

Foreword

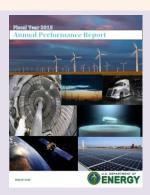
he Reports Consolidation Act of 2000 authorizes Federal agencies, with the Office of Management and Budget's (OMB) concurrence, to consolidate various reports to provide performance, financial and related information in a more meaningful and useful format. For Fiscal Year (FY) 2015, the Department of Energy (Department or DOE), has produced an *Agency Financial*

Report, and will provide an Annual Performance Report and a Summary of Performance and Financial Information, pursuant to OMB Circular No. A-136. They will be available at the website below, as each report is completed. This reporting approach simplifies and streamlines the performance presentations.

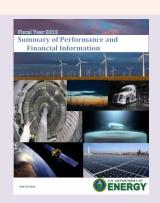
Agency Financial Report (AFR) - The AFR is organized by three major sections.



- Management's Discussion and Analysis 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 provides a Message from the Chief Financial Officer, the Department's consolidated and combined financial statements and the Auditors' Report.
 - **Other Information** provides the Inspector General's Statement of Management Challenges and other statutory reporting.



Annual Performance Report (APR) [will be available February 2016] The APR will provide the detailed performance information and descriptions of results by each performance measure.



Summary of
Performance &
Financial Information
[will be available
February 2016] This
document will highlight
the most important
performance and
financial information
from the APR and AFR.







These three reports meet the following reporting requirements:

- Digital Accountability and Transparency Act (DATA Act) of 2013 requires the transformation of United States (U.S.) federal spending from disconnected documents into open, standardized data, and to publish that data online.
- 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 an agency to have 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.

Table of Contents

Message from the Secretary	i
Management's Discussion and Analysis	1
Agency Highlights	2
Strategic Plan and Program Performance	10
Goal 1: Science and Energy	10
Goal 2: Nuclear Security	15
Goal 3: Management and Performance	19
Management's Analysis, Assurances and Priorities	21
Analysis of Financial Statements	21
Analysis of Systems, Controls, and Legal Compliance	28
Management Priorities	30
Financial Results	41
Consolidated and Combined Financial Statements	44
Introduction to Principal Statements	44
Principal Statements	45
Notes to the Consolidated and Combined Financial Statements	50
Consolidating Schedules	92
Required Supplementary Stewardship Information (RSSI)	102
Required Supplementary Information (RSI)	105
Memorandum from the Inspector General	108
Independent Auditors' Report	110
Other Information	121
Combining Schedules of Spending	122
Inspector General's Management Challenges	124
Summary of Financial Statement Audit and Management Assurances	127
Financial Management Systems Plan	128
Improper Payments Information and Reporting	129
Freeze the Footprint	132
Other Statutory Reporting – Management's Response to Audit Reports	133
Glossary of Acronyms	134



Message from the Secretary



I am pleased to present the United States (U.S.) Department of Energy's (DOE or Department) *Fiscal Year (FY) 2015 Agency Financial Report*. It provides key financial and performance information that demonstrates our commitment to enhance America's security and economic growth through transformative science, technology innovation, and market solutions to meet our energy, nuclear security, and environmental challenges. Our *Fiscal Year 2015 Annual Performance Report* and *Fiscal Year 2015 Summary of Performance and Financial Information* will be released as a complement to this report in February 2016.

Our Strategic Plan provides a roadmap for our work through three broad strategic goals in *Science and Energy, Nuclear Security, and Management and Performance*. Progress was made in achieving each of these goals in FY 2015 through continued investments in scientific research, renewable energy, energy efficiency, nuclear security, and environmental cleanup. For example, DOE supported the interagency task force that released the Administration's Quadrennial Energy Review (QER) in April 2015, a key milestone in the implementation of the President's Climate Action Plan. The QER is a policy roadmap for meeting key energy objectives: enhancing energy infrastructure resilience, reliability, safety and security; modernizing the electric grid and our energy security infrastructures; and improving railways, waterways, ports and roads that move both energy and other commodities. In September 2015, DOE released its second Quadrennial Technology Review which highlights the potential for additional future technology breakthroughs to mitigate the risks of climate change, modernize energy infrastructure, and enhance energy security.

In FY 2015, the Department achieved a number of important financial milestones in support of these strategic objectives. We obligated \$1.7 billion in loan guarantees to three subsidiaries of the Municipal Electric Authority of Georgia to further support the construction of two advanced nuclear reactors at the Vogtle Project - the first new U.S. nuclear power reactors to be licensed in more than three decades. DOE also announced a \$525 million project to establish the Collaboration of Oak Ridge, Argonne, and Lawrence Livermore to deliver computers five to seven times more powerful than the current top supercomputers. These new high performance computers will support national security missions, renewable energy systems design, and materials, biological, and other sciences. Finally, in FY 2015 the Department completed its

investment of over \$30 billion in American Recovery and Reinvestment Act projects that increased the use of renewable energy, modernized the electric grid, made homes and businesses more energy efficient, and created or sustained tens of thousands of jobs in the United States.

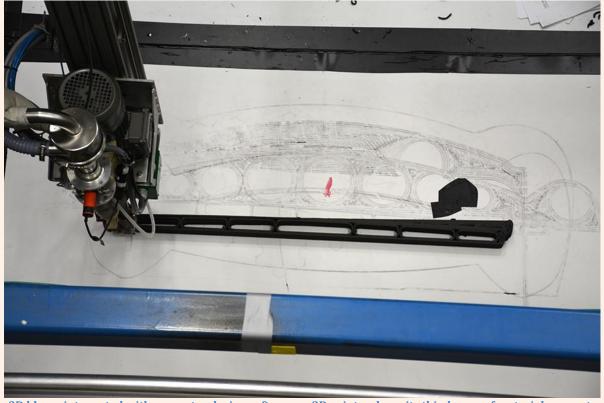
The Department must fulfill ongoing national security responsibilities, including annual certification of the nuclear weapons stockpile without a return to underground testing and successful implementation of the Department's strategy for modernizing our nuclear enterprise, its infrastructure, and nuclear life extension programs, as well as implementation of global nonproliferation initiatives. These global initiatives included removal of all highly enriched uranium from three countries; removal and disposition of four radioisotope thermoelectric generators from Antarctica which contained more than 100,000 curies of radioactive material; strengthening our export control of dual-use commodities while supporting U.S. industry competiveness in the global marketplace; and successfully launched three Global Burst Detector sensor suites that enhance the United States' ability to detect and identify nuclear explosions anywhere in the world. Significant environmental cleanup achievements include the demolition of the K-31 Building at Oak Ridge's East Tennessee Technology Park and the completion of cleanup of mercury-contaminated soil at Los Alamos ahead of schedule, reducing the required cleanup time by more than one third.

The independent public accounting firm KPMG LLP conducted an audit of the FY 2015 DOE financial statements contained in this report and issued an unmodified audit opinion for the ninth consecutive year. Based on internal evaluations, I can provide reasonable assurance that the financial and performance information contained in this report is complete and reliable and accurately describes FY 2015 DOE results.

Ernest J. Moniz November 16, 2015



The Shelby Cobra sports car was 3-D printed at DOE's Manufacturing Demonstration Facility at the Oak Ridge National Laboratory. Photo Courtesy of the Oak Ridge National Laboratory.



Following a 3D blueprint created with computer design software, a 3D printer deposits thin layers of material one on top of the other to create the components of the car from the bottom up. Photo Courtesy of the Oak Ridge National Laboratory.

Management's Discussion and Analysis



The Ivanpah Solar Electric Generating System in Ivanpah Dry Lake, CA. Photo courtesy of Gilles Mingasson, Getty Images for Bechtel.

Agency Highlights

(Unaudited)

MISSION

To enhance United States (U.S.) security and economic growth through transformative science, technology innovation, and market solutions to meet our energy, nuclear security, and environmental challenges.

STRATEGIC PLAN 2014-2018

The Department of Energy (Department or DOE) is subject to the Government Performance and Results Act (GPRA) of 1993 and the GPRA Modernization Act of 2010. In April 2014, DOE issued its 2014-2018 new Strategic Plan. The plan defined the following strategic goals.

Goal 1: Science and Energy

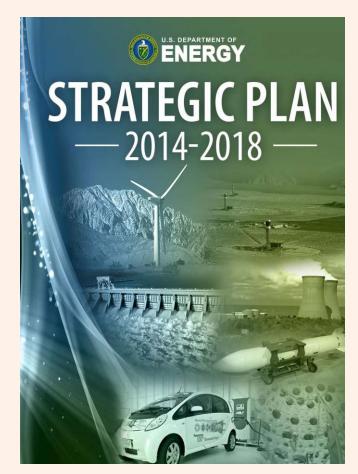
- Advance the goals and objectives in the President's Climate Action Plan by supporting prudent development, deployment, and efficient use of "all of the above" energy resources that also create new jobs and industries
- Support a more economically competitive, environmentally responsible, secure and resilient U.S. energy infrastructure
- Deliver the scientific discoveries and major scientific tools that transform our understanding of nature and strengthen the connection between advances in fundamental science and technology innovation

Goal 2: Nuclear Security

- Maintain the safety, security and effectiveness of the nation's nuclear deterrent without nuclear testing
- Strengthen key science, technology, and engineering capabilities and modernize the national security infrastructure
- Reduce global nuclear security threats
- Provide safe and effective integrated nuclear propulsion systems for the U.S. Navy

Goal 3: Management and Performance

- Continue cleanup of radioactive and chemical waste resulting from the Manhattan Project and Cold War activities
- Manage assets in a sustainable manner that supports the DOE mission
- Effectively manage projects, financial assistance agreements, contracts, and contractor performance
- Operate the DOE enterprise safely, securely, and efficiently
- Attract, manage, train, and retain the best federal workforce to meet future mission needs



History

The Department of Energy's lineage can be traced 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 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 one of the most diverse agencies in the federal Government. 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 R&D 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. During the late 1970s, the Department emphasized energy development and regulation but shifted to nuclear weapons research, development and production during the 1980s. With the end of the Cold War, DOE focused on environmental cleanup of the nuclear weapons complex, as well as non-proliferation and stewardship of the nuclear stockpile. Today, the Department is committed to meeting America's energy, nuclear security and environmental challenges through science and technology innovation.

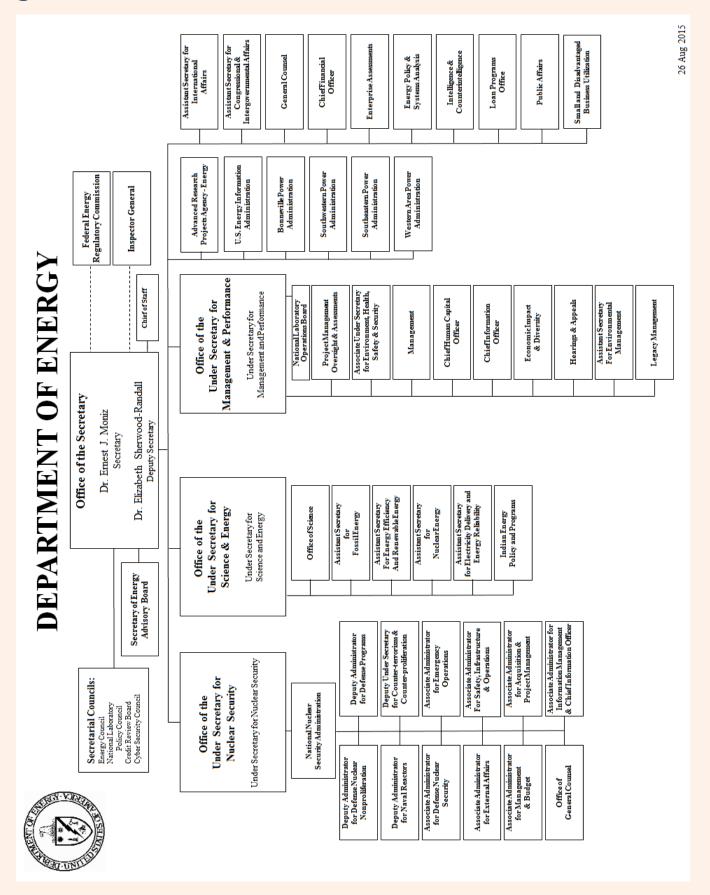


The Weisenberger Mill, a Civil War-era family-owned and operated mill in Kentucky, used Department of Energy funding to install a generator and power electronics. The new system utilizes water flowing through the turbines more efficiently, generating enough power to run the mill when it is grinding.



President Barack Obama, Deputy Secretary of Energy Dr. Elizabeth Sherwood-Randall (2nd from right), DOE Headquarters Energy Manager, Eric Haukdal, and the Council on Environmental Quality's Environmental Executive, Kate Brandt, tour DOE's rooftop solar panels on March 19, 2015.

Organizational Structure

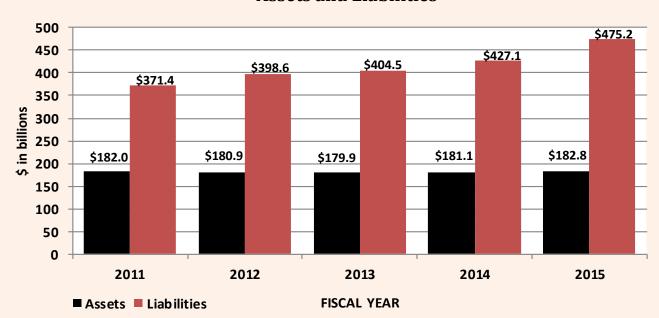


Financial Resources

Appropriations(Appropriations are defined per the FY 2015 *Combined Statements of Budgetary Resources*)

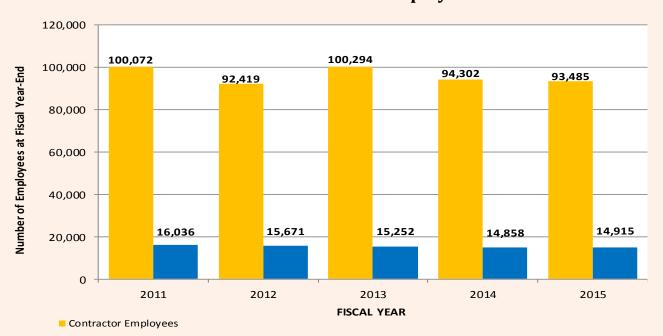


Assets and Liabilities



Human Capital Resources

Federal and Contractor Employees



■ Federal Employees- includes DOE (13,425) and Federal Energy Regulatory Commission (1,490) Employees for FY 2015

Financial Management Report Card

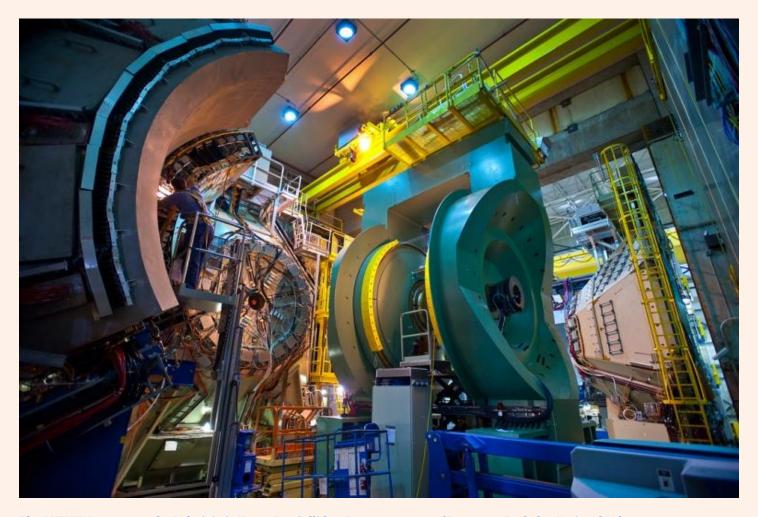
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COMPLIANCE		REQUIREMENT OR INITIATIVE	SUPPORTING INDICATORS (see page references for more detail)					
YES	NO							
abla		Government Management Reform Act –Financial Statement Audit	Unmodified Audit Opinion (see pages 108-120)					
☑		Federal Managers' Financial Integrity Act – Internal Controls (Section II) Financial Systems (Section IV)	No Material Weaknesses (Section II) (see pages 28-29 and 127) Financial Systems generally conform to (Section IV) requirements and no FISMA significant deficiencies identified (see pages 28-29 and 127)					
☑		OMB Circular A-123, Appendix A	No Material Weaknesses (see pages 28-29 and 127)					
☑		Federal Financial Management Improvement Act	Substantially comply with federal financial management system requirements (see pages 28-29 and 127)					
☑		Federal Information Security Management Act (FISMA)	Substantially comply with FISMA requirements as evidenced by annual FISMA reporting data (see pages 28-29 and 127)					
☑		Improper Payments Information Act, as amended by the Improper Payments Elimination & Recovery Act and the Improper Payments Elimination and Recovery Improvement Act	<1% overall Erroneous Payment Rate and not susceptible to significant improper payments (see pages 129-130)					

Performance Summary

The tables in this section will be updated with FY 2015 data in the Department's FY 2015 Annual Performance Report available in 2016. Additional performance results can be obtained at http://www.performance.gov.

