efforts, issuing guidance, and the development of a notational cyber security management architecture framework to support the Department's mission-related risk management approach.

The audit disclosed no instances of noncompliance or other matters that are required to be reported under applicable audit standards and requirements.

KPMG is responsible for the attached auditor's report and the opinions and conclusions expressed therein. The OIG is responsible for technical and administrative oversight regarding KPMG's performance under the terms of the contract. Our review was not intended to enable us to express, and accordingly we do not express, an opinion on the Department's financial statements, management's assertions about the effectiveness of its internal control over financial reporting or the Department's compliance with laws and regulations. Our monitoring review disclosed no instances where KPMG did not comply with applicable auditing standards.

I would like to thank each of the Department elements for their courtesy and cooperation during the review.

Attachment

cc: Deputy Secretary
Associate Deputy Secretary
Under Secretary for Nuclear Security
Acting Under Secretary of Energy
Office of the Under Secretary for Science
Acting Deputy Chief Financial Officer
Chief of Staff

Audit Report: OAS-FS-13-04

http://www.cfo.doe.gov/cf12/2012parAFR.pdf

Independent Auditors' Report

KPMG LLP
Suite 12000
1801 K Street, NW
Washington, DC 20006

Independent Auditors' Report

The Inspector General, United States Department of Energy and
The Secretary, United States Department of Energy:

We have audited the accompanying consolidated balance sheets of the United States (U.S.) Department of Energy (Department) as of September 30, 2012 and 2011, and the related consolidated statements of net cost, changes in net position, and custodial activity, and combined statements of budgetary resources (hereinafter referred to as "consolidated financial statements") for the years then ended. The objective of our audits was to express an opinion on the fair presentation of these consolidated financial statements. In connection with our fiscal year 2012 audit, we also considered the Department's internal control over financial reporting and tested the Department's compliance with certain provisions of applicable laws, regulations, contracts, and grant agreements that could have a direct and material effect on these consolidated financial statements.

As discussed in this report, a Power Marketing Administration of the Department, whose Department-related financial data is included in the accompanying consolidated financial statements, was audited by other auditors whose report has been furnished to us and was considered in forming our overall opinion on the Department's consolidated financial statements.

Summary

As stated in our opinion on the consolidated financial statements, based upon our audits and the report of the other auditors, we concluded that the Department's consolidated financial statements as of and for the years ended September 30, 2012 and 2011, are presented fairly, in all material respects, in conformity with U.S. generally accepted accounting principles.

As discussed in our Opinion on the Financial Statements, the Department changed its presentation for reporting the combined statements of budgetary resources in fiscal year 2012.

Our opinion emphasizes that: (1) the Department has direct loans and loan guarantees issued under the *Federal Credit Reform Act of 1990* and that subsidy costs of the loans and loan guarantees include interest rate differentials, delinquencies, defaults, fees, and other cash flow items; (2) the cost estimates supporting the Department's environmental cleanup and disposal liabilities are based upon assumptions regarding funding and other future actions and decisions, many of which are beyond the Department's control; and (3) the Department is involved as a defendant in several matters of litigation relating to its inability to accept commercial spent nuclear fuel by January 31, 1998, the date specified in the *Nuclear Waste Policy Act of 1982*, as amended.

Our consideration of internal control over financial reporting resulted in identifying certain deficiencies related to unclassified network and information systems security that we consider to be a significant deficiency, as defined in the Internal Control Over Financial Reporting section of this report.

We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses as defined in the Internal Control Over Financial Reporting section of this report.

The results of our tests of compliance with certain provisions of laws, regulations, contracts, and grant agreements disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*, issued by the Comptroller General of the United States, and Office of Management and Budget (OMB) Bulletin Number (No.) 07-04, *Audit Requirements for Federal Financial Statements*, as amended.

The following sections discuss our opinion on the Department's consolidated financial statements; our consideration of the Department's internal control over financial reporting; our tests of the Department's compliance with certain provisions of applicable laws, regulations, contracts, and grant agreements; and management's and our responsibilities.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of the United States Department of Energy as of September 30, 2012 and 2011, and the related consolidated statements of net cost, changes in net position, and custodial activity, and the combined statements of budgetary resources for the years then ended.

We did not audit the financial statements of the Bonneville Power Administration as of and for the years ended September 30, 2012 and 2011, whose Department-related financial data reflect total assets constituting 12.7 percent and 12.2 percent and total net costs constituting (0.5) percent and (0.6) percent, respectively, of the related consolidated totals. Those financial statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for the Bonneville Power Administration, is based solely upon the report of the other auditors.

In our opinion, based on our audits and the report of the other auditors, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the United States Department of Energy as of September 30, 2012 and 2011, and its net costs, changes in net position, budgetary resources, and custodial activity for the years then ended, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 1.Q. to the consolidated financial statements, the Department changed its presentation for reporting the combined statement of budgetary resources in fiscal year 2012, based on new reporting requirements under OMB Circular No. A-136, *Financial Reporting Requirements*. As a result, the Department's combined statement of budgetary resources for fiscal year 2011 has been adjusted to conform to the current year presentation.

As discussed in Note 7 to the consolidated financial statements, the Department has total direct loans and loan guarantees, net, of $13 billion and $7 billion as of September 30, 2012 and 2011, respectively, which are issued under the *Federal Credit Reform Act of 1990*. Subsidy costs of the direct loans and loan guarantees are intended to estimate the long-term cost to the U.S. Government of its loan program and include interest rate differentials, delinquencies, defaults, fees, and other cash flow items. A subsidy re-estimate is performed annually at September 30. Any adjustment resulting from the re-estimate is recognized as subsidy expense.

As discussed in Note 15 to the consolidated financial statements, the cost estimates supporting the Department's environmental cleanup and disposal liabilities of $268 billion and $251 billion as of

September 30, 2012 and 2011, respectively, are based upon assumptions regarding funding and other future actions and decisions, many of which are beyond the Department's control.

As discussed in Note 18 to the consolidated financial statements, the Department is involved as a defendant in several matters of litigation relating to its inability to accept commercial spent nuclear fuel by January 31, 1998, the date specified in the *Nuclear Waste Policy Act of 1982*, as amended. The Department has recorded liabilities for likely damages of $20 billion and $19 billion as of September 30, 2012 and 2011, respectively.

U.S. generally accepted accounting principles require that the information in the Management's Discussion and Analysis, Required Supplementary Information, and Required Supplementary Stewardship Information sections be presented to supplement the basic consolidated financial statements. Such information, although not a part of the basic consolidated financial statements, is required by the Federal Accounting Standards Advisory Board who considers it to be an essential part of financial reporting for placing the basic consolidated financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, 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 basic consolidated financial statements, and other knowledge we obtained during our audits of the basic consolidated financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Our audits were conducted for the purpose of forming an opinion on the basic consolidated financial statements as a whole. The September 30, 2012 consolidating information in the Consolidating Schedules section of the Department's 2012 *Agency Financial Report* is presented for purposes of additional analysis and is not a required part of the basic consolidated financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic consolidated financial statements. The September 30, 2012 consolidating information has been subjected to the auditing procedures applied in the audit of the basic consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic consolidated financial statements or to the basic consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the September 30, 2012 consolidating information is fairly stated in all material respects in relation to the basic consolidated financial statements as a whole. The information in the Message from the Chief Financial Officer and Other Accompanying Information section of the Department's 2012 *Agency Financial Report* are presented for the purposes of additional analysis and are not a required part of the basic consolidated financial statements. Such information has not been subjected to the auditing procedures applied in the audits of the basic consolidated financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Internal Control Over Financial Reporting

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or

detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the Responsibilities section of this report and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. This report also includes our consideration of the results of the other auditors' testing of internal control over financial reporting that are reported on separately by those auditors. However, this report, insofar as it relates to the results of the other auditors' testing, is based solely on the report of the other auditors.