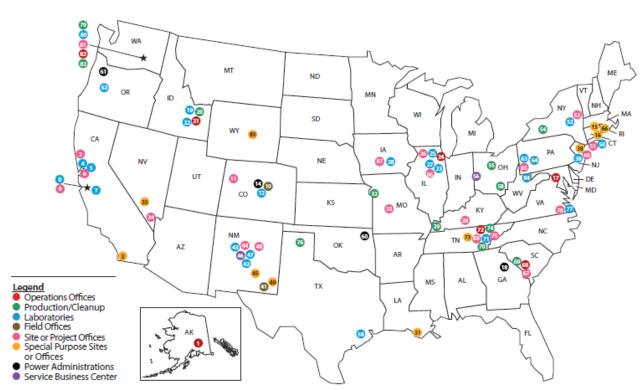
STRATEGIC	ACTIVITY	Fiscal Year 2013 Performance			Fiscal Year 2014 Performance		
GOAL		Targets Met	Targets Not Met	Results Unknown	Targets Met	Targets Not Met	Results Unknown
Strategic G	oal 1: Science and Energy						
J	Electricity Delivery & Energy Reliability	6			7		
	Western Area Power Administration	3			2		
	Bonneville Power Administration	3			3		
	Southeastern Power Administration	2			2		
	Southwestern Power Administration	3			4		
	Solar Energy	3			2		
	Wind Energy	3			2		
	Geothermal Technologies	1			1		
	Water Power	1			1		
	Biomass & Biorefinery Systems R&D	3			2		
	Hydrogen & Fuel Cell Technologies	2			2		
	Vehicle Technologies	6	1		2		
	Advanced Manufacturing	5			4	1	
	Building Technologies	7	2		7		
	Federal Energy Management		1			1	
	Weatherization & Intergovernmental	4			2		
	Fossil Energy R&D	3			3		
	Petroleum Reserves	3			3		
	New Nuclear Generation Technologies	5			3	2	
	Nuclear Infrastructure	1	2			2	
	Energy Information Administration	2			2		
	Loan Guarantees	2			3	1	
	Advanced Research Projects Agency-Energy	2			2		
	Advanced Scientific Computing Research	2			2		
	Basic Energy Sciences	3			3		
	Biological & Environmental Research	3			2		
	Fusion Energy Sciences	4			4		
	High Energy Physics	2	1		3		
	Nuclear Physics	3			3		
	Total Goal 1	87	7	0	76	7	0
Strategic G	oal 2: Nuclear Security						
	NNSA Federal Salaries & Expenses	1			1		
	Directed Stockpile Work	1	3		4		
	Science Campaign	1			1		
	Engineering Campaign	1			1		
	Inertial Confinement Fusion Ignition & High Yield Campaign	2	1		1	2	
	Advanced Simulation & Computing Campaign		1		1		
	Readiness Campaign	3			1		
	Readiness in Technical Base & Facilities	1			2		
	Secure Transportation Asset	1			1		
	Nuclear Counterterrorism Incident Response	1			1		
	Site Stewardship	1			1		
	Defense Nuclear Security	1			3		
	NNSA CIO Activities	1			1		
	Counterterrorism & Counterproliferation	2			1	1	
	Nonproliferation & Verification R&D	4			5		
	Nonproliferation & International Security	3			4		
	International Material Protection & Cooperation	1	1		3	2	
	Fissile Materials Disposition	1	3		2	2	1
	Global Threat Reduction Initiative	3			3		
	Naval Reactors	2			2		
	Total Goal 2	31	9	0	39	7	1

STRATEGIC GOAL	ACTIVITY	Fiscal Year 2013 Performance			Fiscal Year 2014 Performance			
		Targets Met	Targets Not Met	Results Unknown	Targets Met	Targets Not Met	Results Unknown	
Strategic Goal 3: Management and Performance								
	Environmental Management	6	3		8	6		
	Legacy Management	2			2			
	Information Management (CIO)		3			3		
	Departmental Management		1			1		
	Human Capital	1	1					
	Workforce Development for Teachers & Scientists	1						
	Total Goal 3	10	8	0	10	10	0	
	DOE Total	128	24	0	125	24	1	
	Share of Targets Met	84%			83%			



The PHENIX Detector at the Relativistic Heavy Ion Collider. Image courtesy of Lawrence Berkeley National Laboratory.

Major Laboratories and Field Facilities



Alaska

Arctic Energy Office

- Berkeley Site Office
- Energy Technology Engineering
- Center

 Lawrence Berkeley National Laboratory
- Lawrence Livermore National
- Laboratory Livermore Site Office
- Sandia National Laboratories
- SLAC National Accelerator Laboratory

 SLAC Site Office

Laboratory

- Colorado
 Golden Field Office
- Grand Junction Office National Renewable Energy
- Western Area Power Administration

- Connecticut

 15 16 Northeast Home Heating Oil
- District of Columbia
 Washington D.C. Headquarters

Southeastern Power Administration

- Idaho Idaho National Laboratory
- Idaho Operations Office Radiological Environmental Sciences Laboratory

Illinois

- Argonne National Laboratory Argonne Site Office
- Chicago Office
- Fermi National Accelerator
- Laboratory Fermi Site Office
- New Brunswick Laboratory

- Ames Laboratory
- Ames Site Office

- Kentucky
 Paducah Gaseous Diffusion Plant
- Portsmouth/Paducah Project Office

Louisiana

Strategic Petroleum Reserve

Missouri

- Kansas City Plant
- Kansas City Site Office

- Nevada Site Office Nevada National Security Site

New Jersey

- Northeast Regional Refined Petroleum Product Reserve
- Princeton Plasma Physics Laboratory Princeton Site Office

New Mexico Carlsbad Field Office

- Inhalation Toxicology Research
- Los Alamos National Laboratory Los Alamos Site Office
- National Training Center

- NNSA Service Center
- Sandia National Laboratories Sandia Site Office
- Waste Isolation Pilot Plant

- Brookhaven National Laboratory
- Brookhaven Site Office Knolls Atomic Power Laboratory
- Schenectady Naval Reactors Laboratory Field Office
- West Valley Demonstration Project

- Columbus Environmental
- Management Project
- EM Consolidated Business Center
- Portsmouth Gaseous Diffusion Plant

Oklahoma

Southwestern Power Administration

Oregon

- Bonneville Power Administration
- National Energy Technology Laboratory - Albany

Pennsylvania

- Bettis Atomic Power Laboratory
- National Energy
- Technology Laboratory Pittsburgh Pittsburgh Naval Reactors Laboratory Field Office

Northeast Regional Refined Petroleum Product Reserve

South Carolina

- Savannah River National Laboratory
- Savannah River Operations Office Savannah River Site Office

- Oak Ridge National Laboratory Oak Ridge National Laboratory Site Office
- 20 Oak Ridge Office 79 Office of Scientific and Technical
- Information Y-12 National Security Complex
- 7-12 Site Office

- Pantex Plant and Site Office
- National Energy Technology Lab Sugar Land

- Virginia
 Thomas Jefferson National Accelerator Facility
- Thomas Jefferson Site Office

- Washington

 Hanford Site
- Pacific Northwest National Laboratory
- Pacific Northwest Site Office
- Richland Operations Office
 Office of River Protection

West Virginia

National Energy Technology Laboratory - Morgantown

Naval Petroleum Reserve No. 3 -

Strategic Plan and Program Performance

(Unaudited)

The narrative below discusses FY 2015 results and outcomes for DOE programs as aligned with the strategic goals presented in the 2014-18 DOE Strategic Plan. A detailed discussion of results for the Department's FY 2015 performance goals, assessment methodologies, metrics, external reviews, and documentation of performance data will be presented in the *FY 2015 DOE Annual Performance Report* to be released in February 2016. Additional performance information is available at http://energy.gov/about-us/budget-performance.

Goal 1: Science and Energy

Advance foundational science, innovate energy technologies, and inform data driven policies that enhance U.S. economic growth and job creation, energy security, and environmental quality, with emphasis on implementation of the President's Climate Action Plan to mitigate the risks of and enhance resilience against climate change

Objective 1

Advance the goals and objectives in the President's Climate Action Plan by supporting prudent development, deployment, and efficient use of "all of the above" energy resources that also create new jobs and industries

Objective 2

Support a more economically competitive, environmentally responsible, secure and resilient U.S. energy infrastructure

Objective 3

Deliver the scientific discoveries and major scientific tools that transform our understanding of nature and strengthen the connection between advances in fundamental science and technology innovation

Contributing Programs

Advanced Research Projects Agency-Energy, Electricity Delivery and Energy Reliability, Energy Efficiency and Renewable Energy, Energy Information Administration, Energy Policy and Systems Analysis, Fossil Energy, Indian Energy Policy and Programs, International Affairs, Loan Programs, Nuclear Energy, Power Marketing Administrations, Science, Strategic Petroleum Reserve

The DOE leads the nation in the transformational research, development, demonstration, and deployment of an extensive range of clean energy and efficiency technologies, supporting the President's Climate Action Plan and an "all of the above" energy strategy. The DOE identifies and promotes advances in fundamental and applied sciences; translates cutting-edge inventions into technological innovations; and accelerates transformational technological advances in energy areas that industry by itself is not likely to undertake because of technical or financial risk. The DOE also leads national efforts to develop technologies to modernize the electricity grid, enhance the security and resilience of energy infrastructure, and expedite recovery from energy supply disruptions. The DOE conducts robust, integrated policy analysis and regional engagement to support the nation's energy agenda. The DOE is the largest federal sponsor of basic research in the physical sciences. Below are examples of FY 2015 program accomplishments in these areas.

Loan Guarantees: The DOE obligated \$1.7 billion in loan guarantees to 3 subsidiaries of the Municipal Electric Authority of Georgia to further support the construction of two advanced nuclear reactors at the Alvin W. Vogtle Electric Generating Plant. This is the

last of 3 conditional commitments that were first announced by the Administration in 2010, which, when combined with the previously obligated \$6.2 billion in loan guarantees to Georgia Power Company and Oglethorpe Power Corporation, allow the project to be fully financed. This project is a crucial part of America's revitalized nuclear energy industry and will further support the nation's clean energy economy. The Vogtle project is the first new nuclear power plant to be licensed and begin construction in the United States in more than 3 decades. The 2 new 1,100 megawatt Westinghouse AP1000® nuclear reactors at Vogtle represent the first U.S. deployment of this innovative technology. Once they come on line, the new nuclear reactors are expected to provide enough reliable electricity to power nearly 1.5 million American homes and avoid nearly 10 million metric tons of carbon dioxide emissions annually.

Carbon Capture, Storage: The DOE reached a milestone: a group of carbon capture and storage (CCS) projects supported by the Department have safely stored 10 million metric tons of carbon dioxide (CO_2)—the equivalent of removing more than 2 million passenger vehicles from the nation's roads for 1 year. CCS is the separation and capture of CO_2 from power plant and industrial emissions. The captured CO_2 is then injected and stored in deep

underground geologic formations. In a number of CCS projects, the CO_2 is used to enhance oil recovery from mature wells. The projects are part of DOE's Regional Carbon Sequestration Partnership Initiative and the Industrial Carbon Capture and Storage Major Demonstrations programs.

Wind Energy: The DOE released a report in May 2015, Enabling Wind Power Nationwide, describing how the United States can unlock the vast potential for wind energy deployment in all 50 states—made possible through the next-generation of larger wind turbines. It also builds upon the recently released Wind Vision report and highlights the potential for technical advancements to unlock wind resources in regions with limited wind deployment today, such as the Southeast. Technological advancements, such as taller wind turbine towers of 110 and 140 meters and larger rotors—currently under development by the DOE and its private sector partners—can more efficiently capture the stronger and more consistent wind resources typically found at greater heights above ground level, compared with the average 80-meter wind turbine towers installed in 39 states today.

This potential expansion represents an additional 700,000 square miles—or about one-fifth of the United States—bringing the total area of technical wind potential to 1.8 million square miles. These advanced wind energy systems will generate more electricity per dollar invested and further drive down the cost of wind energy. The DOE supports research and development that has already helped the wind industry install nearly 66 gigawatts of wind power capacity—enough to power more than 17 million homes—and has helped decrease the cost of wind energy by more than 90%.

Solar Energy: The DOE committed \$32 million in funding to help train American workers for the solar energy workforce and to further drive down the cost of solar by developing innovative low-cost concentrating solar power collectors and increasing access to critical solar data. The Department is making up to \$12 million available to develop a diverse, well-trained solar support workforce, including professionals in the insurance, real estate, and utility industries. An additional \$5 million will fund projects aimed at increasing market transparency and access to key solar energy datasets, and \$15 million will fund projects to develop new designs for concentrating solar power collectors. Altogether, this funding will help make solar energy more accessible and affordable for American families and businesses.

Lighting Technology: The DOE selected nine research and development projects that will receive \$8.2 million in funding to support solid-state lighting core technology research, product development, and U.S. manufacturing. The projects will help accelerate the development of high-quality light-emitting diode (LED) and organic light-emitting diode (OLED) products that can significantly reduce overall U.S. energy consumption and save

consumers money. Solid-state lighting technologies, based on LEDs and OLEDs, are about 10 times more energy-efficient, last 25 times longer, and significantly reduce the amount of lamp toxins in landfills compared to conventional incandescents. DOE-funded R&D will foster technology breakthroughs to unlock new levels of performance and energy savings; for example, DOE targets look to increase the efficiency of LEDs by an additional 66% from the current baseline. As solid-state electronic technology, LED lighting also offers new potential for advanced lighting control, including color tuning and intelligent, adaptive lighting.

Geothermal Energy: The DOE selected 5 projects for a total of \$2 million for the first part of the multiphase Frontier Observatory for Research in Geothermal Energy (FORGE) effort. This field laboratory, dedicated to cutting-edge research on enhanced geothermal systems (EGS), could unlock access to a domestic, geographically diverse, and carbon-free source of clean energy with the potential to supply power to up to 100 million homes in the United States. The first two phases of FORGE will provide a total of up to \$31 million over 2 years for selected teams.

EGS are engineered geothermal reservoirs, created beneath the surface of the earth, where there is hot rock but limited pathways through which fluid can flow. During EGS development, underground fluid pathways are safely created and their size and connectivity increased. These enhanced pathways allow fluid to circulate throughout the hot rock and carry heat to the surface to generate electricity. EGS development could lead to more than 100 gigawatts of economically viable electric generating capacity in the continental United States, representing a two-orders-of-magnitude increase over present geothermal capacity.

Hydropower: The DOE released the *2014 Hydropower Market Report* in April 2015, the first report to quantify the current size, scope, and variability of the nation's hydropower supplies. Hydropower currently provides approximately 7% of the U.S. electricity supply – enough to power more than 20 million homes and has experienced significant growth industry-wide. Within the last decade, the industry has supported more than 55,000 direct domestic jobs across the country and helped offset 200 million metric tons of carbon emissions per year, equivalent to the emissions from more than 42 million passenger vehicles. The report also highlights how hydropower can be rapidly integrated with other renewable energy sources into the electric grid.

Residential Energy: The DOE's Advanced Research Projects Agency-Energy (ARPA-E) announced \$25 million in funding for 12 innovative projects as part of ARPA-E's new program: GENerators for Small Electrical and Thermal Systems (GENSETS). GENSETS projects are aimed at developing generator technologies that will improve efficiencies in residential Combined Heat and Power generation (CHP). Compared to conventional

electricity generation and transmission, CHP captures the otherwise wasted heat and makes it available for useful application. By making CHP affordable for home use, this heat can be used for water and home heating, reducing the residents' energy costs.

Natural Gas Exports: In FY 2015 the DOE issued several final authorizations to export domestically produced liquefied natural gas (LNG) to countries that do not have a Free Trade Agreement with the United States: the Sabine Pass LNG Terminal in Cameron Parish, Louisiana; the Freeport LNG Terminal on Quintana Island, Texas; the Corpus Christi Liquefaction Project in Corpus Christi, Texas; the Cove Point LNG Terminal in Calvert County, Maryland and the small-scale Hialeah liquefaction facility near Medley, Florida. The development of U.S. natural gas resources is having a transformative impact on the U.S. energy landscape, helping to improve our energy security while spurring economic development and job creation around the country.

Better Buildings: As part of DOE's effort to support U.S. businesses working to save money by saving energy, the Better Buildings Alliance's Lighting Energy Efficiency in Parking Campaign recognized 18 organizations for leading the way in efficient outdoor lighting today. From 2014 to 2015, these organizations committed to installing efficient lighting across more than 470 million square feet of parking space —cutting energy use on average by 60%. American building owners could save more than \$9 billion annually across the 215 billion square feet of parking facilities. More than 140 U.S. businesses and organizations are participating in the campaign and planning or installing energy efficient lighting in their parking lots and garages. As a cornerstone of President Obama's Climate Action Plan, the Better Buildings program aims to make commercial, public, industrial, and residential buildings 20% more energy efficient over the next decade.

Advanced Technology Vehicles: As part of the Administration's effort to strengthen U.S. leadership in manufacturing vehicles, and reduce greenhouse gas emissions through increased fuel efficiency, the DOE announced a conditional commitment for a \$259 million loan to Alcoa, Inc. This conditional commitment is the first issued by the Department under the Advanced Technology Vehicles Manufacturing (ATVM) loan program since Secretary Moniz announced a number of improvements to the program last year and is the first step toward issuing a final loan to Alcoa. If finalized, the loan will partially finance the company's Alcoa, Tennessee, upgraded manufacturing facility that will produce high-strength automotive-grade aluminum for North American automakers to reduce the weight of their vehicles.

Low-Level Waste Disposal: The Nuclear Energy program reached a major milestone in FY 2015, successfully completing design efforts and initiating construction of infrastructure for a new remote-handled low-level waste

disposal facility at the Idaho National Laboratory. The project includes installation of 400+ concrete disposal vaults, construction of supporting infrastructure, completion of facility nuclear safety documentation, and extensive environmental performance analyses to ensure the safe, permanent disposal of remote-handled low-level wastes at the Idaho Site.

Tribal Energy: The DOE announced that 11 tribal communities will receive nearly \$6 million to accelerate the implementation of renewable energy and energy efficiency technologies on tribal lands. As part of the Administration's commitment to partner with Tribal Nations, these projects provide Indian Tribes and Alaska Native villages clean energy options that will reduce fossil fuel use and save money. With tribal renewable energy resources comprising approximately 5% of all U.S. renewable energy resources, these facility- and community-scale projects support national energy goals to strengthen tribal energy self-sufficiency, create jobs, and further economic development. The projects represent a total investment value of \$13.5 million. The Department's funding is expected to be leveraged by nearly \$7.5 million in cost share by the selected Indian Tribes.

Electric Infrastructure: The DOE's Western Area Power Administration and a group of Arizona utilities celebrated the energizing of a new transmission infrastructure project that will serve the state's growing electrical energy needs, attract renewable energy development to the area, and strengthen the transmission system in the Southwestern United States. The 109-mile Electrical District No. 5-to-Palo Verde Hub transmission project in Arizona advances America's energy infrastructure by eliminating system constraints and providing increased capacity access to affordable energy in the region.

Energy Information: The Energy Information Administration (EIA) significantly expanded its domestic energy coverage in 2015 in response to the rapid growth of U.S. oil and gas production. EIA added 10 states to its monthly natural gas production survey, including Pennsylvania, which is now the second largest gasproducing state. EIA also launched monthly collection of oil production data directly from producers in 15 states plus the Gulf of Mexico, including a measure of the API gravity, a quality indicator. To improve understanding of crude oil logistics, EIA also began publishing monthly data on movements of crude oil by rail, a mode that has grown from near-zero in 2010 to nearly a million barrels per day in 2015. The data were integrated into EIA's Petroleum Supply Monthly report that shows the movements of products through five regions of the country by pipeline, tanker, barge, and now rail. Together these data provide industry, researchers, media, and policymakers with standardized and universally-accessible information on important trends in U.S. energy production and distribution.

12

This year EIA also launched the hourly collection of electricity demand data from the nation's 67 balancing authorities that manage the grid for the Lower-48 states. These near real-time data, interactively displayed on EIA's website, will enable researchers to study regional differences and time-series trends in how power is dispatched, which could lead to improvements in peak load management to prevent brownouts or price spikes.

Grid Modernization: The DOE awarded 6 research and development projects to teams of utilities and software vendors to develop advanced applications for utility control rooms using real-time data. These software applications will give grid operators insight into the behavior of the grid and help them to take corrective actions to run the system more efficiently and reliably. By operating the system more efficiently, these projects will allow utilities to avoid billions of dollars in investments in new infrastructure and integrate renewable and distributed energy resources more effectively, thus helping the United States reduce greenhouse gas emissions. As part of their participation, the teams committed to deploying the applications in their control rooms, ensuring real-world testing and a path forward to commercialization.

Quadrennial Energy Review and Quadrennial Technology Review: DOE supported the interagency task force that released the Administration's Quadrennial Energy Review (QER) in April 2015 on energy transmission, storage and distribution - a key milestone in the implementation of the President's Climate Action Plan. Vice President Biden announced the release of the OER report with Secretary Moniz at an event in Philadelphia, PA. The Electric Power Supply Association worked with interagency partners and key stakeholders to verify information and data for the review and to develop policy recommendations. The QER is a policy roadmap for meeting key energy objectives: enhancing energy infrastructure resilience, reliability, safety and security; modernizing the electric grid and our energy security infrastructures; and improving railways, waterways, ports and roads that move both energy and other commodities. In September 2015, DOE released its second Quadrennial Technology Review, which highlights the potential for additional future technology breakthroughs to mitigate the risks of climate change, modernize energy infrastructure, and enhance energy security.

Pluto Mission: The National Aeronautics and Space Administration's (NASA) New Horizons spacecraft accomplished one of the most exciting feats in the history of space exploration. After a 9 1/2-year, 3-billion-mile journey, the mission's historic flyby of Pluto provided the first, close-up views of the frozen world at the edge of the solar system. This remarkable achievement had a little help from the DOE through the development of a radioisotope thermoelectric generator (RTG). This simple form of nuclear power takes heat from the radioactive decay of plutonium-238 and converts it into electricity

using devices called "thermocouples." The RTG provides about 200 watts of electricity to the spacecraft. Used by the United States in space exploration since the 1960s, RTGs are rugged and reliable, with no moving parts to wear out or break. That durability made an RTG the perfect

candidate to power a deep-space mission like New Horizons. To build it. NASA turned to DOE's national laboratories. The heat-producing ceramic "fuel pellets" of plutonium dioxide for the RTG designed and safety-tested by DOE scientists were manufactured



This image of Pluto, taken by New Horizons, is the highest-resolution photo of the dwarf planet since its discovery in 1930. Photo courtesy of NASA.

at Los Alamos National Laboratory in New Mexico, with special iridium and graphite shielding provided by Oak Ridge National Laboratory in Tennessee. The final product was assembled at Idaho National Laboratory in September 2005, just three years after the DOE decided to relocate its RTG program there in 2002.

Energy Innovation Hub: The DOE committed \$75 million in funding to renew the Joint Center for Artificial Photosynthesis, a DOE Energy Innovation Hub originally established in 2010 with the goal of harnessing solar energy for the production of fuel. The Center is led by the California Institute of Technology in partnership with Lawrence Berkeley National Laboratory and operates research sites at both institutions. The researchers are focused on achieving the major scientific breakthroughs needed to produce liquid transportation fuels from a combination of sunlight, water, and carbon dioxide, using artificial photosynthesis. While the scientific challenges of producing such fuels are considerable, this Center will capitalize on state-of-the-art capabilities developed during its initial five years of research, including sophisticated characterization tools and unique automated highthroughput experimentation that can quickly make and screen large libraries of materials to identify components for artificial photosynthesis systems.

Small Modular Reactors: NuScale is making significant progress on the technical work needed to support their design certification application, which they are on schedule to submit to the Nuclear Regulatory Commission (NRC) by December 2016. This year they completed testing and analysis of key primary system components, such as the first-of-a-kind, full-length helical coil steam generator; fabrication and assembly of a full-scale mockup of the upper head assembly of the reactor module; Level 1 probabilistic risk assessment; several design reviews on major systems, including the reactor building and module protection system; and, annotated outlines on all chapters

of their design certification application. Design certification is required to build new plants in the United States and an important feature for international sales since NRC certification is considered the "gold standard" of safety designations.

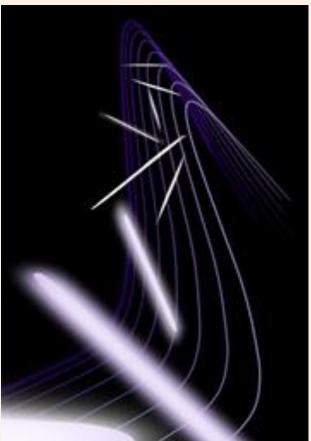
Light Water Reactor Sustainability: The LWRS program is developing computer-based procedure technology and successfully demonstrated the technology on the process of swapping out auxiliary salt-water pumps at the Diablo Canyon Nuclear Plant. Field-based computer-based procedures are one of the top enablers of improved efficiency and human performance for nuclear power plants. Digital technologies such as these benefit plant efficiency and safety, and benefit plant economics.

Modeling and Simulation Hub: The Nuclear Energy Modeling and Simulation Energy Innovation Hub (the Hub) operated by the Consortium for the Advanced Simulation of Light-Water-Reactors (CASL) completed its first five-year phase by simulating all 12 of the fuel cycle cores for the entire life of the TVA operated Watts Bar #1 reactor. During the year, CASL also successfully completed its application to be extended into a second 5-year phase based on the Hub's demonstrated Phase One accomplishments and plans for Phase Two to extend the virtual reactor to other reactor types. The virtual reactor modeling and simulation tools will be used by the nuclear energy industry to gain insights into performance and safety issues with existing reactors that will lead to increased electricity production.

Joint Fuel Cycle Studies: In a significant cost-shared technical collaboration with the Republic of Korea, DOE designed an engineering-scale demonstration and is now installing it at the Idaho National Laboratory (INL) for operation over the next several years. While the facilities at INL have used electrochemical processing in the past, this comprehensive demonstration will begin with actual commercial spent fuel in oxide form, convert it to a metallic form, process it in an electrorefiner to extract the useful transuranic elements, and use them to cast metallic fast reactor fuel, all at an engineering scale. Over the long term, electrochemical processing may offer significant improvements compared to the existing once-through light water reactor fuel cycle now employed in the United States.

Collaboration of Oak Ridge, Argonne, and Lawrence Livermore: DOE announced a \$525 million project to establish the Collaboration of Oak Ridge, Argonne, and

Lawrence Livermore to deliver computers 5 to 7 times more powerful than the current top supercomputers. These new high-performance computers will support national security missions, renewable energy systems design, and materials, biological, and other sciences. Advances in exascale/HPC technology research, development, and deployment are needed to ensure that our nation can continue to meet critical exascale-relevant national security needs, fully leverage exascale for economic competitiveness and scientific discovery, and position our country for sustained technical leadership. Additionally, DOE has worked to create the preliminary conceptual design document for the exascale initiative, which identifies drivers and technical requirements to achieve the Department's exascale goals, and incorporates interagency and community comments.



Ames Laboratory scientists discovered semiconducting nanocrystals that function not only as stellar light-to-energy converters but also as stable light emitters. Image Courtesy of Ames Laboratory.