In our fiscal year 2012 audit, we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above. However, we identified certain deficiencies in internal control over financial reporting related to unclassified network and information systems security, as described below and in more detail in Exhibit I that we consider to be a significant deficiency in internal control over financial reporting. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

- *Unclassified network and information systems security* – We noted network vulnerabilities and weaknesses in access and other security controls in the Department's unclassified computer information systems. The identified weaknesses and vulnerabilities increase the risk that malicious destruction or alteration of data or unauthorized processing could occur. The Department should fully implement policies and procedures to improve its network and information systems security.

Exhibit II presents the status of the prior year significant deficiency.

We noted certain additional matters involving internal control over financial reporting and internal control over financial management systems that we will report to management in separate letters.

Compliance and Other Matters

The results of our tests of compliance as described in the Responsibilities section of this report, exclusive of those referred to in the *Federal Financial Management Improvement Act of 1996* (FFMIA), disclosed no instances of noncompliance or other matters that are required to be reported herein under *Government Auditing Standards* or OMB Bulletin No. 07-04, as amended. This report also includes our consideration of the results of the other auditors' testing of compliance and other matters that are reported on separately by the other auditors. However, this report, insofar as it relates to the results of the other auditors' testing, is based solely on the report of the other auditors.

The results of our tests of FFMIA disclosed no instances in which the Department's financial management systems did not substantially comply with the (1) Federal financial management systems requirements, (2) applicable Federal accounting standards, and (3) the United States Government Standard General Ledger at the transaction level.

* * * * * * *

Responsibilities

Management's Responsibilities. Management is responsible for the consolidated financial statements; establishing and maintaining effective internal control over financial reporting; and complying with laws, regulations, contracts, and grant agreements applicable to the Department.

Auditors' Responsibilities. Our responsibility is to express an opinion on the fiscal year 2012 and 2011 consolidated financial statements of the Department based on our audits and the report of the other auditors. We conducted our audits in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and OMB Bulletin No. 07-04, as amended. Those standards and OMB Bulletin No. 07-04, as amended, require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Department's internal control over financial reporting. Accordingly, we express no such opinion.

An audit also includes:

- Examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements;
- Assessing the accounting principles used and significant estimates made by management; and
- Evaluating the overall consolidated financial statement presentation.

We believe that our audits and the report of the other auditors provide a reasonable basis for our opinion.

In planning and performing our fiscal year 2012 audit, we considered the Department's internal control over financial reporting by obtaining an understanding of the Department's internal control, determining whether internal controls had been placed in operation, assessing control risk, and performing tests of controls as a basis for designing our auditing procedures for the purpose of expressing our opinion on the consolidated financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Department's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Department's internal control over financial reporting. Furthermore, we did not test all controls relevant to operating objectives as broadly defined by the *Federal Managers' Financial Integrity Act of 1982*.

As part of obtaining reasonable assurance about whether the Department's fiscal year 2012 consolidated financial statements are free of material misstatement, we performed tests of the Department's compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of the consolidated financial statement amounts, and certain provisions of other laws and regulations specified in OMB Bulletin No. 07-04, as amended, including the provisions referred to in Section 803(a) of FFMIA. We limited our tests of compliance to the provisions described in the preceding sentence, and we did not test compliance with all laws, regulations, contracts, and grant agreements applicable to the Department. However, providing an

opinion on compliance with laws, regulations, contracts, and grant agreements was not an objective of our audit and, accordingly, we do not express such an opinion.

The Department's written response to the findings identified in our audit and presented in Exhibit I was not subjected to the auditing procedures applied in the audit of the Department's consolidated financial statements and, accordingly, we express no opinion on it.

This report is intended solely for the information and use of the Department's management, the Department's Office of Inspector General, OMB, the U.S. Government Accountability Office, and the U.S. Congress and is not intended to be and should not be used by anyone other than these specified parties.

KPMG LLP

November 14, 2012

Independent Auditors' Report
Exhibit I – Significant Deficiency

Unclassified Network and Information Systems Security
(Finding numbers reported in separate management letter)

The United States Department of Energy (the Department or DOE) uses a series of interconnected unclassified networks and information systems. Federal and Departmental directives, included in DOE Order 205.1B, *Department of Energy Cyber Security Program,* require the establishment and maintenance of security over unclassified information systems, including financial management systems. Past audits identified significant weaknesses in selected systems and devices attached to the computer networks at some Department sites. The Department has implemented corrective actions to address many of the identified weaknesses at the sites whose security controls we, and the Department's Office of Health, Safety and Security, reviewed in prior years. However, at the time of our testing, these corrective actions had not been completed. The frequency of network security weaknesses reported by KPMG has decreased when compared to the prior year weaknesses, but remains slightly higher than fiscal year (FY) 2010. The severity of these weaknesses remains consistent with prior year weaknesses. The Department recognizes the need to enhance its unclassified cybersecurity program and has categorized unclassified cybersecurity as a leadership challenge in its *Federal Managers' Financial Integrity Act* assurance statement for FY 2012. Improvements are still needed in the areas of system and application access and related access privileges, password management, configuration and vulnerability management, restriction of network services, and integrity of web applications.

Our FY 2012 audit disclosed information system security deficiencies similar in type and risk level to our findings in prior years. We identified similar weaknesses at sites where we had not reviewed security controls in the prior year. Specifically, we noted weaknesses within layered security controls for network servers and devices, desktop systems and business applications. We identified multiple instances of easily guessed login credentials or unrestricted access controls on network systems that could permit unauthorized access to those systems and their data. We also found weak account management and monitoring controls for review, approval, provisioning and termination of administrative and user accounts that may increase the risk of malicious or unauthorized access to systems and data.

In the area of configuration and vulnerability management, we identified deficiencies in the patch management process for timely and secure installation of critical software patches, with numerous instances in which security patches had not been applied to correct known vulnerabilities more than three months after the patches became available. The affected systems included workstations used by financial application users and system administrators with privileged levels of access to financial systems and other network systems. We also noted numerous weaknesses in web application integrity as a result of design flaws in those applications. We identified web applications that did not properly validate the form or content of input data against an application's database, which could result in unauthorized access to application functionality, sensitive data stored in the applications, and other network systems and applications.

While many of these cybersecurity weaknesses were corrected immediately after we identified and reported them to site management, deficiencies in the process and procedures for identifying, monitoring and remediating such deficiencies have continued from prior years. We also identified inconsistent risk management practices at several sites and noted that site management had not established a risk acceptance process to fully document acceptance of risk. We further noted that multiple sites were continuing to

develop and implement site-level Implementation Plans in accordance with the Department's Risk Management Approach (RMA) to address these weaknesses. However, these risk management enhancements were incomplete at the time of our testing.

The Department's Office of Inspector General (OIG) reported on these deficiencies in its evaluation report on *The Department's Unclassified Cyber Security Program - 2012*, dated November 2012. The OIG noted that identified weaknesses occurred, in part, because Departmental entities had not ensured that cybersecurity requirements were fully developed and implemented. The OIG reported that programs and sites had not always effectively monitored performance to ensure that appropriate controls were in place. The OIG noted that the Department's Plans of Action and Milestones were not always effectively used to report, prioritize and track cybersecurity weaknesses through remediation. The OIG also reported deficiencies in physical and logical access controls and configuration management at several sites where, even when policies and procedures were established, implementation of those policies and procedures were not aligned with the Federal requirements.

The identified vulnerabilities and control weaknesses in unclassified network and information systems increase the possibility that malicious destruction or alteration of data or unauthorized processing could occur. Because of our concerns, we performed supplemental procedures and identified compensating controls that mitigate the potential effect of these security weaknesses on the integrity, confidentiality and availability of data in the Department's financial applications.