Goal 2: Nuclear Security

Strengthen national security by maintaining and modernizing the nuclear stockpile and nuclear security infrastructure, reducing global nuclear threats, providing for nuclear propulsion, improving physical and cybersecurity, and strengthening key science, technology, and engineering capabilities

Objective 4

Maintain the safety, security, and effectiveness of the nation's nuclear deterrent without nuclear testing

Objective 5

Strengthen key science, technology, and engineering capabilities and modernize the national security infrastructure

Objective 6

Reduce global nuclear security threats

Objective 7

Provide safe and effective integrated nuclear propulsion systems for the U.S. Navy

Contributing Programs

National Nuclear Security Administration, Intelligence and Counterintelligence, International Affairs

The DOE national security mission supports nuclear security, intelligence and counterintelligence operations, and related national security needs. The President's 2010 National Security Strategy, the Nuclear Posture Review (NPR), and the ratification of the New Strategic Arms Reduction Treaty underscored the importance of the DOE's nuclear mission, and renewed the mandate for DOE to maintain a safe, secure, and reliable stockpile for as long as nuclear weapons exist. The NPR presented a path to reduce global nuclear security threats while permitting access to peaceful nuclear power for nations that respect the international nonproliferation regime. DOE advances the President's vision to move toward a world free of nuclear weapons by both dismantling retired weapons and improving global stability through increased transparency and confidence building measures.

Through the National Nuclear Security Administration's (NNSA) nuclear security enterprise, DOE plays a central role in sustaining a safe, secure, and effective nuclear deterrent and combating proliferation and nuclear terrorism. The science, technology, engineering and manufacturing capabilities resident in the nuclear security enterprise underpin our ability to conduct stockpile stewardship and solve the technical challenges of verifying treaty compliance, combating nuclear terrorism and proliferation, and guarding against the threat posed by nuclear technological surprise. For example, the unique knowledge gained in nuclear weapons design developed to support the U.S. stockpile plays a critical role in the nation's ability to understand strategic threats worldwide. DOE is responsible for providing the design, development, and operational support required to provide militarily effective naval nuclear propulsion plants and ensure their safe, reliable, and long-lived operations.

By providing a modernized, responsive infrastructure, DOE prepares the nation for a range of potential future

nuclear deterrence challenges. With its extensive science and technology capabilities and nuclear expertise, DOE provides support to defense, homeland security, and intelligence missions, primarily through DOE's system of national laboratories and sites. DOE also provides expert knowledge and operational capabilities for physical security, classification, emergency preparedness and response, nuclear forensics and cybersecurity. Below are examples of FY 2015 program accomplishments in these areas.

B61-12 Life Extension: The NNSA and United States Air Force completed the second development flight test of a non-nuclear B61-12 gravity bomb at Tonopah Test Range in Nevada on August 11, 2015. The flight test asset consisted of hardware designed by Sandia National and Los Alamos National Laboratories, manufactured by the National Security Enterprise Plants, and mated to a tail-kit assembly section designed by The Boeing Company under contract with the Air Force Life Cycle Management Center. This test is the second of three development flight tests for



Completion of first flight test of B61-12 Life Extension Program. Photo courtesy of NNSA.

the B61-12 Life Extension Program (LEP), with one additional development flight test scheduled for later this calendar year. This test provides additional confidence in the weapon system and instrumentation designs before authorizing Phase 6.4, Production Engineering, in 2016.

Enriched Uranium Strategy: NNSA's efforts continue at the Y-12 National Security Complex in Oak Ridge, TN, to sustain enriched uranium manufacturing capabilities and replace aging infrastructure. In September 2014, the NNSA approved a Uranium Mission Strategy outlining the overall modernization plan which includes constructing the Uranium Processing Facility (UPF) and making investments in the current plant to reduce mission and safety risks. The UPF is scheduled for completion by 2025, and NNSA completed initial site readiness work to prepare the construction site. NNSA made measurable progress towards its commitment of ceasing all enriched uranium programmatic operations in Building 9212 no later than 2025 by removing more than 9.4 tons of enriched uranium metal from inside the processing facilities. The metal was transported to the Highly Enriched Uranium Materials Facility for storage where it is safer and more secure. This action also reduces the overall hazard for the public by reducing inventory to working levels. Finally, programmatic investment this year in the analytical laboratory, the machining center, and in the casting system have improved the reliability of equipment and improved NNSA's ability to deliver on the enriched uranium mission.

Emergency Management Progress: NNSA responded to over 1,400 actual and training Triage calls, and the Triage system maintained 100% availability and expanded methods for data submission to include mobile platforms. NNSA participated in the Southern Exposure 2015 exercise, the first exercise for a nuclear power plant with full Federal participation in over 20 years, with over 600 Federal, state, and local players and observers, including 52 international radiological experts from 11 countries and 2 international organizations. NNSA also completed Large Scale Operations including the State of the Union, Super Bowl XLIX, U.S. Air Force Academy Graduation, and the Operation Sonar and Radiological Anomaly.

Export Control Regulation: NNSA updated the federal rule (10 C.F.R. Part 810, or Part 810) that regulates the export of unclassified nuclear technology and assistance. The final rule was published in the Federal Register on February 23 and went into effect on March 25, 2015. Part 810 enables civil nuclear trade by ensuring that nuclear technology and assistance exported from the United States will be used for peaceful purposes only. The revision was initiated by NNSA in 2011, and this final version takes into account comments received from industry, academia, and other interested parties during the four-year rulemaking process. As the first comprehensive update to the rule since 1986, this revision makes Part 810 consistent with current global civil nuclear trade practices and the President's U.S. export control reform. Recognizing the importance of nuclear technology in today's society, NNSA

has made Part 810 into a regulation that both meets the requirement to ensure peaceful uses of nuclear power and the expanded use of nuclear technology worldwide. The updated rule is in line with and supports the President's export control reform initiative. (To view a copy of the new rule on the Federal Register, visit the site: http://www.gpo.gov/fdsys/pkg/FR-2015-02-23/pdf/2015-03479.pdf)

Nuclear Detonation Detection: In FY 2015, NNSA collaborated with the U.S. Air Force (USAF) to launch three 300-pound Global Burst Detector (GBD) sensor suites on GPS IIF navigation satellites. The GBD sensor suite detects, identifies, and precisely locates nuclear explosions. This is the latest space-based sensor addition to the U.S. Nuclear Detonation Detection System, which monitors compliance with the international Limited Test Ban Treaty. The treaty, signed by 108 countries, prohibits nuclear testing in the atmosphere, outer space, and underwater. The launch is another milestone in the successful 52-year partnership between the USAF, NNSA, and the national laboratories. These organizations continue to work together to employ advanced technologies for nuclear detonation detection instruments. Currently, research is being conducted to improve future systems so they collect more data and process information faster to monitor globally for nuclear events.

Nonproliferation and Arms Control Verification:

In 2015, NNSA successfully conducted the fourth in a series of experiments designed to improve our ability to detect underground nuclear explosions as a fundamental step forward in the U.S. effort to improve arms control verification. These source physics experiments generate terabytes of data for validating models, testing hypotheses, and improving tools that the US can use to independently verify international compliance with treaties and commitments. Nevada National Security Site, Los Alamos National Laboratory, Lawrence Livermore National

Laboratory,
Sandia
National
Laboratories,
the University
of Nevada
(Reno), and
the Defense
Threat
Reduction
Agency all
participated

in the experiment.
As a matter of test site



Scientists at LANL developed satellite technology that watches for radiation around the globe, around the clock, an ability crucial to nuclear nonproliferation and to verifying the Limited Test Ban Treaty.

transparency, data from this series of experiments are archived and available on the IRIS (Incorporated Research Institutions for Seismology web site: http://www.iris.edu/hq.)

Plutonium Experiments: Lawrence Livermore National Laboratory's National Ignition Facility has successfully performed several experiments on the material properties of plutonium. The three completed experiments are the first in a planned series using small quantities – less than 10 milligrams, or about the size of a poppy seed – plutonium to study the behavior of this material at the temperatures and pressures that occur in the nuclear phase of a weapon. Up to 12 similar experiments could be conducted each year. All facility operations, including safety systems, proceeded as intended in all three experiments and excellent data on phase transitions of plutonium were collected.

Reducing Global Nuclear Dangers: In January 2015,

NNSA announced the successful removal of 36 kilograms of highly enriched uranium (HEU) from the VVR-K research reactor in a joint operation with the Russian Federation. NNSA also removed 2.9 kilograms of fresh HEU from Canada in October 2014. As of August 2015, NNSA had removed or confirmed the disposition of a cumulative total of 5,359 kilograms of nuclear material and eliminated all HEU from 26 countries and Taiwan.

Training on Insider Threats:

NNSA supported an International Atomic Energy Agency (IAEA) International Training Course held in Helsinki, Finland, on the Preventive and Protective Measures Against Insider



Workers in Jamaica load HEU into the transportation cask for return to the U.S. – Photo courtesy of NNSA.

Threats. This course was held in June 2015 and included case studies of actual insider events and multiple practical exercises on measures to prevent and mitigate the threat of the insider at nuclear facilities. The course was attended by 38 participants from 20 countries including: Algeria, Belgium, Brazil, Bulgaria, China, Egypt, Finland, Indonesia, Japan, Lithuania, Malaysia, Mexico, Netherlands, Japan, Republic of Korea, Spain, Sweden, Thailand, Turkey, and United Arab Emirates. Six instructors representing Canada, Finland, Pakistan, Russia, and the United States conducted the course for the IAEA. The participants consisted of regulators, operators, physicists, and engineers – representing many disciplines such as Physical Security Systems, Cyber Security, and Material Control and Accounting.

Preventing Illicit Trafficking: In December 2014, NNSA responded to urgent needs of the State Border Guard Service (SBGS) of Ukraine, as a result of the Russian incursion in Ukraine. NNSA provided new and replacement

equipment to detect and interdict illicit trafficking of nuclear and radiological materials at newly created checkpoints and along uncontrolled regions. NNSA's rapid response included the provision of handheld and mobile detection systems along with operator training support. NNSA has partnered with the SBGS since 2005 and has equipped key locations with fixed and mobile radiation detection equipment and handheld and man-portable equipment, and provided associated training and maintenance support.

In addition, in January 2015, NNSA transferred responsibility for a radiation detection system at the Port of Yangshan to the General Administration of Customs of China (GACC). This system enhances China's capabilities to deter, detect, and interdict illicit trafficking of nuclear and radiological materials that may be moving through the global maritime shipping system. This transition of responsibility indicates GACC's commitment to operate and maintain the system over the long term. The Nuclear Smuggling Detection and Deterrence Program and GACC continue to build upon the success of the work at Yangshan through a recently established joint working group. As China works to expand its national detection program, this group of subject matter experts will continue to share lessons learned and best practices in the design, operation, and sustainment of radiation detection systems.

Recovering Disused Radioactive Sources: NNSA recovered its one millionth curie (Ci) of disused and unwanted radioactive sources from domestic sites through its Off-Site Source Recovery Project (OSRP) in December 2014. These removals were part of DOE/NNSA's global campaign to prevent terrorists from acquiring nuclear and radiological material. The radioactive source that achieved the millionth curie milestone was a small stainless steel capsule, about the size of a pencil, containing 100 Ci of the radioactive isotope Cobalt-60 (Co-60). This source was recovered from an industrial facility in Maryland. Since 1999, OSRP's mission to remove excess, unwanted, abandoned or orphaned radioactive sealed sources that pose a potential risk to health, safety, and national security has resulted in the successful recovery of more than 38,000 radioactive sources from more than 1,100 domestic locations. Cumulatively, this amount of radioactive material is enough to produce 100,000 radiological dispersal devices (aka "dirty bombs").

New Alarm Response Training Academy: NNSA's new Alarm Response Training Academy at the Y-12 National Security Complex opened in October 2014. The facility houses NNSA's Alarm Response Training program, which trains local law enforcement and other critical first responders around the country. The program features a three-day course where participants develop and discuss tactics, techniques, procedures, and protocols for responding to a theft or sabotage event involving radioactive materials. After 2 days of classroom instruction, Y-12 experts facilitate live-action scenarios

allowing participants to test their knowledge and exercise their revised response plans.

A1B Reactor Plant Design: NNSA continued development on the A1B naval reactor; achievements include the engineering of safeguard systems installation on the lead and follow primary plants, and hydrostatic testing of the lead primary plant. The reactor design increases core

energy, increasing availability between refueling overhauls; provides nearly three times as much electrical power, essential for the greater power demands of modern technology; and halves the number of required sailors, significantly reducing personnel costs.



The Naval Nuclear Propulsion Program provides militarily effective nuclear propulsion plants and ensures their safe, reliable and long-lived operation. This mission requires the combination of fully trained U.S. Navy men and women with ships that excel in endurance, stealth, speed, and independence from supply chains. Photo Courtesy of NNSA.

Goal 3: Management and Performance

Position the Department of Energy to meet the challenges of the 21st century and the nation's Manhattan Project and Cold War legacy responsibilities by employing effective management and refining operational and support capabilities to pursue departmental missions

Objective 8

Continue cleanup of radioactive and chemical waste resulting from the Manhattan Project and Cold War activities

Objective 9

Manage assets in a sustainable manner that supports the DOE mission

Objective 10

Effectively manage projects, financial assistance agreements, contracts, and contractor performance

Objective 11

Operate the DOE enterprise safely, securely, and efficiently

Objective 12

Attract, manage, train, and retain the best federal workforce to meet future mission needs

Contributing Programs

Congressional and Intergovernmental Affairs, Economic Impact and Diversity, EERE Sustainability, Enterprise Assessments, Environmental Management, Financial Management (CFO), General Counsel, Environment, Health, Safety and Security, Hearings and Appeals, Human Capital, Information Technology (CIO), Inspector General, Legacy Management, Management, Public Affairs

Attaining mission success requires a sustained commitment to performance-based management and expectations of excellence from DOE headquarters to every site office, service center, laboratory, and production facility. At the center of this goal is a highly qualified, capable, and flexible federal workforce that can execute the mission in a safe, secure, efficient, and sustainable manner. DOE cultivates a performance-based system that links work to meeting agency and Administration goals and achieves results. Management of research and development involves prioritization of those activities with the greatest potential and likelihood for impact. Research decisions are informed by rigorous peer reviews at the portfolio level and solicitation levels. A top priority has been to improve contract and project management across the DOE enterprise, along with vigilant protection of DOE's cyber networks. Below are examples of FY 2015 program accomplishments in these areas.

Rocky Flats: A project to reconfigure the East Trenches Plume Treatment System (ETPTS) at the Rocky Flats Colorado site, to improve treatment effectiveness and meet the strict water quality standards in the area, was completed in January 2015. The ETPTS was installed in 1999. The system was designed to intercept and treat groundwater contaminated with chlorinated solvents, chemicals commonly used in dry cleaning and to clean tools. At Rocky Flats, the solvents were used primarily as degreasers and lathe and machining coolants. During the 1950s and 1960s, a common disposal practice around the world for these chemicals was to bury them in trenches dug into the ground. Rocky Flats followed this practice at that time, which led to the groundwater contamination at the site.

Los Alamos: DOE's Los Alamos Field Office in New Mexico completed a cleanup of mercury-contaminated soil on DOE property. The project was finished successfully in about 5 weeks — approximately 3 weeks ahead of schedule. Experts used a specialized telescoping crane and spider excavator to remove 160 cubic yards of mercury-contaminated soil from the rugged canyon side. The contaminants resulted from the Manhattan Project and early Cold War era operations at a Solid Waste Management Unit at the former Technical Area 32, which was the site of a small medical research facility. This legacy cleanup project was a cooperative effort with Los Alamos County and the DOE.