During FY 2012, the Department had taken steps to enhance its unclassified cybersecurity program under the collaborative leadership of the DOE Information Management Governance Council (IMGC) and IMGC Working Group. The Joint Cybersecurity Coordination Center (JC3) Governance Model was approved in May 2012 to implement the requirements of DOE Order 205.1B related to continuous monitoring and risk management. The Department also continued ongoing efforts to improve awareness of Cybersecurity initiatives, including role-based training and workforce development, and to promote effective channels of communication and collaboration.

Recommendation:

While progress has been made, continued efforts are needed to effectively manage the evolving nature of cybersecurity threats, including strengthening the management review process and monitoring of field sites to ensure the adequacy of cybersecurity program performance; fully implementing revised and ongoing risk management processes; and expanding the use of automated tools in the resolution of the vulnerabilities and control weaknesses described above to ensure that systems are properly configured, implemented and updated throughout the lifetime of those systems.

Therefore, we recommend that the Under Secretary for Nuclear Security, Under Secretary of Energy, and Under Secretary for Science, in coordination with the Department and National Nuclear Security Administration (NNSA) Chief Information Officers, fully implement policies and procedures to meet Federal cybersecurity standards, protect networks and information systems against unauthorized access, and implement an adequate performance monitoring program, such as the use of periodic evaluations by Headquarters management, to improve the effectiveness of sites' cybersecurity program implementation. Detailed recommendations to address the issues discussed above have been separately reported to the cognizant management officials.

Management's Response:

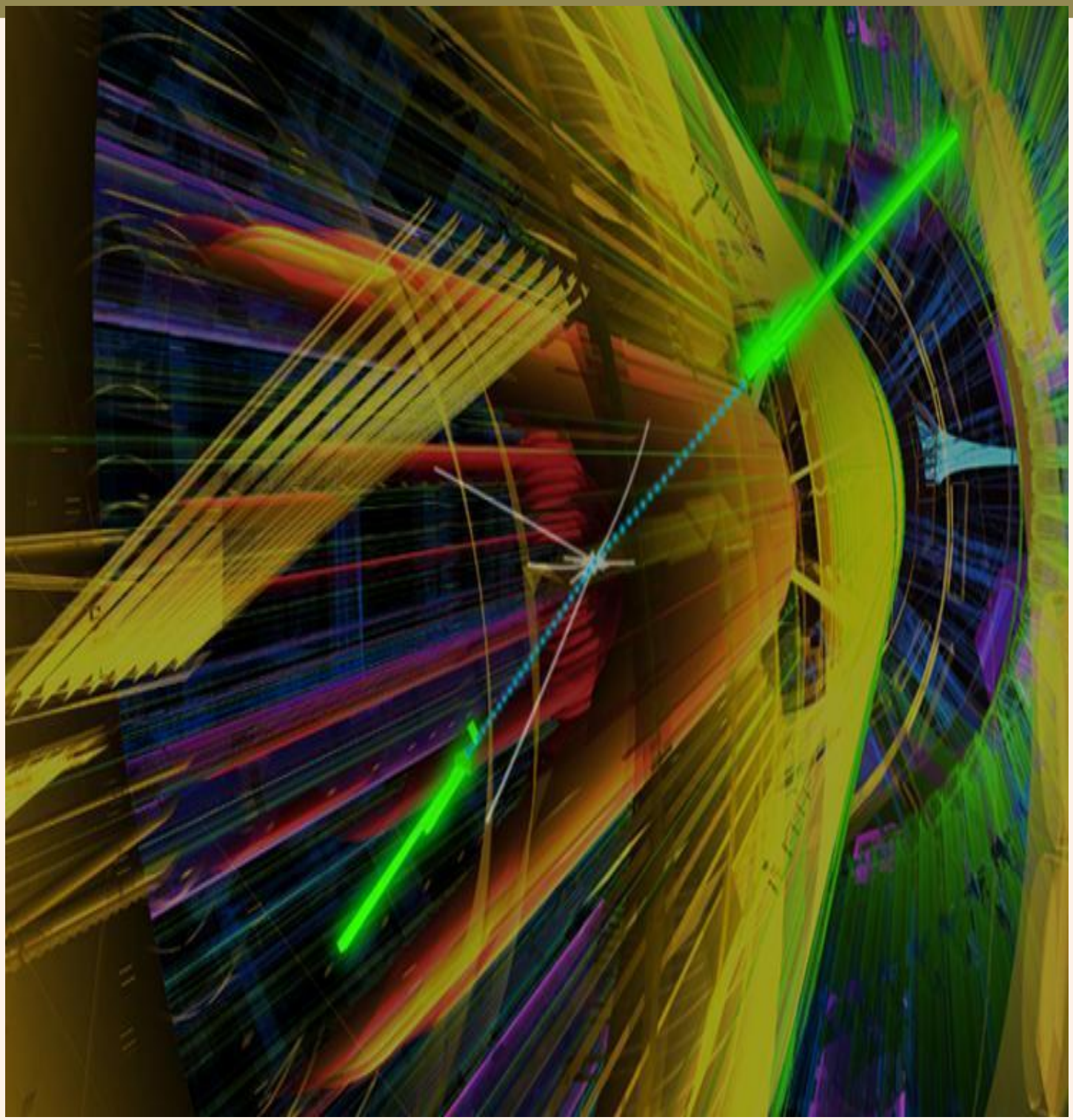
The Department of Energy's Chief Information Officer (CIO) appreciates the opportunity to comment on the OIG's recognition of the Department's continued progress in addressing weaknesses and enhancing its unclassified cybersecurity program. The information in this report will enable the Department to take appropriate follow-up action on specific findings, as well as to continue to work in the most effective way to improve the Department's cybersecurity posture.

Throughout FY 2013, the Department will continue to enhance policies and procedures that define and implement the cybersecurity program and maintain the risk management approach.

Independent Auditors' Report
Exhibit II – Status of Prior Year Significant Deficiency

Fiscal Year 2011 Significant Deficiency	Status at September 30, 2012
Unclassified Information Systems Security	Not fully implemented – Unclassified network and information systems security issues continue to be reported in Exhibit I as a significant deficiency.

Other Accompanying Information



A simulation of the two-photon channel shows what ATLAS sees when the decay of a Higgs boson results in the production of two gamma rays. The blue beads indicate intermediate massive particles, and the bright green rods are the gamma-ray tracks. While the two-photon channel is the least likely Higgs decay, it is easier to observe than others with even noisier backgrounds. | Photo courtesy of Lawrence Livermore National Lab

Combining Schedule of Spending

For the Year Ended September 30, 2012

($ IN MILLIONS)	FEDERAL ENERGY REGULATORY COMMISSION	POWER MARKETING ADMINISTRATIONS	ALL OTHER DOE PROGRAMS	COMBINED
		FY 2012		
WHAT MONEY IS AVAILABLE TO SPEND?				
Total Resources	$ 329	$ 5,390	$ 45,573	$ 51,292
Less Amount Available but Not Agreed to be Spent	(21)	(585)	(9,014)	(9,620)
Less Amount Not Available to be Spent	-	(166)	(3,844)	(4,010)
Total Amounts Agreed to be Spent	**$ 308**	**$ 4,639**	**$ 32,715**	**$ 37,662**
HOW WAS THE MONEY SPENT?				
Personnel Compensation	$ 167	$ 479	$ 1,102	$ 1,748
Personnel Benefits	47	183	307	537
Benefits for Former Personnel	1	-	8	9
Travel and Transportation of Persons	4	24	54	82
Transportation of Things	-	9	1	10
Rent, Communications and Utilities	25	47	138	210
Printing and Reproduction	2	-	3	5
Other Contractual Services	45	2,532	27,876	30,453
Supplies and Materials	2	193	26	221
Equipment	6	97	743	846
Land and Structures	1	410	3,033	3,444
Loans	-	-	5,451	5,451
Grants, Subsidies and Contributions	5	232	8,598	8,835
Interest	-	104	533	637
Refunds	-	322	8	330
Total Spending	**$ 305**	**$ 4,632**	**$ 47,881**	**$ 52,818**
Increase/(Decrease) in Amounts Remaining to be Spent	3	7	(15,166)	(15,156)
Total Amounts Agreed to be Spent	**$ 308**	**$ 4,639**	**$ 32,715**	**$ 37,662**

The Schedule of Spending presents an overview of how and where the Department spent its funding. The budgetary information in this schedule is presented on a combined basis and not a consolidated basis.

What Money is Available to Spend summarizes the funds the Department obligated during the fiscal year, the total amount agreed to be spent being equivalent to the obligations incurred shown on the Statements of Budgetary Resources. *How Was the Money Spent* summarizes the actual gross cash outlays for the fiscal year, the total spending being equivalent to the gross outlays shown on the Statements of Budgetary Resources. These gross outlays are categorized by the OMB Budget Object Class definitions found in Circular No. A-11.

Outlays are not always made in the same fiscal year in which funds are obligated resulting in carryover obligated balances that will be disbursed in subsequent fiscal years. These timing differences are shown as *Increase/(Decrease) in Amounts Remaining to be Spent*.

Inspector General's Management Challenges

On an annual basis, the Office of Inspector General identifies what it considers to be the most significant management challenges facing the Department of Energy. This effort is designed to assess the agency's progress in addressing previously identified challenges and to consider emerging issues. The identified challenges represent risks inherent in the Department's wide ranging and complex operations as well as those related to problems with specific management processes. Consistent with our mission, the overall goal is to focus attention on significant issues with the objective of working with Department managers to enhance the effectiveness of agency programs and operations.

As noted in previous reports, many of the Department's most significant management challenges are not amenable to immediate resolution and must, therefore, be addressed through a concerted effort over time. Based on the results of our body of work over the last year, the management challenge list for FY 2013 remains largely consistent with that of the previous year. These challenges include:

- Operational Efficiency and Cost Savings
- Contract and Financial Assistance Award Management
- Cybersecurity
- Energy Supply
- Environmental Cleanup
- Human Capital Management
- Nuclear Waste Disposal
- Safeguards and Security
- Stockpile Stewardship

We also develop an annual "watch list" consisting of significant issues that do not meet the threshold of a management challenge, yet, in our view, warrant special attention by Department officials. For FY 2013, the watch list includes: Infrastructure Modernization; Loan Guarantee Program; and Worker and Community Safety.

Operational Efficiency and Cost Savings

For the FY 2012 report, we concluded that the current economic climate and associated Federal budgetary concerns dictated that finding ways to make Departmental operations more efficient and less costly was the preeminent management challenge. In our view, this concern has actually intensified over the past year. For this reason, we continue to believe that, looking forward, Operational Efficiency and Cost Savings should be a top priority for management. As we outlined in last year's report, we know of no other time in recent memory when there was such a broad and bipartisan consensus concerning the need to reduce Federal spending and address the Nation's mounting debt. In this climate, significant reductions in Federal budgets appear likely and the impact on the Department's operations may be equally significant. In this context, we are reiterating the series of operational efficiency and cost reduction ideas offered for management's consideration in last year's report. Our intent was, and continues to be, to highlight possible ways in which the Department can reduce the overall cost of operations and become more efficient. These topics include:

- Apply the Quadrennial Technology Review (QTR) strategic planning concept to the Department's entire science and technology portfolio;
- Eliminate duplicative National Nuclear Security Administration functions;
- Establish a "BRAC-style" commission to analyze the Department's laboratory and technology complex;
- Reprioritize the Department's environmental remediation efforts; and
- Re-evaluate the current structure of the Department's physical security apparatus.

In highlighting these issues, it is apparent that any realistic discussion of meaningful change in the operational efficiency of the Department or significant reductions in the cost of operations will be difficult, complex, and require a great deal of introspection.

Contract and Financial Assistance Award Management

The largest civilian contracting agency in the Federal government, the Department awards contracts to industrial companies, academic institutions, and non-profit organizations that operate a broad range of Department facilities. In fact, a substantial portion of the Department's operations are carried out through contracts. With the addition of Recovery Act funding and initiatives over the last few years, successful contract administration within the Department has taken on even greater importance. In addition to contracting, the Department administers and manages an array of grants and cooperative agreements. Given the number of contracts handled by the Department and the complexity and importance of the Department's numerous multi-million dollar projects, we believe that the area of Contract and Financial Assistance Management remains a significant management challenge.

Cybersecurity

Given the importance and sensitivity of the Department's activities, along with the vast array of data it processes and maintains, Cybersecurity has become a crucial aspect of the Department's overall security posture. Although the Department has implemented numerous counter

measures in recent years, security challenges and threats to the Department's information systems continue and are constantly evolving. Adversaries routinely attempt to compromise the information technology assets of the Department. As such, it is critical that Cybersecurity protective measures keep pace with the growing threat. As a result of these inherent risks and the sensitivity of much of the Department's work, we have identified Cybersecurity as a continuing and significant management challenge.

Energy Supply

Fundamental concerns related to the availability of energy supply in the U.S. have had a dramatic impact on consumers and the U.S. economy in recent years, with implications for our national security. Through its role in areas of scientific discovery and innovation, the national laboratory complex, and the Loan Guarantee Program, there is an expectation that the Department will play a leadership role in ensuring that the Nation's energy needs are met through the development, implementation, and execution of sound energy policy. Providing the leadership to ensure reliable, affordable, and environmentally sound energy supply represents a significant management challenge for the Department. Addressing these issues will require both short-term and long-term solutions. For example, the Department is tasked with helping to modernize our national energy infrastructure; invest in clean energy technologies such as hydropower, wind, solar, and advanced biofuels; and promote conservation in our homes and businesses.

Environmental Cleanup

Since its establishment, the Department has had an important environmental mission. With the end of the Cold War, this mission took on even greater importance as the agency began to dispose of large volumes of radioactive waste resulting from more than 50 years of nuclear defense and energy research work. This effort involved 2 million acres of land located in 35 states and annually employs up to 30,000 Federal and contractor employees. After 23 years of progress, EM currently has 17 sites in 11 states remaining. The cleanup efforts at these sites remain one of the most complicated problems facing the Department and the Nation. The disposal and cleanup costs associated with these efforts are projected to be in the hundreds of billions of dollars and will continue well into the foreseeable future. As has been the case in previous years, Environmental Cleanup remains a management challenge that warrants attention on the part of Departmental management.

Human Capital Management

For a number of years, strategic management of human capital has been recognized by various government authorities and oversight organizations as one of the Government's most significant challenges. In the past, officials have recognized that the Department's staff lacked adequate project and contract management skills required to oversee large projects. Subsequently, the Department undertook an effort to perform a critical skills gap analysis to review and evaluate specific critical skill needs. These actions led to our removal, in FY 2009, of the human capital focus area from our management challenges. With the infusion of funding as a result of the Recovery Act, in conjunction with smaller bottom lines as a result of the current budgetary environment, the Department must address the challenge of maintaining a highly skilled workforce with the technical knowledge to perform its new and expanded mission. We continue to believe that this challenge represents a critical area that will affect nearly all major program elements. As a result, human capital management will continue to be a key challenge area that will require considerable attention in the near-term.

Nuclear Waste Disposal

Under the Nuclear Waste Policy Act of 1982, the Department is responsible for the management and safe disposal of high-level defense and commercial waste and spent nuclear fuel. For a number of years, the centerpiece of the Department's efforts relating to the disposal of nuclear waste was the development of the Yucca Mountain Nuclear Waste Repository in Nye County, Nevada. The Department's FY 2010 budget request, however, included no funding for the Yucca Mountain Project, effectively terminating the Office of Civilian Radioactive Waste Management. Since that time, the Blue Ribbon Commission on America's Nuclear Future issued a report at the direction of the President on policies for managing the back end of the nuclear fuel cycle, which includes alternative storage sites. Given the importance of a coherent strategy on nuclear waste disposal that protects public health, safety, and the environment and until a viable solution for disposal and storage is outlined, the area of Nuclear Waste Disposal will be recognized as a significant challenge facing the Department.