In ongoing efforts to reduce the Laboratory's footprint, Los Alamos National Laboratory's Environmental Remediation program removed 160 cubic yards of legacy mercury-contaminated soil from the Los Alamos Canyon that derived from the Manhattan Project and early Cold War era operations at the former Technical Area-32.

Idaho: The Nuclear Energy program reached a major milestone in FY 2015, successfully completing design efforts and initiating construction of infrastructure for a new remote-handled low-level waste disposal facility at the Idaho National Laboratory. The project includes installation of over 400+ concrete disposal vaults, construction of supporting infrastructure, completion of facility nuclear safety documentation, and extensive environmental performance analyses to ensure the safe, permanent disposal of remote-handled low-level wastes generated as a result of Nuclear Energy and Naval Reactors mission activities at the Idaho Site.

Strategic Sourcing Savings: The Department expanded use of the Federal Strategic Sourcing Initiative (FSSI) to DOE federal procurement operations while continuing focus on Contractor Supply Chain Council activities to achieve cost savings against actionable spending in FY 2015. As of March 31, 2015, only six months into the fiscal year, DOE surpassed FSSI savings for all of FY 2014 by 133%. Current FSSI actions and trends will continue the increase in savings in coming years. Office Supplies 3 was awarded in 2014 and it is expected to significantly impact the savings related to FSSI. As Category Management Leadership Council initiatives and new vehicles continue to emerge, we anticipate that savings will continue to increase.

Oak Ridge: DOE, community leaders, and local officials gathered in the summer of 2015 to witness the completion of K-31 Building's demolition at Oak Ridge's East Tennessee Technology Park, marking the removal of the fourth of five gaseous diffusion buildings at the former uranium enrichment site. This project was completed ahead of schedule and under budget. The demolition of the gaseous diffusion building—one of the most complex

aspects of cleanup at the site—improves the chances of meeting the major DOE milestone of having all five gaseous diffusion plant buildings demolished by the end of calendar year 2016.



Workers take down the last section of the K-31 building at Oak Ridge's East Tennessee Technology Park.

Exercised Direct Hire Authority for DOE Headquarters:

The Department further developed its workforce by concentrating on delivering improvements to professional development program requirements and management, as well as making improvements to the information technology tools and systems used by our professional workforce to accomplish the Agency's mission. For example, DOE extended direct hire authority for Contract Specialists, expediting the selection and time-to-hire cycle.

Management's Analysis, Assurances and Priorities

Analysis of Financial Statements

The Department's financial statements 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 Department's management is responsible for the integrity and objectivity of the financial information presented in these financial statements.

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. 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 total 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 liabilities balances over the past five years. The largest component of the Department's environmental liabilities 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; soil and groundwater remediation; and disposition of excess material from sites after the EM program activities have been completed. The other legacy liabilities also include the Department's share of the estimated future costs of dispositioning its inventory of high-level waste and spent nuclear fuel (SNF).

Chart 1: Total Assets and Liabilities with Breakdown of FY 2015 Liabilities



Chart 2: FY 2015 Significant Changes in Assets

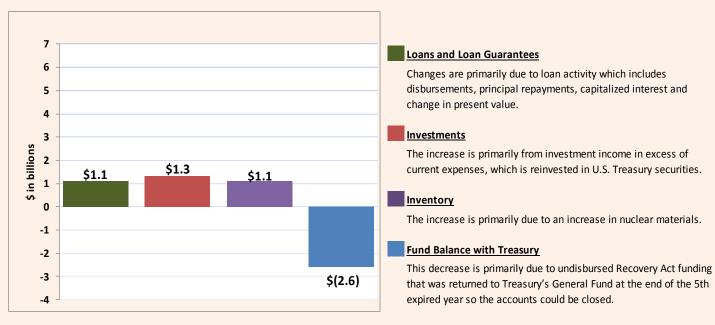
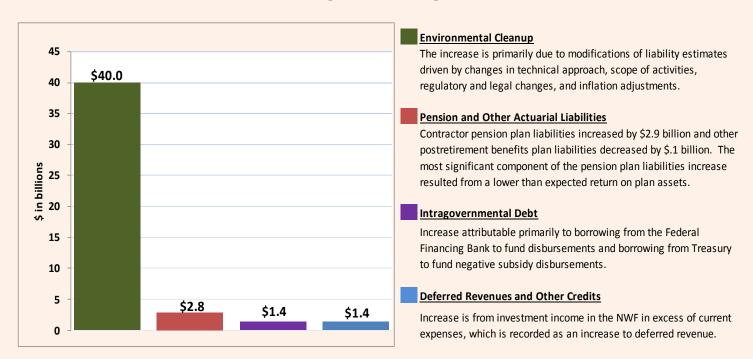


Chart 3: FY 2015 Significant Changes in Liabilities



300 250 \$240 \$204 200 \$181 \$175 FY 2011 \$163 FY 2012 150 FY 2013 FY 2014 FY 2015 100 \$70 \$69 \$65 \$66 \$59 \$30 \$30 \$31 \$29 \$29 **Environmental Management** Other Legacy Environment **Active and Surplus Facilities**

Chart 4: Composition of Environmental Cleanup and Disposal Liability

Net Cost of Operations

The major elements of net cost are shown in Chart 5. A breakdown of program costs (gross) by the Department's three programmatic goals, reimbursable work and other programs is provided in Chart 6.

The Department's overall net costs are primarily affected by changes in environmental and other unfunded liability estimates. Since these estimates mostly 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 2015 unfunded liability estimate changes are shown in Chart 7.

A net increase to the Department's environmental liabilities estimate during FY 2015 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 and legal changes (see Chart 4).

The Department's FY 2015 unfunded liability estimates increased by \$2.9 billion for contractor pension plans and decreased by \$0.1 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 liabilities resulted from a lower

than expected return on plan assets. The most significant component of the change in contractor PRB liabilities resulted from changes made by contractors during the year in an effort to control the future cost growth associated with these benefits. There were also changes in both pension and PRB liabilities because of 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. The discount rate used to discount the liabilities to present value was unchanged from FY 2014.

The Department's Research & Development (R&D) expenses are shown in Chart 9. These R&D expenses facilitate the creation, advancement, and deployment of 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. Overall, Research & Development expenses increased by \$2.4 billion in FY 2015, primarily due to the inclusion of Program Direction, Safeguards & Security, and Infrastructure costs that support R&D activities. Excluding those support costs, the FY 2015 reported total would have been approximately \$10.3 billion or essentially the same level as FY 2014.

Chart 5: Elements of Net Cost

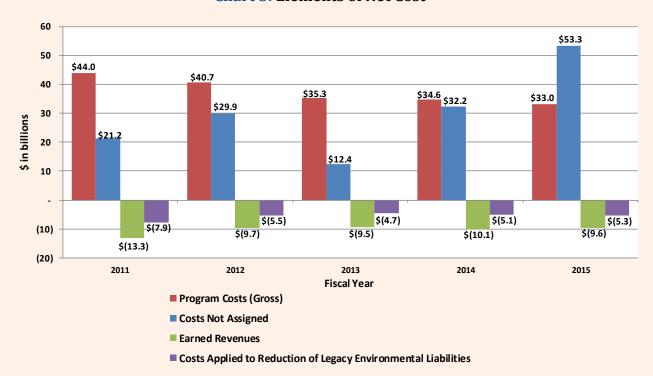


Chart 6: FY 2015 Program Costs (Gross)

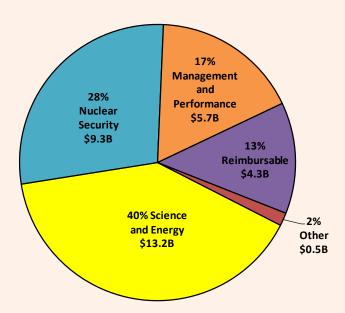


Chart 7: Major Elements of Costs Not Assigned

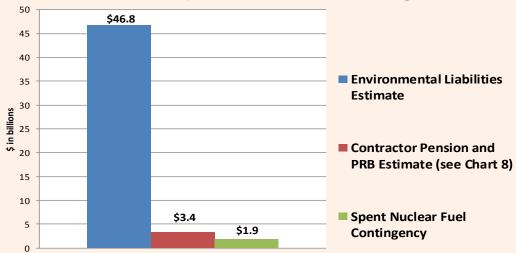


Chart 8: FY 2015 Contractor Employee Pension and Other Postretirement Benefit Plans Liability
Estimate Changes

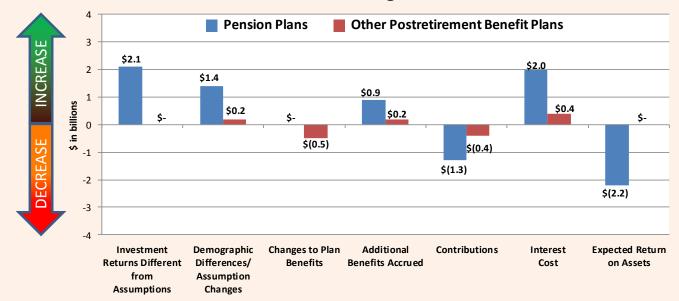
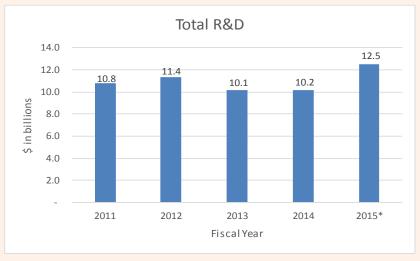


Chart 9: Research & Development



^{* -} FY 2015 includes Program Direction, Safeguards & Security, and Infrastructure costs that support R&D activities.

Budgetary Resources

The Combined Statements of Budgetary Resources provides information on the budgetary resources available to the Department for the year and the status of those resources at the end of the FY. The Department receives most of its funding from general Government funds administered by the Department of the Treasury (Treasury) and appropriated for DOE'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 appropriations on the Combined Statements of Budgetary Resources increased in FY 2015 by \$2.9 billion from FY 2014.

As shown in Chart 10, the Department's Obligations Incurred decreased by \$4.1 billion from FY 2014.

Chart 10: Obligations Incurred

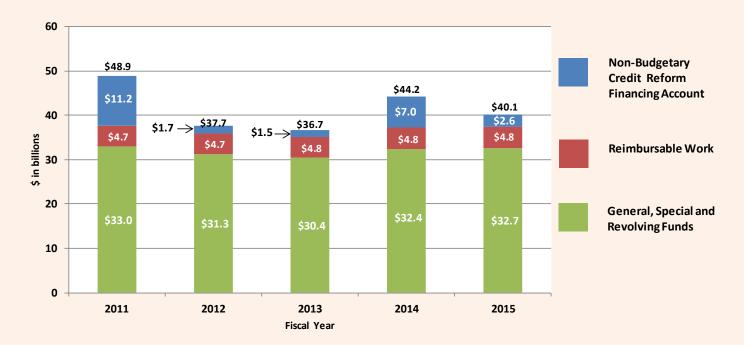


Chart 11: Linking Strategic Goals, Objectives, Budget and Cost

			DITURES RED ^{a c}	PROGRAM COST b c		
STRATEGIC GOALS	STRATEGIC OBJECTIVE	(\$ IN BILLIONS) FY 2015 FY 2014		(GROSS IN BILLIONS) FY 2015 FY 2014		
STRATEGIC GUALS	Advance the goals and objectives in the President's	F1 2013	F1 2014	F1 2015	F1 2014	
	Climate Action Plan by supporting prudent development,					
	deployment, and efficient use of "all of the above"					
	energy resources that also create new jobs and industries	\$ 11.6	\$ 12.5	\$ 7.8	\$ 8.7	
	Support a more economically competitive,					
Goal 1:	environmentally responsible, secure and resilient U.S.					
Science and Energy	energy infrastructure	0.9	0.8	0.6	0.7	
	Deliver the scientific discoveries and major scientific tools					
	that transform our understanding of nature and					
	strengthen the connection between advances in					
	fundamental science and technology innovation	4.8	4.8	4.8	5.2	
	Subtotal Goal 1: Science and Energy	17.3	18.1	13.2	14.6	
	Maintain the safety, security and effectiveness of the					
	nation's nuclear deterrent without nuclear testing	4.4	3.8	3.6	3.9	
	Strengthen key science, technology, and engineering					
Goal 2:	capabilities and modernize the national security					
Nuclear Security	infrastructure	3.4	3.5	2.8	3.2	
ivacieal Security	Reduce global nuclear security threats	2.1	2.0	1.7	1.7	
	Provide safe and effective integrated nuclear propulsion					
	systems for the U.S. Navy	1.1	1.1	1.2	1.1	
	Subtotal Goal 2: Nuclear Security	11.0	10.4	9.3	9.9	
	Continue cleanup of radioactive and chemical waste					
	resulting from the Manhattan Project and Cold War					
	activities	6.4	5.5	4.9	4.6	
	Manage assets in a sustainable manner that supports the					
Goal 3:	DOE mission	0.2	0.2	0.1	0.1	
Management and	Effectively manage projects, financial assistance					
Performance	agreements, contracts, and contractor performance	0.2	0.1	0.2	0.1	
	Operate the DOE enterprise safely, securely, and					
	efficiently	0.6	0.6	0.6	0.6	
	Attract, manage, train, and retain the best federal					
	workforce to meet future mission needs	-	-	-	-	
	Subtotal Goal 3: Management and Performance	7.4	6.4	5.8	5.4	
	Total for Strategic Goals	35.7	34.9	28.3	29.9	

a. Budgetary Expenditures Incurred are amounts accrued or paid for services performed, goods and tangible property received. 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 activities.

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

c. Budgetary Expenditures and Program Cost include Recovery Act amounts.

Analysis of Systems, Controls, and Legal Compliance

(Unaudited)

Management Assurances

he Department of Energy (Department) 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 No. 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, 2015, the Department provides reasonable 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. 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, 2015, were working effectively and no material weaknesses were identified in the design or operation of the specific controls over financial reporting. This assessment and evaluation of internal controls over financial reporting includes safeguarding assets and compliance with applicable laws and regulations, as required by Appendix A of OMB Circular No. 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 controls (including safeguarding of assets and compliance with applicable laws and regulations) over all of the Department's American Recovery and Reinvestment Act (ARRA) funding. Controls have been established to ensure that the following critical objectives are met: (1) ARRA 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 ARRA funding have been evaluated and are deemed effective.

While the Department has no material weaknesses to report as a result of the above internal control evaluations, the Department 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.

Ernest J. Moniz November 16, 2015

MANAGEMENT'S ANALYSIS, ASSURANCES AND PRIORITIES (Unaudited)

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, advises the Secretary on the Statement of Assurance.

OMB Circular No. A-123, Appendix A

Appendix A of OMB Circular No. A-123 provides specific requirements to agencies for conducting management's assessment of internal control over financial reporting. The Department's evaluation for FY 2015 did not identify any material weaknesses in financial controls as of, or subsequent to, June 30, 2015.

Federal Financial Management Improvement Act

The Federal Financial Management Improvement Act 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 United States Government Standard General Ledger at the transaction level.