Safeguards and Security

With the advancement of the Manhattan Project and the race to develop the atomic bomb during World War II, the origins of the Department are inexorably linked to national security. While the Department has shifted its focus over time as the needs of the Nation have changed, special emphasis on safeguards and security has remained a vital aspect of the Department's mission. The Department plays a vital role in the Nation's security by ensuring the safety of the country's nuclear weapons, advancing nuclear non-proliferation, and providing safe and efficient nuclear power plants for the United States Navy. In order to faithfully execute its mission, the Department employs numerous security personnel, protects various classified materials and other sensitive property, and develops policies designed to safeguard national security and other

critical assets. Recent events at the Y-12 National Security Complex have highlighted the need for a robust security apparatus with effective Federal oversight. Given the policy issues that have arisen as a result of this intrusion and the importance of ensuring the safe and secure storage of nuclear materials at Department sites, we have elevated Safeguard and Security to the list significant management challenges.

Stockpile Stewardship

The Department is responsible for the maintenance, certification, and reliability of the Nation's nuclear weapons stockpile. To help ensure that our nuclear weapons continue to serve their essential deterrence role, the Department conducts stockpile surveillance and engineering analyses, refurbishes selected nuclear systems, and sustains the ability to restore the manufacturing infrastructure for the production of replacement weapons. Along these lines, recent funding proposals have been projected to dramatically increase funding for the purpose of beginning the planned modernization of the Department's nuclear weapons complex. While we recognize that the Department has taken action in recent years to further enhance the safety and reliability of the Nation's nuclear weapons stockpile, sustained efforts will be necessary if the Department is to extend the life of aging warheads and maintain a viable weapon stockpile.

Summary of Financial Statement Audit and Management Assurances

Audit Opinion	Unqualified				
Restatement	No				
Material Weaknesses	**Beginning Balance**	**New**	**Resolved**	**Consolidated**	**Ending Balance**
Total Material Weaknesses	***0***	***0***	***0***	***0***	***0***

Effectiveness of Internal Control over Financial Reporting (FMFIA Section II)						
Statement of Assurance	Unqualified					
Material Weaknesses	**Beginning Balance**	**New**	**Resolved**	**Consolidated**	**Reassessed**	**Ending Balance**
No Material Weaknesses reported						
Total Material Weaknesses	***0***	***0***	***0***	***0***	***0***	***0***

Effectiveness of Internal Control over Operations (FMFIA Section II)						
Statement of Assurance	Qualified					
Material Weaknesses	**Beginning Balance**	**New**	**Resolved**	**Consolidated**	**Reassessed**	**Ending Balance**
Security Breach at the Y-12 National Security Complex						
Total Material Weaknesses	***0***	***1***	***0***	***0***	***0***	***1***

Conformance with financial management system requirements (FMFIA Section IV)						
Statement of Assurance	Systems conform to financial management system requirements					
Non-Conformances	**Beginning Balance**	**New**	**Resolved**	**Consolidated**	**Reassessed**	**Ending Balance**
No non-conformances reported						
Total non-conformance	***0***	***0***	***0***	***0***	***0***	***0***

Conformance with Federal Financial Management Improvement Act (FFMIA)		
	Agency	Auditor
Overall Substantial Compliance	Yes	Yes
1. System Requirements	Yes	
2. Accounting Standards	Yes	
3. USSGL at Transaction Level	Yes	

Financial Management Systems Plan

iManage

iManage is the Department's solution for managing enterprise-wide corporate business systems and information. The primary objectives of iManage are to improve financial and business system and processing efficiencies, enhance decision making capabilities, deploy collaboration and social networking tools, and expand transparent electronic government in support of Presidential priorities. The iManage strategic theme is "Connecting our People", "Simplifying our Work", and "Liberating our Data."

iManage is a collaborative effort to modernize, consolidate, streamline, and integrate financial, budgetary, procurement, personnel, program and performance information. The program is supported at the core by a portal/central data warehouse that links common data elements from each of the Department's business systems and supports both external and internal reporting. The major system components that comprise iManage are:

- iManage Data Warehouse (IDW)/iPortal
- Standard Accounting and Reporting System (STARS)
- Corporate Human Resources Information System (CHRIS)
- Strategic Integrated Procurement Enterprise System (STRIPES)
- Budget Formulation-Publication-Execution (iBudget)

iManage also includes travel and payroll processing. Travel processing services are provided by General Services Administration eTravel Services using a system called GovTrip. Payroll processing services are outsourced to the Defense Finance and Accounting Service.

iManage 1.0 was primarily focused on the modernization, integration and implementation of the Department's corporate financial and business systems. Significant accomplishments have been made in this area and additional work is in progress to complete the modernization of all business systems. iManage 2.0 is now shifting much of the focus to the value of providing products and services to support the Department's strategic vision, mission and decision-making, and interactive peer-to-peer participation. iManage must also address future workforce needs, specifically, decreased learning curve and improved access to training; increased access to experts and peers; more work using the web and remote access; and improved access to systems and information.

Current Systems

iManage Data Warehouse (IDW) iPortal - IDW is a central data warehouse linking common data elements from multiple DOE/ iManage corporate business applications providing reporting and decision-making capabilities to DOE executives, managers, and staff. iPortal is the iManage "face" to its customers/users. It provides access to iManage applications, personalized dashboards, messaging, discussion boards, collaboration capabilities, news, reporting, web conferencing, graphing and data exchange capabilities to DOE executives, managers and staff. IDW/iPortal expanded IDW to include Human Capital type data, reports and dashboards for use by DOE offices; modified the nightly extract and load of STARS data to run multiple times a day, providing users with more up-to-date data; updated/enhanced IDW data marts for STARS, STRIPES and DOEInfo; continued to establish additional interfaces with internal and external systems; enhance existing interfaces and provide additional and enhanced iPortal services to end users.

Standard Accounting and Reporting System – STARS provides the Department with a modern, comprehensive and responsive financial management system that provides the foundation for linking budget formulation, budget execution, financial accounting, financial reporting, cost accounting and performance measurement. The financial management component is integrated with the other major corporate business systems, procurement, funds distribution, travel, and human resources. STARS deployed Oak Ridge Financial Service Center's Payments Dashboard; incorporated a management dashboard for monitoring helpdesk statistics; automated additional fund recast capabilities per the FY 2012 Appropriations Act; prepared for upcoming Government-wide Treasury Account Symbol (GTAS) and Government-wide Accounting (GWA) requirements; and began the initial analysis of the Release 12 upgrade.

Corporate Human Resource Information System – CHRIS is a single, integrated Human Resource (HR) system created through a phased approach to provide the highest quality HR information and services to the Department's executives, managers and staff. The primary objectives for CHRIS are to enhance operational efficiencies; reduce paperwork; eliminate redundant information systems; eliminate non-value added work; and provide strategic information necessary to make informed human resource management decisions. National Business Center's (NBC) Federal Personnel Payroll System (FPPS) Fit/Gap Analysis is in progress and should be completed by the second quarter FY13. If the decision is to proceed with migration to FPPS, the earliest migration could be accommodated by NBC would be FY14. Upgrade to PeopleSoft version 9.1 completed. The SES Performance Management System module of ePerformance has been modified to accommodate the new OPM/OMB SES Performance Appraisal System. Additional modifications will be started to improve the coordination between ePerformance and

the Department's Performance Review Board (PRB) system. Part of these modifications will be an evaluation of the feasibility of merging the PBS functionality into ePerformance.

Strategic Integrated Procurement Enterprise System – STRIPES is the procurement and contracts management component of iManage, automating all procurement and contract activities required or directly associated with planning, awarding and administering various unclassified acquisition and financial assistance instruments. STRIPES replaced and consolidated federal corporate, regional and local procurement-related systems across the Department. The STRIPES application connects DOE with the Integrated Acquisition Environment which includes Central Contractor Registration (CCR), Federal Procurement Data System – Next Generation (FPDS-NG), Federal Business Opportunities (FedBizOpps), and the Online Representations and Certifications Application, as well as Grants.gov and FedConnect. In addition, STRIPES is integrated with other iManage projects such as STARS and IDW. STRIPES began the initial analysis of upgrading to PRISM software v.7x; developed and implemented the recast capabilities/procedures for the accounting segments within STRIPES; and deployed STRIPES to Western Area Power Administration.

Systems Underway

iBudget – iBudget will standardize budget formulation process/templates, automatically publish the budget documents, streamline budget execution processes, integrate budget and performance data, and consolidate corporate budget data. iBudget formulation developed use cases for three organizations to create their budget formulation structure, provided ability to enter funding data and generate core budget output.

The funds distribution process completed a Lean Six Sigma analysis of the current processes; conducted workgroup and steering group meetings to gain organizational perspectives and approvals; completed a business case analysis with cost/benefit analysis and cycle time estimates; conducted two rounds of COTS software demonstrations for three potential solutions to develop source selection and solution design information; and finalized the concept of operations for the new processes and system.

Improper Payments Information and Reporting

The Improper Payments Information Act (IPIA) of 2002, Public Law (P.L.) No. 107-300, as amended by the Improper Payments Elimination and Recovery Act (IPERA) of 2010 requires agencies to annually review their programs and activities to identify those susceptible to significant improper payments, to measure and report improper payment rates and amounts for programs that are found to be susceptible to improper payments. In addition, IPERA and the implementing guidance expanded agency authorities and requirements for recapturing overpayments, one type of improper payment. The OMB released guidance for implementing IPERA and established specific reporting requirements for agencies with programs that possess a significant risk of erroneous payments and for reporting on the results of recapture activities.

Improper Payments

The Department utilizes OMB's risk factors in performing risk assessments at least once every three years to determine whether programs are susceptible to significant improper payments, unless programs experience significant change when the frequency is accelerated. Based on risk assessments conducted during FY 2012, the Department currently does not have any programs susceptible to significant improper payments and continues to maintain a <1% overall erroneous payment rate. The Departmental erroneous payment rate has remained below one percent since the inception of its tracking program in FY 2002. For FY 2011 reported information, the Department's total payment outlays were $46.6 billion and the actual amount of improper payments identified were $ 13.1 million.

Recovery Auditing

In accordance with the expanded requirements of IPERA, the Department has established a policy for implementing payment recapture auditing requirements. This policy prescribes requirements for identifying overpayments and establishes reporting standards to track the status of recoveries. The Department's payment recapture audit activities include conducting recapture audits and leveraging various other processes to identify and recover improper payments. These other processes include performing post-payment reviews, internal audits and utilizing the results of cost allowability audits of integrated contractors. The Department's on-going and integrated relationship with its contractors enables a high improper payment recapture rate, currently 85 percent for FY 2011. The cumulative amount determined not collectible by the Department since FY 2010 is $ .21 million and is deemed uncollectible due to amounts being below a minimal threshold established for pursuing recapture or due to lost prompt payment discounts. The Department has identified improper payment activity as a focus area within our internal control program and will continue to emphasize, evaluate and strengthen controls where needed to maintain our record of low payment errors and ensure the effective stewardship of public funds.

OTHER ACCOMPANYING INFORMATION

Payment Recapture Audit Reporting for FY 2011 Payments ($ in millions)

FY 2011								
AMOUNT SUBJECT TO REVIEW	ACTUAL AMOUNT REVIEWED AND REPORTED	AMOUNTS IDENTIFIED FOR RECOVERY	AMOUNTS RECOVERED	% OF AMOUNT RECOVERED OUT OF AMOUNT IDENTIFIED	AMOUNT OUTSTANDING	% OF AMOUNT OUTSTANDING OUT OF AMOUNT IDENTIFIED	AMOUNT DETERMINED NOT COLLECTABLE	% OF AMOUNT DETERMINED NOT COLLECTABLE OUT OF AMOUNT IDENTIFIED
$46,623	$32,824	$14.08	$11.99	85.2%	$1.99	14.1%	$0.12	.9%

FY 2004-2010		FY 2004-2011			FY 2010-2011
AMOUNTS IDENTIFIED FOR RECOVERY	AMOUNTS RECOVERED	CUMULATIVE AMOUNTS IDENTIFIED FOR RECOVERY	CUMULATIVE AMOUNTS RECOVERED	CUMULATIVE AMOUNT PENDING RECOVERY	CUMULATIVE AMOUNT DETERMINED NOT COLLECTABLE
$88.24	$78.34	$102.32	$90.33	$8.08	$0.21

Payment Recapture Rate and Targets ($ in millions)

PROGRAMS	TYPE OF PAYMENT	FY 2011 AMOUNT IDENTIFIED	FY 2011 AMOUNT RECOVERED	FY 2011 RECOVERY RATE	FY 2012 RECOVERY RATE TARGET	FY 2013 RECOVERY RATE TARGET	FY 2014 RECOVERY RATE TARGET
All	All	$14.08	$11.99	85.2%	92%	93%	93%

Aging of Outstanding Overpayments ($ in millions)

PROGRAMS	TYPE OF PAYMENT	FY 2011 AMOUNT OUTSTANDING (0-6 months)	FY 2011 AMOUNT OUTSTANDING (6 months-1 yr)	FY 2011 AMOUNT OUTSTANDING (Over 1 yr)
All	All	N/A	$1.99	N/A

Disposition of Recaptured Funds ($ in millions)

PROGRAMS	TYPE OF PAYMENT	AGENCY EXPENSES TO ADMINISTER THE PROGRAM	PAYMENT RECAPTURE AUDITOR FEES	FINANCIAL MANAGEMENT IMPROVEMENT ACTIVITIES	ORIGINAL PURPOSE	OFFICE OF INSPECTOR GENERAL	RETURNED TO TREASURY
All	All	N/A	N/A	N/A	$11.983	N/A	$0.005

Other Statutory Reporting – Management's Response to Audit Reports

Pursuant to the Inspector General Act Amendments of 1988 (Public Law 100-504), agency heads are to report to Congress on the status of final action taken on audit report recommendations. This report complements a report prepared by the Department's IG that provides information on audit reports issued during the period and on the status of management decisions made on previously issued IG audit reports; the IG report is available at http://www.ig.energy.gov.

The reporting also contains information on the resolution of GAO audits per the reporting requirements in OMB Circular A-50.

Inspector General Audit Reports

The Department responds to audit reports by evaluating the recommendations they contain, formally responding to the IG, and implementing agreed upon corrective actions. In some instances, we are able to take corrective action immediately and in others, action plans with long-term milestones are developed and implemented. The audit resolution and follow-up process is an integral part of the Department's effort to deliver its priorities more effectively and at the least cost. Actions taken by management on audit recommendations increase both the efficiency and effectiveness of our operations and strengthen our standards of accountability.

During FY 2012, the Department took final action on 46 IG reports, eight of which identified cost impacts, including both questioned costs and funds put to better use. At the end of the period 127 reports awaited final action. As reported here, taking final action on a report includes both the development of an agreed-upon management decision and completion of the corrective actions.

Status of Final Action on IG Audit Reports for FY 2012

The following chart provides more detail on the audit reports with open actions and the dollar value of recommendations and funds "put to better use" that were agreed to by management.