American Recovery and Reinvestment Act

The American Recovery and Reinvestment Act (Recovery Act) was enacted 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 included 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. In 2009, Congress enacted \$32.6 billion in time-limited Recovery Act funds for the Department. The Department expended \$30.1 billion and returned \$2.5 billion to the U.S. Treasury as of the September 30, 2015 expiration date of those funds.

Management Priorities

(Unaudited)

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 the Inspector General (IG) to prepare an annual statement summarizing what they consider to be the most serious management and performance challenges facing the Department. These challenges are included in the Other Information section of this report. Similarly, in FY 2015 the GAO issued its biennial "High Risk Series" update which included one DOE specific high risk issue.

The Department, after considering all critical activities within the agency and those areas identified by the IG and GAO, has identified eight management priorities that represent the most important strategic management issues facing the Department now and in the coming years. The IG-identified challenges, GAO-identified high risk issue, and DOE management priorities are presented in the table at the end of this section.

CONTRACT AND PROJECT 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 and to acquire capital assets. The Department has been challenged, both externally and internally, to improve the efficiency and effectiveness of its contract management processes.

Since 1990, the Department has been on the GAO High-Risk List for inadequate contract and project oversight and management. In its February 2013 High-Risk List update, GAO acknowledged the Department's continuing improvement in contract and project management by shifting the focus of DOE's high-risk designation to major contracts and projects executed by NNSA and EM with values of \$750 million or greater. This focus continued in GAO's update provided in February 2015.

The Department's project management success metric is to deliver projects to completion at the original scope with no greater than a 10% cost increase. During the most recent reporting period covering FYs 2012 through 2015, 78% of DOE's projects were completed successfully. DOE continues to explore strategies for improving project management performance.

Departmental Initiatives: In FY 2015, the Department continued to make significant progress in addressing this management priority.

In November 2014, a working group of DOE's most senior project managers produced an in-depth analysis of project management in a report titled "Improving Project Management" which resulted in a Secretarial policy memorandum, "Improving the Department's Management of Projects" released by the Secretary in December 2014. Based on the report and policy memorandum, and drawing from industry and government best practices, the Department took several steps to supplement ongoing efforts to improve project management, including: strengthening the Energy Systems Acquisition Advisory Board (ESAAB), establishing a Project Management Risk Committee (PMRC), and improving the lines of responsibility and the peer review process.

The ESAAB was transformed from an ad hoc body to a board that now meets regularly to discuss and review project management across the Department. While the ESAAB previously met only when a major capital asset project (total project cost of \$750 million or greater) was reaching a critical decision milestone, it now convenes on at least a quarterly basis to review all capital asset projects with a total project cost (TPC) of \$100 million or greater. The ESAAB focuses on those projects at risk of not meeting their performance baselines and discusses project management and project execution across the Department.

The PMRC, which consists of the Department's top project management experts, supports DOE's continuing effort to improve project management. The PMRC leverages existing capabilities to provide enterprisewide project management risk assessment and expert advice to the Secretary, the Deputy Secretary as the Chief Executive for Project Management, other Departmental Project Management Executives and the ESAAB on cost, schedule and technical issues and associated risks regarding capital asset projects with a TPC of \$100 million or greater.

To improve lines of responsibility, the Secretary directed that for each project, the appropriate Under Secretary designate an owner who has budgetary and programmatic responsibility with a clear line of responsibility that extends from the Under Secretary to the project owner to the Federal Project Director. The project owner is documented in the Department's central project management data repository and communicated in monthly DOE project portfolio status reports to senior leadership.

To further strengthen the independence of the project peer review process, the Secretary directed each Under Secretary to establish, if it did not already exist, a project assessment office that did not have line management responsibility for project execution. As a result, the Under Secretary for Nuclear Security elevated the Office of Project Assessments (NA-APM-1.1) as a direct report to the Under Secretary, and within the Under Secretary for Management and Performance, the Office of Project Management Oversight and Assessments (PM-1) was established as a direct report to conduct assessments of the Environmental Management (EM) portfolio of projects. Within the Under Secretary for Science and Energy, the Office of Project Assessment (SC-28) which only conducts assessments of the portfolio of projects within the Office of Science and does not have line management responsibility for project execution, already existed. It was determined that a standing office for the Energy Programs (i.e., Fossil Energy, Nuclear Energy) was unnecessary as capital asset projects are infrequent in those programs.

In a memorandum dated June 8, 2015, entitled Project Management Policies and Principles, the Secretary further enhanced and clarified departmental policy related to areas of project management to include analysis of alternatives, cost estimating, planning and scheduling, and design management, among others. The Secretary further directed that all requirements of DOE Order 413.3B, Program and Project Management (PM) for the Acquisition of Capital Assets, were applicable for all capital asset projects having a TPC of \$10 million or greater versus the \$50 million threshold originally specified in the Order, and that a limited update to the Order be immediately undertaken to incorporate all recent Secretarial policy memorandums. The changes were either noted as areas for improvement by the GAO in recent reports; identified by DOE project management experts; or were recommended in the Improving Project Management Report, and were to be implemented and effective immediately as required project management procedures.

Specifically, in the areas of analysis of alternatives and cost estimating, the Department recently adopted the recommendations cited in two recent GAO reports (GAO-15-37, December 2014, and GAO-15-29, November 2014). The June 8, 2015 Secretarial policy memorandum requires an independent analysis of alternatives to be conducted consistent with GAO best practices, and it also requires the use of all 12 GAO cost estimating best practices (GAO-09-3SP, March 2009) so project teams more consistently develop reliable cost estimates inclusive of life-cycle costs.

SECURITY

Key Challenges: Ensure the security of national assets entrusted to DOE and classified information related to nuclear weapons while striving to enhance the Department's productivity to achieve mission objectives.

The security breach at the Y-12 National Security Complex (Y-12) in July 2012 and the results of the reviews directed by the Secretary for all Category I Special Nuclear Material (SNM) sites demonstrate the need for continued vigilance and improvement.

Departmental Initiatives: In FY 2015, Departmental elements continued implementing security reforms such as establishing the role of the Chief Security Officer for each Under Secretary; reorganizing the Office of Health, Safety and Security into the Offices of Enterprise Assessments and Environment, Health, Safety and Security; and through senior departmental leadership, worker and stakeholder engagement, and use of operational experience to establish and strengthen lines of communications, seek feedback, and resolve areas of concern. DOE program and staff offices continue to validate the technical basis and soundness of their safeguards and security programs. Where applicable, revisions were and continue to be incorporated into organizational safeguards and security procedures and site contracts. Field and site training needs are being assessed and pertinent training continues to support operational requirements. The Department continued modifying site and laboratory security operational footprints to meet the Graded Security Protection (GSP) Policy and other security policies by consolidating and improving SNM storage facilities; eliminating or releasing for general use facilities that previously required safeguarding; and restructuring security management systems. Lessons learned and findings from the assessments, inspections, and reviews are being used to implement security reforms and corrective actions to address program weaknesses.

The Department will continue to institutionalize safeguards and security reforms through the following initiatives:

- Continue maximizing the use of national and international consensus standards where applicable and ensure DOE requirements are based on credible threats, and are meaningful, clear, and concise;
- Continue improving the effectiveness and efficiency of the Department's personnel security program, to include examining all potential and organizational alternatives in an effort to streamline the access authorization process and support the Department's Insider Threat Program. Continue to provide 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 effort maps to the federal ICAM initiative, and implements Homeland Security Presidential Directive-12, and supports other information technology-based initiatives);
- Updating risk acceptance and vulnerability assessment processes, deploying cost-effective

security measures, and consolidating and improving nuclear material storage facilities while also examining the basis behind the GSP and its potential revision;

- 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 special
 nuclear 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 through the newly established Chief Security Officer role reporting to each Under Secretary and clarifying roles and responsibilities for federal and contractor line management;
- Foster a collaborative approach to electrical grid resiliency and security through partnerships with the Power Marketing Administrations, the Office of Electricity Delivery and Energy Reliability, and the Office of Intelligence and Counterintelligence (IN) to identify, test and implement cost-efficient and performance-effective security technologies and programs;
- Continue to review and update security policy to better establish clear lines of responsibility and accountability for the implementation of security within line management; and provide expertise, guidance and security support services across the Department;
- Continue conducting security surveys and selfassessments and implementing independent security performance oversight and enforcement programs to maintain stakeholder and public confidence; and
- Implement an insider threat program to detect, deter, and mitigate insider threat actions by federal and contractor employees in accordance with the requirements of Executive Order 13587; Structural Reforms to Improve the Security of Classified Networks and the Responsible Sharing and Safeguarding of Classified Information, dated October 7, 2011; and the National Insider Threat Policy and Minimum Standards for Executive Branch Insider Threat Programs, dated November 21, 2012.

ENVIRONMENTAL CLEANUP

Key Challenges: Environmental Management's (EM) 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 several decades to complete the work.

Technical and programmatic risks and associated uncertainties are an inherent part of complex cleanup projects. Characterization of legacy waste sites is performed in conjunction with planning and executing cleanup activities, such as deactivating and decommissioning facilities, removing hazardous materials, stabilizing waste streams to prevent additional environmental damage, and restoring the sites to conditions required by legal agreements. Cleanup activities can last for decades and often require first-of-a-kind solutions. As EM's program progresses, waste sites may be re-characterized.

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 accomplished. Compliance with these agreements and orders is one of the major cost drivers for the EM program.

The legacy of the Manhattan Project, Cold War, and other nuclear fuels programs includes 2,733 remaining excess contaminated facilities currently within the EM Program, and another 1,000 facilities identified in other DOE programs. There are also thousands of tons of excess nuclear materials and wastes requiring cleanup and disposition.

As a result of the duration and diversity of past research development, testing, and production, legacy conditions encompass a level of uncertainty regarding the amount and composition of waste and the nature and extent of environmental contamination. Initial regulatory milestones were developed based on the best available information about a site's condition, with the understanding that further characterization would be needed. When a site is re-characterized, the scope of the potential cleanup work is better defined. EM shares characterization data to negotiate or revise milestones and remedy decisions with the U.S. Environmental Protection Agency and state regulators, with stakeholder involvement.

The Waste Isolation Pilot Plant (WIPP) continues to recover from two unrelated events (underground vehicle fire and underground radiological release) in February 2014. As a result of these events, the Waste Isolation Pilot Plant repository is shut down and is not accepting transuranic waste shipments.

Considerable progress at WIPP has been achieved. Completed actions include the immediate response to the incidents, evaluation and investigation into the events, defining and implementing required corrective actions for the first two Accident Investigation Reports, and issuance of the high-level WIPP Recovery Plan.

Headquarters, the Carlsbad Field Office and the WIPP management and operating contractor are implementing broad corrective actions to strengthen nuclear safety, fire protection, emergency management, and radiological and maintenance programs. DOE is establishing the Documented Safety Analysis (DSA) for WIPP, implementing rigorous training on new procedures and processes, and responding to concerns posed by oversight organizations (e.g., New Mexico Environment Department, the Environmental Protection Agency, the Defense Nuclear Facilities Safety Board, the Mine Safety and Health Administration, and Office of Enterprise Assessment). DOE is currently working on corrective action plans in response to the second Accident Investigation Report (Phase 2). DOE is upgrading the WIPP DSA to the current DOE Standard 3009-2014. The Department is committed to resuming operations at WIPP as soon as it is safe to do so.

Departmental Initiatives: The GAO February 2015 High-Risk Series Update report to Congress identified several areas that DOE must address to improve contract and project management:

- Sustain the leadership commitment it has already demonstrated to address its contract and project management challenges;
- Commit sufficient people and resources to resolve its contract and project management problems;
- Ensure its corrective action plan and the initiatives needed to address underlying causes of contract and project management problems are up to date and address root causes;
- Demonstrate progress in implementing corrective measures, especially measures intended to improve the performance of major projects; and
- Monitor and independently validate the effectiveness and sustainability of its corrective measures, particularly for major projects.

EM is pursuing numerous initiatives to improve its performance:

- In accordance with applicable statutes and implementing regulations, evaluate federal facility agreement cleanup milestones, permits, and decisions with regulators to ensure they protect human health and the environment while appropriately balancing cost:
- Continue to develop and deploy new and innovative technologies, approaches and modeling capabilities resulting in significant improvements in safety, and cost and schedule savings;
- Use project peer reviews and continue independent contract reviews and independent project reviews, construction project reviews, and external independent reviews to keep contracts and projects aligned and on track. In FY 2015, EM completed a total of 17 project reviews;
- Ensure at least 90% of contracting series workforce and Federal Project Directors (FPDs) for each capital

- project has appropriate certification. As of July 30, 2015, 97% of contracting series workforce and 89% of FPDs for each project have the appropriate level of certification;
- Continue to partner with national laboratories, industry, academia, and the U.S. Army Corps of Engineers (USACE) to ensure the best scientific and engineering resources are integrated into decisionmaking. As a result, the selected technologies, design, and construction approaches are expected to help reduce risk, and accelerate project completion for new projects. In FY 2015, the USACE provided resources and expertise to support numerous project peer reviews, independent government cost estimates, and project baseline development efforts. For legacy projects, EM solicits input from the nation's best and brightest scientific and technical expert panels to strengthen its understanding of cleanup challenges and develop a cost-effective path forward for project completion;
- Acquisition teams consider the use of a firm fixedprice contract when appropriate to shift risk and responsibility to the contractor which provides strong incentives for contractors to control costs and perform efficiently. In FY 2015, EM awarded 18 firm-fixed price and 8 fixed-unit price contracts;
- In instances where a firm fixed-price contract may not be the best contracting vehicle, acquisition teams investigate the possibility of conducting additional planning and risk reduction that would make a fixedprice or hybrid approach feasible before resorting to a cost-reimbursement contract;
- Improving its acquisition planning practices 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 in the planning stage of the procurement;
- Strengthening 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;
- To strengthen the Department's contract and project oversight capacity, EM was authorized to hire 96 additional full-time equivalents, 27 of which are specifically designated for contract specialists and 19 for cost estimators. EM has newly hired 28 procurement analysts. As of the end of July 2015, EM has filled or is in the process of filling 17 of the 19 cost estimator positions;
- EM continues rigorous management and application of DOE Order 413.3B for planning and execution of capital projects;
- EM sites at Richland, Office of River Protection, Savannah River, Portsmouth, Paducah, Oak Ridge,

West Valley, Carlsbad, Idaho, and Moab have signed partnering agreements with their major contractors. A total of seventeen 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;

- 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;
- In 2014, Congress mandated a complex-wide review by an independent panel of experts to rank and rate the relative risks to public health and safety of DOE's remaining environmental cleanup liabilities which was delivered in August 2015;
- Supporting the Department's goal to identify the
 mission and core capability associated with real
 property assets, all sites including the Savannah River
 National Lab are participating in the effort being led
 by the Laboratory Operating Board to address issues
 associated with the Department's infrastructure; and
- EM is co-leading efforts to analyze critical information on contaminated excess facilities that will be useful for decisions regarding the path forward for addressing these facilities and evaluate alternatives to disposition these facilities in a manner that ensures effective expenditure of resources and mitigates the Department's overall risk to the extent practical.

SPENT NUCLEAR FUEL AND HIGH-LEVEL WASTE DISPOSAL

Key Challenges: DOE is directed by the amended Nuclear Waste Policy Act of 1982 (NWPA) to manage and dispose of 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 SNF. In return for the payment by utilities of fees established by the NWPA into the Nuclear Waste Fund, the Government was to begin disposing of their SNF starting in 1998. Lawsuits have been filed by utilities to recover damages resulting from the delay. The Department of Justice has entered into settlements. To date, approximately \$5.3 billion has been paid out of the Judgment Fund for settlements 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 pursuant to those agreements until the Government has fulfilled its spent fuel acceptance obligations. DOE reviews the claims and provides recommendations for approval to the Department of

Justice. DOE staff continue to be lead Government witnesses for the remaining unsettled cases being tried and continue to manage the Nuclear Waste Fund with a balance of approximately \$34.3 billion.

Departmental Initiatives: The Department released its *Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste* in January 2013. The President selected this Strategy as the preferred approach for disposing of spent fuel and high-level nuclear waste in the U.S. The Department continues with research and development, analytical, and planning activities that lay the groundwork for implementing the Strategy.

Change in the Ongoing Fee Paid Into the Nuclear Waste Fund: In *NARUC v. DOE*, the U.S. Court of Appeals for the D.C. Circuit ruled that the Department's 2010 fee adequacy determination was legally inadequate and ordered the Department to issue a new fee adequacy evaluation in compliance with the court's opinion by January 18, 2013. The Department issued a new fee adequacy report by that date and submitted it to the Court. NARUC and NEI immediately moved to reopen the appeal to challenge that report. On November 19, 2013, the court issued a decision finding that the Department's 2013 fee adequacy report was "arbitrary and capricious" and ordered the Secretary "to submit to Congress a proposal to change the fee to zero until such time as either the Secretary chooses to comply with the [Nuclear Waste Policy Act] as it is currently written, or until Congress enacts an alternative waste management plan." On December 20, 2013, the court issued a mandate directing the Department to comply with the court's decision to reduce the fee to zero. Accordingly, on January 3, 2014, the Department submitted the courtmandated proposal to Congress to adjust the 1 mill per kilowatt-hour fee to zero.

CYBERSECURITY

Key Challenges: Despite significant improvements in the cybersecurity posture of the Department, cyber-attacks from highly-capable, malicious actors continue to increase in their complexity, frequency, and aggression. The Enterprise level must address known areas of weaknesses to ensure the Department's information assets and systems have adequate protection from harm.

Departmental Initiatives: The DOE Cyber Council is currently evaluating several recommendations for improving the protection of the DOE enterprise. Major accomplishments in FY 2015 include:

- The Council revised its Charter to:
 - Include the broad definition of cyber;
 - Include the Cyber Steering Committee formed at the request of the Deputy Secretary;
 - Ensure first class participation by all Cyber Council members; and

- Reference the Information Management Governance Board (IMGB); revised the IMGB Charter similarly.
- At the direction of the Council, the Office of the Chief Information Officer (CIO) reformulated and streamlined the underlying committees and working groups. The Council approved the revised governance structure that reformulates and streamlines the underlying committees and working groups to include enterprise-wide contribution of technical insights to the IMGB and Cyber Council;
- The Council directed the development of an enterprise-wide DOE Cyber Strategy leveraging work done by Departmental elements;
- The Council also directed the development of an enterprise-wide DOE Cyber Strategy Implementation Plan with underlying 100/300/500-day Plan of Actions and Milestones; and
- The Council directed that the Department prioritize and complete all necessary actions to reduce the Department's risk as a result of the OPM incident and related threats. As a result, the CIO generated a Daily Report to track DOE's response to key governmentwide initiatives.

Other Departmental cybersecurity initiatives include:

- The DOE's Joint Cybersecurity Coordination Center (JC3) continues to promote a coordinated approach for incident response by prioritizing and closing operational gaps that include, but are not limited to enhancing incident response practices, improving collaboration, and updating reporting protocols. In agreement with NNSA and IN, the JC3 provides enterprise monitoring, advanced analytics, reporting for classified networks as part of the JC3 portfolio, and supports cyber intelligence fusion activities. In collaboration with the sites, plants and labs the JC3 continues to conduct pilot initiatives and evaluations of cyber tools for potential operational enhancements;
- The CIO has initiated and/or completed the following to meet program-related governmentwide requirements:
 - DOE will improve upon existing defenses and shift to a more streamlined and inclusive governance that continuously improves – integrating people, policy, management, technology, and operations – to build a transparent enterprise that excels at proactive and defensive cyber management;
 - DOE Order 470.5, Insider Threat Program (ITP), established the Department's responsibilities and requirements to deter, detect, and mitigate insider threat actions. Recognizing the ITP depends on the outcomes of many of the cybersecurity initiatives, the Senior Agency Official and Chief Information Security Officer have taken actions to ensure coordination and

- cooperation on cybersecurity initiatives with the ITP; and
- Procedures and scope of the Department's enterprise-wide quarterly reporting requirements of the Key Information Sharing and Safeguarding Indicators reports are maturing and potentially broadening in scope.
- On July 17, 2015, the Department of Homeland Security (DHS) Continuous Diagnostics Mitigation (CDM) Program released guidance on its strategy to provide CDM Phase 2 tools to agencies. Phase 2 delivers tools to enable agencies to better manage accounts for people and services. This guidance provides information on the strategy and actions needed for departments/agencies to participate. Per the signed Memorandum of Agreement (MOA), the CIO DOE CDM Program is the DHS CDM Program Office's conduit for communicating and coordinating CDM activities throughout the DOE Enterprise. The DOE CDM Program collaborates with each DOE Element during all phases of DHS CDM Program activities and implementation efforts to ensure the satisfaction of requirements. The Energy Information Technology Services is currently working Phase I implementation efforts of the DHS CDM Program. The CIO will continue to coordinate with the DHS CDM Program Office for the addition of the remaining DOE Elements into the DHS CDM Program;
- The Office of Cybersecurity expands and enhances the enterprise's Supply Chain Risk Management (eSCRM) in all areas required by the Committee for National Security Systems Directive 505. Tactical planning is underway to complete requirements for full operating capability in FY 2016. Over the last few months, review processes for risk assessment reports have been refined to include IN as well as various staff offices (e.g., Inspector General and General Counsel). The eSCRM program also supports outreach activities, particularly as part of the Cybersecurity Training and Awareness Program designed to improve awareness and identify supply chain risk for Information and Communication Technologies for organizations across the DOE Enterprise. These activities include the cybersecurity conference, various Program Office training sessions, and a planned eSCRM Summit in second quarter FY 2016. As an outgrowth of these activities, the eSCRM Resource Center significantly increased the throughput of Supplier Risk Assessments;
- DOE continues to enhance the CIO's delivery of quality training and workforce development products and services through execution of the approved plan to implement a centralized Cybersecurity Role-Based/Core Competency Training Program for critical Federal cybersecurity roles.
 - To date, four role-based/core competency modules have been completed and placed into production. The Incident Management Core

Competency Training Module was delivered in September 2015. This course will be available to all DOE Cybersecurity and Information Technology professionals via the Online Learning Center (OLC) and the DOE Contractor Training Site. The Office is also in the process of scheduling a project kickoff with Skillsoft to formally initiate development of the Enterprise Supply Chain Risk Management for Program Managers Module. Development plans for this course began in September 2015;

- The Cybersecurity Awareness and Training Team is also taking a significant role towards meeting the Cross-Agency Priority goals related to antiphishing and malware;
- O The CIO, in partnership with the Kansas City Plant, plans to sponsor an Anti-Phishing Summit in the second quarter of FY 2016, which will feature tools and techniques to address the human and technology solutions to phishing attacks. The summit plans to raise the awareness of this simplistic, persistent threat and to provide current anti-phishing program information with a focus on both technical implementations and reputable testing solutions;
- The DOE OLC and Contractor Training Site added the Defense Information Systems Agency Anti-Phishing course and plans are to incorporate phishing into events and materials planned for National Cyber Security Awareness Month (NCSAM); and
- o In keeping with the President's annual proclamation of October as NCSAM, work is underway to plan the 2015 DOE NCSAM October event. The CIO in collaboration with DHS and other Federal agencies hosts this event annually to engage and educate employees about cyber threats and mitigating actions to enhance the resiliency of the Nation against cyber incidents.
- The DOE 2015 Cybersecurity Training Conference in April 2015, provided keynote speakers, training opportunities, and a dedicated cyber conference agenda for the 326 cyber professionals attending. A variety of keynote speakers from private industry discussed emerging cyber topics and strategies as well as current threat statistics impacting all cyber consumers. Training sessions addressed risk management, emerging and collaboration technologies, training and awareness, continuous monitoring, network security, cloud security, incident management, and Federal initiatives.
- The Enterprise Cyber Governance System (ECGS) automates the Office of Cyber Security's manual processes and workflows. The system facilitates accurate and efficient management reporting, reduces costs, and directly supports CIO Strategic Goals, Office of Cybersecurity internal functions, external-facing Departmental services, and e-Government/Federal initiatives. RSA Archer is the enterprise Governance, Risk, and Compliance

platform for ECGS. Automation Support Objectives include the following:

- Support DOE's Cyber Security Management
 Program as codified in DOE Order 205.1B,
 Department of Energy Cyber Security Program;
- Automate Office of Cybersecurity processes and services to maximize mission accomplishment and reduce costs:
- Provide functionality for Office of Cybersecurity activities to include dashboards, management reporting, notifications, task tracking, and resource utilization; and
- Deliver automated tools to replace manual processes such as the collection of Federal Information Security Management Act and Federal Risk and Authorization Program data, data calls, and task reporting.

HUMAN CAPITAL MANAGEMENT

Key Challenges: The Department requires a fully engaged and high-performing federal workforce to achieve the strategic goals and objectives of the 2014-2018 DOE Strategic Plan. Key challenges to DOE's federal workforce in the current human capital environment include:

- Mitigating the risk to mission from attrition, as a result of expected losses (retirements) and unplanned losses (resignations from federal service and transfers to other agencies);
- Mitigating succession risks as evidenced by the growing underrepresentation of new generations of the workforce while overall succession readiness remains unclear:
- Strengthening employee engagement as indicated by steady declines in measures of employee engagement and employee perceptions of agency leadership; and
- Implementing a new HR Service Delivery to reduce costs and increase efficiency of HR services compared to Government benchmarks.

Departmental Initiatives: In the 2014-2018 DOE Strategic Plan, the Department's goal for "Management and Performance" includes the following strategic objective: Attract, manage, train, and retain the best federal workforce to meet future mission needs. This objective includes five agency performance goals which are summarized as:

- Reduce the per employee cost of providing human resource services;
- Improve each year on the speed, quality, and diversity of hiring and on-boarding;
- Improve the effectiveness of workforce development to support corporate succession planning;
- Implement a corporate leadership development strategy; and
- Ensure accountability for improving employee perceptions, engagement, and performance.

The Office of the Chief Human Capital Officer (OCHCO), working with DOE Program Offices, developed a 2016-

2020 Strategic Human Capital Plan that aligns with the 2014-2018 DOE Strategic Plan, as well as the management pillars and cross-agency priority goals of the President's Second-Term Management Agenda. The plan identifies three strategic human capital goals relating to leadership, people, and Human Resources (HR) service delivery:

- Grow Our Leaders;
- Strengthen Our Workforce; and
- Improve Our HR Service Delivery

The goals include strategies to guide each year's priority initiatives for human capital as the Department works to support a fully engaged and high-performing federal workforce. These priorities are identified in the OCHCO's Annual Human Capital Plans.

The OCHCO achieved the following in FY 2015 in support of the three strategic human capital goals:

Grow Our Leaders:

- Improved hiring efficiency for Senior Executive Service (SES) positions by reducing the SES Time-to-Hire from 240 days to 179 days from the time the vacancy was posted until the final job offer was issued;
- Delivered training to develop effective, measurable performance plans linked to organizational goals and accurate performance assessments;
- Developed interactive tools with real-time metrics to assist departmental elements in providing SES award recommendations that support greater organizational accountability;
- Strengthened leadership and accountability for employee engagement by establishing a process and guidance to ensure SES performance plans for FY 2016 include a measurable component within the Leading People critical element related to action planning and/or results to improve employee engagement based on employee feedback; and
- Implemented a corporate leadership development approach that will serve to close leadership competency gaps, improve efficiency by sharing best practices, and reduce unnecessary duplication across DOE.

Strengthen Our Workforce:

- Strengthened DOE Employee Engagement and Organizational Performance by instituting a series of Town Halls and Action Plans beginning with the S1/S2 Town Hall in April 2015 and continuing throughout DOE organizations. In the 2015 Governmentwide Management Report, the Office of Personnel Management recognized the Department for achieving a top increase of +18.2% from 50.2% to 68.4% in survey response rate for the Federal Employee Viewpoint Survey and a +3% increase in Employee Engagement from 61% to 64%;
- Exceeded and/or met the Department's goals for Veterans hiring: 38% hiring of Veterans versus 25% goal, and 12.5% hiring of Disabled Veterans versus

- 12% goal, including 8.11% hiring of Veterans with 30% or more Disabilities compared to 6.89% last year;
- Exceeded the Departments' goal for the hiring of Individuals with Disabilities, hiring 10.2% Individuals with Disabilities versus its 9% goal;
- Initiated a 120-day Talent Management study under the sponsorship of the Deputy Secretary. The study will identify the current barriers to recruitment and talent development, while informing the strategies and programs for supporting more effective and efficient recruitment and development of DOE employees; and
- Developed a competency model and assessment process for the HR line of business. Piloted the assessment process with the Human Capital Workforce in the HR Operations and Learning and Workforce Development organizations in advance of the standup of the shared service centers for Management and Performance and Science and Energy.

Improve Our HR Service Delivery:

- Began multi-year implementation of the New HR Service Delivery Model by completing the standup of the Shared Service Center for the Under Secretary for Management and Performance;
- Piloted with NNSA the concept of Learning Branches as part of the HR Service Delivery Model in advance of the standup of the first shared service center;
- Implemented a Blanket Purchase Agreement for procurement of professional skills and technical training resulting in the enterprise-wide delivery of over 50 courses at a 50% savings compared to the previous contract vehicle with no loss in the quality of delivered training;
- Aligned the Human Capital Management
 Accountability Program function and process with the requirements of the new HR Service Delivery Model and shared service center operations;
- Improved the functionality of HR information technology (HRIT) systems by deploying an automated position classification module in Hiring Management that includes a position description library for Department-wide use; and modified the existing HR system of record to display and/or generate standard reports of all HR actions that managers and supervisors can easily access;
- Transitioned the Hiring Management HRIT contract to the Interior Business Center, resulting in a cost savings for DOE;
- Executed an improved human capital planning lifecycle process through the development of the 2016-2020 Strategic Human Capital Plan and supporting the Annual Human Capital Plan; and Established the Office of Corporate Executive Management to provide full employment lifecycle support for senior executives, senior professionals, and political appointees DOE-wide in support of a more cost effective and efficient HR Service Delivery Model.