AUDIT REPORTS	NUMBER OF REPORTS	COST IMPACT (Millions)
Reports pending final action at the start of FY 2012	129	$ 1.8*
Reports Issued in FY 2012 with agreed upon management decisions	44	$84.5
Total Reports pending final action during FY 2012	173	$95.0
Reports for which final action was taken during FY 2012	46	($91.5)
Total reports requiring final action as of the end of FY 2012	127	$ 4.0

**Note: Amount reported is net of adjustments made to correct over-reporting in prior years.*

Government Accountability Office Audit Reports

The GAO audits are a major component of the Department's audit follow-up program. At the beginning of FY 2012 there were 67 GAO audit reports awaiting final action. During FY 2012, the Department received 50 additional final GAO audit reports, of which 20 contained recommendations requiring corrective actions. The Department completed agreed-upon corrective actions on 18 audit reports during FY 2012, leaving 69 GAO reports awaiting final action at year-end.

Glossary of Acronyms

AFR	Agency Financial Report
ANL	Argonne National Laboratory
APM	Acquisition and Project Management
APR	Annual Performance Report
ARO	Asset Retirement Obligations
ARPA-E	The Advanced Research Projects Agency-Energy
ARRA	American Recovery and Reinvestment Act
ASC	Accounting Standards Codification
ATVM	Advanced Technology Vehicle Manufacturing
BiOp	Biological Opinion
BPA	Bonneville Power Administration
CAP	Corrective Action Plan
CASL	Consortium for Advanced Simulation of Light Water Reactors
CCR	Central Contractor Registration
CCUS	Carbon Capture Utilization and Storage
CEDS	Cybersecurity for Energy Delivery Systems
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
C.F.R.	Code of Federal Regulations
CGS	Columbia Generating Station
CHCO	The Chief Human Capital Officer
CHRIS	Corporate Human Resources Information System
CIO	Office of the Chief Information Officer
CO	Contracting Officers
CO2	Carbon Dioxide
COR	Contracting Officers Representative
COU	Consumer Owned Utility
CR	Continuing Resolution
CSRS	Civil Service Retirement System
D&D	Uranium Enrichment Decontamination and Decommissioning Fund
DOD	Department of Defense
DOE	Department of Energy
EEOICPA	Energy Employees Occupational Illness Compensation Program Act
EERE	Office of Energy Efficiency and Renewable Energy
EM	Office of Environmental Management
EPACT05	Energy Policy Act of 2005
ERISA	Employee Retirement Income Security Act
ES&H	Environment, Safety, and Health
ESA	Endangered Species Act
FASB	Financial Accounting Standards Board
FCRA	Federal Credit Reform Act of 1990
FE	Office of Fossil Energy
FERC	Federal Energy Regulatory Commission
FERS	Federal Employees Retirement System
FFB	Federal Financing Bank
FFMIA	Federal Financial Management Improvement Act
FIPP	Financial Institution Partnership Program
FISMA	Federal Information Security Management Act
FMFIA	Federal Managers' Financial Integrity Act
FPPS	Federal Personnel Payroll System
FY	Fiscal Year
GAO	Government Accountability Office
GDP	Gaseous Diffusion Plant
GMRA	Government Management Reform Act
GS	General Schedule
GSP	Graded Security Protection
GTRI	Global Threat Reduction Initiative
HEU	Highly Enriched Uranium
HMO	Health Maintenance Organization
HQ	Headquarters
HR	Human Resources
HSS	Office of Health, Safety and Security
iBudget	iManage Budget

ICAM	Identity Credentialing and Access Management program
ICT	Information and Communications Technology
IDW	iManage Data Warehouse
IG	Office of Inspector General
IOU	Investor Owned Utility
IPERA	Improper Payments Elimination and Recovery Act
ISO	California Independent System Operator
LEU	Low Enriched Uranium
LHC	Large Hadron Collider
LLNL	Lawrence Livermore National Laboratory
LM	Office of Legacy Management
MA	Medicare Advantage
M&O	Management and Operating
Mo-99	Molybdenum-99
MOX	Mixed Oxide
MTU	Metric Tons of Uranium
MY	Model Year
NAV	Net Asset Value
NBC	National Business Center
NE	Office of Nuclear Energy
NNSA	National Nuclear Security Administration
NOAA	National Oceanic and Atmospheric Administration
NRC	Nuclear Regulatory Commission
NRD	Natural Resources Damages
NWF	Nuclear Waste Fund
NWPA	Nuclear Waste Policy Act
OMB	Office of Management and Budget
OPAM	Office of Procurement and Assistance Management
OPM	Office of Personnel Management
ORCA	Online Representations and Certifications Application
P.L.	Public Law
PAR	Performance and Accountability Report
PARS II	Project Assessment and Reporting System II
PDP	Medicare Part D Prescription Drug Plan
PEMPs	Performance Evaluation Management Plans
PIO	Performance Improvement Officer
PMA	Power Marketing Administrations
PMPM	Per Member Per Month
PPO	Preferred Provider Organization
PRB	Post Retirement Benefits Other Than Pensions
PUD	Public Utility District
PX	California Power Exchange
QTR	Quadrennial Technology Review
RA	Recovery Act
RCA	Root Cause Analysis
R&D	Research and Development
REP	Residential Exchange Program
RHIC	Relativistic Heavy Ion Collider
RMA	Risk Management Approach
RSI	Required Supplementary Information
RSSI	Required Supplementary Stewardship
SC	Office of Science
SDM	Senior DOE Management
SEPA	Southeastern Power Administration
SES	Senior Executive Service
SFFAS	Statement of Federal Financial Accounting
SNF	Spent Nuclear Fuel
SNM	Special Nuclear Material
SPR	Strategic Petroleum Reserve
SRS	Savannah River Site
STARS	Standard Accounting and Reporting System
STRIPES	Strategic Integrated Procurement Enterprise
Title XVII	Loan Guarantee Program for Innovative Technologies
Treasury	Department of the Treasury
UF6	Uranium Hexafluoride

U.S.C.	United States Code
USEC	United States Enrichment Corporation
WAPA	Western Area Power Administration
WMD	Weapons of Mass Destruction
WTP	Waste Treatment Plant
WVDPA	West Valley Demonstration Project Act
Y-12	Y-12 National Security Complex

Internet References/Links

2011 DOE PAR Reports
http://www.energy.gov/about/budget.htm

Advanced Manufacturing
http://ww1.eere.energy.gov/manufacturing

Advanced Research
http://www.netl.doe.gov/technologies/coalpower/advresearch/

Advanced Research Projects-Energy
http://arpa-e.energy.gov/

Advanced Scientific Computing
http://science.energy.gov/user-facilities/advanced-scientific-computing-research/

Advanced Technology Vehicles (ATVM)
http://www.atvmloan.energy.gov/

Atomic Energy Commission
http://science.energy.gov/about/history/

Basic Energy Sciences
http://science.energy.gov/bes/

Biological and Environmental Research
http://science.energy.gov/ber/

Biomass & Biorefinery Systems R&D
http://www1.eere.energy.gov/biomass/

Block Grant Program
http://www.eecbg.energy.gov/default.html

Building Technologies
http://www1.eere.energy.gov/buildings

Carbon Capture and Storage Technology
http://www.fossil.energy.gov/programs/sequestration/index.html

Chief Human Capital Officer
http://humancapital.doe.gov

Chief Information Officer
http://cio.energy.gov

Clean Cities Alternative Fuel Vehicles Program
http://www1.eere.energy.gov/cleancities/about.html

Clean Coal Power Initiative
http://fossil.energy.gov/programs/powersystems/cleancoal/

Congressional and Intergovernmental Affairs
http://congresssional.energy.gov

Contract and Project Management Summit Report
http://energy.gov/management/downloads/contract-and-project-management-improvement-cpmi-closure-report-april-2012

Control System Security
http://energy.gov/oe/technology-development/control-systems-security

Conversion of Cellulosic Ethanol
http://www.afdc.energy.gov/afdc/ethanol/production_cellulosic.html

Department of Energy
http://energy.gov/

Economic Impact and Diversity
http://diversity.energy.gov

Electrical grid
http://www.oe.energy.gov/smartgrid.htm

Energy Frontier Research Center
http://science.energy.gov/bes/efrc/

Energy Information Administration
http://www.eia.doe.gov/

Energy Storage and Renewable System Integration
http://energy.gov/oe/technology-development/renewable-energy-integration

Federal Energy Management Program
http://www1.eere.energy.gov/femp

Fusion Energy Sciences
http://science.energy.gov/fes/

FutureGen
http://www.netl.doe.gov/technologies/coalpower/futuregen/

Gas Hydrates
http://fossil.energy.gov/programs/oilgas/hydrates

General Counsel
http://gc.energy.gov

Geothermal Technology
http://www1.eere.energy.gov/geothermal/

Health, Safety and Security
http://www.hss.doe.gov

OTHER ACCOMPANYING INFORMATION

Hearings and Appeals
http://www.oha.doe.gov

High Energy Physics
http://science.energy.gov/hep/

High Performance Computing
http://energy.gov/articles/simulation-and-high-performance-computing

Hydrogen Technology
http://www1.eere.energy.gov/hydrogenandfuelcells/

Industrial Technologies
http://www1.eere.energy.gov/industry

Inspector General
http://www.ig.energy.gov

Legacy Management
http://www.lm.doe.gov/

Loan Guarantees
http://www.lgprogram.energy.gov/

Management
http://management.energy.gov

Manhattan Project
http://energy.gov/downloads/themanhattanproject2010pdf

National Nuclear Security Administration
http://nnsa.energy.gov/

Naval Reactors
http://nnsa.energy.gov/ourmission/poweringnavy/moreaboutnavalreactorsoffice

Nuclear Detonation Detection
http://nnsa.energy.gov/aboutus/ourprograms/nonproliferation/programoffices/officenonproliferationresearchdevelopment/nuclea

Nuclear Physics
http://science.energy.gov/np/

Nuclear stockpile
http://www.nnsa.energy.gov/ourmission/managingthestockpile

Office of Electricity Delivery and Energy Reliability
http://www.oe.energy.gov/

Office of Energy Efficiency and Renewable Energy
http://www.eere.energy.gov/

Office of Environmental Management
http://www.em.doe.gov/Pages/EmHome.aspx

Office of Fossil Energy
http://fossil.energy.gov/

Office of Management and Budget
http://www.whitehouse.gov/omb/

Office of Nuclear Energy
http://www.ne.doe.gov

Office of Personnel Management Federal Hiring Reform
http://www.chcoc.gov/transmittals/TransmittalDetails.aspx?TransmittalID=4454

Office of Science
http://science.energy.gov/

PAR Reports
http://www.energy.gov/about/budget.htm

Policy and International Affairs
http://www.pi.energy.gov

Power Marketing Administrations
http://www.energy.gov/organization/powermarketingadmin.htm

President's Budget
http://www.whitehouse.gov/omb/budget

Proliferation Detection
http://www.nnsa.energy.gov/aboutus/ourprograms/nonproliferation/programoffices

Reports Consolidation Act of 2000
http://www.cbo.gov/ftpdocs/21xx/doc2193/s2712.pdf

Research, Development and Demonstration Program
http://www.netl.doe.gov/technologies/coalpower/index.html

Smart Grid
http://www.oe.energy.gov/smartgrid.htm

Solar Energy
http://www1.eere.energy.gov/solar/

Strategic Plan
http://energy.gov/downloads/2011-strategic-plan

Technology Innovation
http://www.bpa.gov/corporate/business/innovation

Vehicle Technologies
http://www1.eere.energy.gov/vehiclesandfuels/

Water Power
http://www1.eere.energy.gov/water

Weatherization & Intergovernmental Activities
http://apps1.eere.energy.gov/wip/

Wind Energy
http://www.energy.gov/energysources/wind.htm

Front Cover:

Top Photo: The Department is working on new technologies to turn biomass resources, such as switchgrass, into renewable transportation fuel and other products.

Center Photo: While they might look like drops of water or soap bubbles, these colorful figures are actually photomultiplier tubes that line the walls of the Daya Bay neutrino detector. Neutrinos and antineutrinos are neutral particles produced in nuclear beta decay when neutrons turn into protons. This experiment aims to measure the final unknown mixing angle that describes how neutrinos oscillate. The tubes are designed to amplify and record the faint flashes of light that signify an antineutrino interaction. Lawrence Berkeley and Brookhaven National Labs and a number of physicists at U.S. universities played leading roles in the Daya Bay experiment, from designing the detectors all the way through to analyzing the data gathered. | Photo by Roy Kaltschmidt, LBNL

Center Left Photo: Fermilab contributed to experiments conducted by Geneva scientists' that resulted in the discovery of what they believe to be the Higgs Boson, a key to understanding why there is diversity and life in the universe.

Center Right Photo: The VULCAN diffractometer at Oak Ridge National Laboratory's Spallation Neutron Source (SNS) was built to take measurements of engineered components like a jet engine turbine blade or the frame of a car. VULCAN can "see" inside the material and make three dimensional maps of the distance between atoms in critical sections. Scientists can use these maps to determine if the atoms are being squeezed together or pulled apart — signs of stress in the materials. This photo highlights the optical fibers of a VULCAN detector module. The fibers transmit light signals created by captured neutrons to photo multiplier tubes where the signals are amplified and then sent into a data acquisition system. | Photo courtesy of Oak Ridge National Laboratory

Bottom Left Photo: The Streator Cayuga Ridge South Wind Farm has 300 MW capacity of electricity. | Photo courtesy of Greater Livingston County Economic Development Council

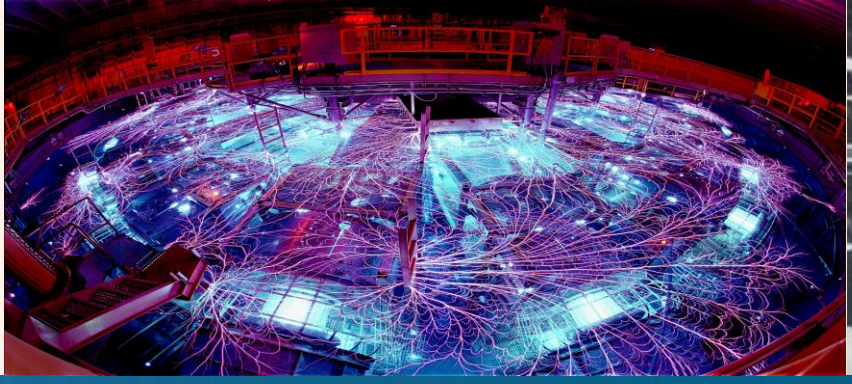
Bottom Right Photo: The Energy Department launched the SunShot Prize competition, which offers cash awards for the top three teams that demonstrate non-hardware costs no higher than $1 per watt for small-scale photovoltaic systems. | Photo by Dennis Schroeder/NREL.

Back Cover:

Top Left Photo: The Z machine, the largest X-ray generator in the world, is located in Albuquerque, New Mexico. As part of the Pulsed Power Program, which started at Sandia National Laboratories in the 1960s, the Z machine concentrates electrical energy and turns it into short pulses of enormous power, which can then be used to generate X-rays and gamma rays. | Photo credit: Randy Montoya/Sandia National Laboratories

Top Right Photo: Solar Panels. Photo is courtesy of ARPA-E.

Bottom Photo: Features the Power County Wind Farm in Power County, Idaho where the nacelles, the center support to which the blades attach, were produced at the Nordex USA plant in Jonesboro, Arkansas. | Photo provided by Nordex USA



WWW.ENERGY.GOV

www.cfo.doe.gov/cf12/2012parAFR.pdf