SAFETY CULTURE

Key Challenges: Maintain the safety and health of the Department's current workforce and ensure the safety of the general public from departmental operations while striving to enhance the Department's productivity to achieve mission objectives. Establish an effective Safety Culture Improvement Panel (SCIP), pursuant to the Charter signed by the Deputy Secretary on May 18, 2015, in providing cross-organizational leadership focused on continuous safety culture improvement across the Department.

Departmental Initiatives: In FY 2015, Departmental elements continued to implement safety and health reforms through senior departmental leadership, worker and stakeholder engagement, and use of operational experience to establish and strengthen lines of communications, seek feedback, and resolve areas of concern. DOE program and staff offices worked toward completing reviews to validate the technical basis and soundness of their health and safety programs within the context of the revised DOE directives. Where applicable, revisions to health and safety programs were, and continue to be, incorporated into organizational procedures and site contracts. Maintaining rigorous Technical Qualification Programs to support the operations of DOE nuclear facilities continued to be a major focal point for the Department.

Integrated Safety Management (ISM) directives that provide the existing ISM infrastructure are due for revisions and update. In order to take advantage of recent Department-wide focus on work planning and control improvements, ISM Champion Council work groups are organized to review and recommend revisions that reflect important lessons learned since their last publications. In particular, the functions, responsibilities, and authorities review is being formed to better define and clarify safety responsibilities.

The Department continued to fulfill commitments in the Implementation Plan for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2011-1, *Safety Culture at the Waste Treatment and Immobilization Plant*.

The SCIP will provide leadership to support continuous improvement in meeting the Department's safety culture and safety conscious work environment (SCWE) objectives across the complex and to ensure consistent leadership and focus on all aspects of DOE's safety culture initiatives. Its cross-organizational membership of senior career leaders has been established, and the SCIP co-chairs convened two meetings, on July 1 and August 5. The SCIP will meet monthly. Through the SCIP, the Department will, among other initiatives, be: (1) pursuing incorporation of the safety culture and SCWE objectives and practices into DOE training; and (2) considering the evaluation of contractual language to incorporate clear reference to safety culture to sustain focus on safety culture among DOE's contractors.

The need for a strong safety culture is institutionalized in the ISM Policy, Order, and Department of Energy Acquisition Regulations clauses. Additional guidance (e.g., guide and handbook) to improve implementation of ISM requirements for federal and contractor management and staff is being used, and the Department continued implementing its ISM System as the framework for safety throughout the Department. It is a requirement in Title 10, Code of Federal Regulations (C.F.R.), part 851, Worker Safety and Health Program (WSHP), that the WSHP be integrated with the Integrated Safety Management System. Additionally, the Office of Environment, Health, Safety and Security meets regularly with workers and managers at all levels at field sites to obtain feedback on the strengths and weaknesses of both the regulation and field implementation of worker safety and health programs.

The Department will continue working toward institutionalizing ISM and safety culture through the following initiatives:

- Continue to share lessons-learned on implementation of work planning and control;
- Conduct monthly meetings of the SCIP and support activities that strengthen the implementation of safety culture and safety conscious work environment throughout DOE;
- Develop updated guidance for the conduct of safety culture self-assessments at DOE sites;
- Considering the hazards associated with the work, continue maximizing the use of national and international consensus standards where applicable and ensure DOE requirements are risk-informed and performance-based and are meaningful, clear, and concise;
- Continue strengthening the implementation of safety and health-related programs; e.g., ISM, 10 C.F.R. 851, and DOE Voluntary Protection Program, through corporate assistance and awareness activities that are focused on effective implementation of DOE requirements and the strengthening of safety culture;
- Identify and support additional nuclear safety research projects through the Nuclear Safety Research and Development program;
- Maintain effective levels of safety and health expertise throughout the Department by providing relevant training and professional development programs through the National Training Center and fostering the expansion of the reciprocity program, whereby accredited safety training programs are recognized by other DOE contractors and sites;
- Continue fostering improvements to safety and health performance by clarifying roles and responsibilities for federal and contractor line management;
- Continue conducting safety and health selfassessments and implementing the independent oversight and worker safety and nuclear safety enforcement programs to maintain stakeholder and public confidence;

- Continue conducting independent oversight of nuclear facility projects to ensure compliance with 10 C.F.R. 830, Nuclear Safety Management, requirements; and
- Complete the actions committed to in the Department's Implementation Plan for DNFSB Recommendation 2011-1 and conduct efforts to close out the Recommendation.

INFRASTRUCTURE

Key Challenges: DOE is responsible for a vast portfolio of infrastructure that consists of world-leading scientific and production tools and the general purpose infrastructure needed to enable the use of those tools. While the Department has made significant investments in world class experimental facilities, much of the supporting infrastructure such as office space, general laboratory spaces, shops and utilities that enable the mission and form the backbone of the laboratory and production plant sites is in need of greater management attention.

The Department is facing a systemic challenge of degrading infrastructure. To help address this challenge, in November 2013, DOE established an integrated plan to conduct a site-wide assessment of general purpose infrastructure across all 17 labs as well as NNSA plants, for the first time using common standards and definitions and an enterprise-wide approach. The assessments provided a detailed, uniform analysis of facilities and other infrastructure and information for decisions on future investments. It is clear from the condition assessment and deferred maintenance data that DOE must continue to focus on arresting the decline of infrastructure through consistent management attention.

Excess contaminated facilities are a drain on the Department's infrastructure resources, and can pose a risk to safety, security, and programmatic objectives. The Department faces a significant challenge with the number of aging excess facilities throughout the complex in the Office of Environmental Management (EM) and other Program Secretarial Offices (PSOs) needing to be deactivated, decontaminated, decommissioned, and demolished (D&D). Several of the existing EM facilities and facilities awaiting transfer to EM are in substantial states of disrepair, as a recent Inspector General (IG) and Government Accountability Office (GAO) reports concluded.

Departmental Initiatives: The Secretary of Energy formed the National Laboratory Operations Board (LOB) in 2013 to provide an enterprise-wide forum to engage the Laboratories and DOE's programs in a joint effort to identify opportunities to improve effectiveness and efficiency. The LOB Infrastructure Assessment Subgroup was chartered to assess how the infrastructure is meeting the mission-related needs of the laboratory complex across DOE, including the National Nuclear Security Administration (NNSA). These assessments, conducted over the course of 2014, provided new insights into the condition of DOE's infrastructure and formed the basis for

the development of a plan to ensure effective stewardship for the future.

In its first year, the data developed as a result of this initiative provided the basis for over \$100 million in funding proposed in FY 2016 and a policy determination by the Secretary of Energy that future budgets will not increase deferred maintenance. In order to build on the success of that effort, an Infrastructure Executive Committee comprised of line managers and facilities experts from across the complex was charged with providing an annual update to DOE leadership on the state of general purpose infrastructure, and presenting an enterprise-wide list of prioritized investments as part of each year's budget formulation cycle.

In January 2015, the Secretary directed the establishment of an Excess Contaminated Facilities Working Group to develop an analysis and present alternatives for how the Department may prioritize and address the numerous contaminated excess facilities owned by the various DOE program offices. This focus on excess facilities was an outgrowth of DOE's broader efforts, led by the LOB, to assess infrastructure on an enterprise-wide basis and develop a plan for the future. Through this enterprise-wide analysis and related infrastructure planning, the Department identified a focus on excess facilities as an important second phase of this effort to establish a sustainable trajectory for DOE infrastructure.

In addition, the issue of excess facilities has generated external attention in recent months. In early 2015, both the IG and GAO issued reports raising concerns with the Department's management of high-risk excess facilities, particularly those awaiting transition to EM. These reports describe what the IG characterized as increasing levels of risk being assumed by the Department due to delays in the cleanup and disposition of contaminated excess facilities. The reports recommend that the Department conduct an updated analysis and report providing critical information on contaminated excess facilities to Departmental leadership to support decisions regarding the path forward for addressing these facilities. The Department committed to providing this analysis through the excess facilities working group that had been established.

The working group, which has membership from across the complex, established an enterprise-wide data collection effort, using common metrics and definitions to obtain updated data on excess facilities. The data collection effort obtained updated cost estimates to D&D the Department's excess facilities, updated assessments of various levels of risk for each facility (environmental, public health, and mission risks), and requested site-specific plans on how each site would address its excess facilities. These evaluations were determined based on knowledge of the facility and potential impacts that could result from retaining the facility for a long period of time. These data will be entered into the Department's Facilities Information Management System, which will provide a

transparent and repeatable process for storing and collecting excess facilities data moving forward.

As part of this initial effort, the sites also were tasked to prioritize their excess facilities based on factors including current facility condition/degradation, hazards, potential mission impact, worker safety and public health/environmental impacts, project execution considerations, and carrying costs. Individual program offices then evaluated their site inputs and conducted an initial program-level prioritization based on programmatic considerations. Sites will continue to work with their programs to examine priorities for risk reduction and removal of facilities. A next step of the working group will be to develop a framework for improved Department management of excess facilities. This process will obtain data that can be used for risk-

informed prioritization, manage work that requires an integrated approach that includes multiple programs, and ensures Departmental focus on reducing risk.

The updated data on the status of the Department's excess facilities were used to define the scope of the challenge and to evaluate several examples for how the Department may prioritize and address the numerous contaminated excess facilities owned by the various DOE program offices, mitigating the Department's overall risk to the extent practical. The result of this analysis will be presented in a report from the Excess Contaminated Facilities Working Group. It represents a first phase of the process, which is to use the data collected to present information, recommend DOE and program actions, and provide examples of an expedited approach to disposition these facilities.

DOE MANAGEMENT PRIORITIES	IG CHALLENGE AREAS FY 2016	GAO HIGH RISK LIST - GAO-15-290 (As of February 2015, updated every two years.)
Contract and Project Management	Contract Management	Contract Management for the NNSA and EM Management of major (\$750M+) projects and programs
Security	Safeguards and Security	
Environmental Cleanup	Environmental Cleanup	
Spent Nuclear Fuel and High- Level Waste Disposal	Nuclear Waste Disposal	
Cybersecurity	Cybersecurity	
Infrastructure	Infrastructure Modernization	
Human Capital Management		
Safety Culture		
	Stockpile Stewardship	

Financial Results



A team of LANL scientists are working with ARCHY, a comprehensive Arctic hydrology model, to make it capable of accurately modeling Arctic topography, thawing and erosion to help predict how quickly and how extensively the Arctic permafrost will thaw. Photo courtesy of Los Alamos National Laboratory.

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Message from the Chief Financial Officer



For fiscal year (FY) 2015, the Department of Energy (DOE or Department) received an unmodified audit opinion on its financial statements from the independent public accounting firm of KPMG LLP for the ninth consecutive year. The audit identified no material weaknesses in internal control over financial reporting and no reportable instances in which the DOE financial management systems did not comply with governmental financial system requirements. This achievement is an important measure of the integrity of our financial management and the strength of our internal controls.

The Office of the Chief Financial Officer (CFO) accomplished the following in FY 2015:

- Upgraded the DOE financial system to Oracle R12 and implemented sub-ledger accounting
- Completed major system development lifecycle phases on Funds Distribution System 2.0
- Reduced information technology (IT) financial statement audit findings by 54%
- Strengthened IT and property and equipment internal control testing
- Conducted 41 DOE-wide financial management webinars for over 1,900 participants
- Improved reporting and documentation of the improper payment risk assessment process
- Refined methodology for the calculation of environmental liabilities estimates

CFO led the effort to successfully complete financial close out of over \$30 billion in American Recovery and Reinvestment Act investments by the September 30, 2015 statutory deadline. CFO also is leading the DOE implementation of the Digital Accountability and Transparency (DATA) Act that requires expanded federal financial reporting to the public by May 2017. Finally, CFO is working jointly with the Chief Information Officer (CIO) on implementation of the Federal Information Technology Acquisition Reform Act (FITARA).

CFO continues to monitor and evaluate the Department's performance in meeting the goals and objectives in the 2014-2018 Strategic Plan. The Department will continue to make financial management improvements in FY 2016 to meet DOE strategic goals and to respond to external requirements resulting in increased accountability to our stakeholders and the public.

Joseph S. Hezir

Chief Financial Officer

November 16, 2015

Consolidated and Combined Financial Statements

Introduction to Principal Statements

he Department's financial statements have been prepared to report the financial position and results of operations of the Department of Energy (the Department or DOE), pursuant to the requirements of the Chief Financial Officers Act of 1990, the Government Management Reform Act of 1994, and the OMB Circular (No.) 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 2014 - 2018 Strategic Plan. All operating costs reported reflect full costs, except for indirect costs, which are reported on the Management and Performance line of the statements. The costs for each line 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 budgetary authority. Federal law gives budgetary authority to agencies to incur financial obligations that will eventually result in outlays or expenditures. Budgetary 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 of 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 Department of Defense (DoD), U.S. Army Corps of Engineers (USACE), Department of the Interior (DOI), and Bureau of Reclamation (BOR).

Principal Statements

U.S. Department of Energy Consolidated Balance Sheets As of September 30, 2015 and 2014

As of september 50, 2015 and 2014		
(\$ IN MILLIO NS)	FY 2015	FY 2014
ASSETS: (Note 2)		
Intragovernmental Assets:		
Fund Balance with Treasury (Note 3)	\$ 30,224	\$ 32,815
Investments and Related Interest, Net (Note 4)	39,908	38,584
Accounts Receivable, Net (Note 5)	537	489
Other Assets	29	24
Total Intragovernmental Assets	\$ 70,698	\$ 71,912
Investments and Related Interest, Net (Note 4)	254	254
Accounts Receivable, Net (Note 5)	3,696	3,634
Direct Loans and Loan Guarantees, Net (Note 7)	14,514	13,403
Inventory, Net (Note 8)	43,887	42,796
General Property, Plant, and Equipment, Net (Note 9)	33,541	32,981
Regulatory Assets (Note 6)	11,466	11,661
Other Non-Intragovernmental Assets (Note 10)	4,720	4,457
Total Assets	\$ 182,776	\$ 181,098
LIABILITIES: (Note 11)		
Intragovernmental Liabilities:		
Accounts Payable	\$ 143	\$ 107
Debt (Note 12)	25,807	24,425
Deferred Revenues and Other Credits (Note 13)	82	83
Other Liabilities (Note 14)	603	636
Total Intragovernmental Liabilities	\$ 26,635	\$ 25,251
Accounts Payable	3,703	3,615
Loan Guarantee Liability (Note 7)	154	208
Debt Held by the Public (Notes 11 and 12)	5,955	5,828
Deferred Revenues and Other Credits (Note 13)	39,294	37,854
Environmental Cleanup and Disposal Liabilities (Note 15)	339,819	299,828
Pension and Other Actuarial Liabilities (Note 16)	26,392	23,554
Obligations Under Capital Leases (Note 17)	1,682	1,534
Other Non-Intragovernmental Liabilities (Note 14)	6,480	6,662
Contingencies and Commitments (Note 18)	25,091	22,759
Total Liabilities	\$ 475,205	\$ 427,093
NET POSITION:		
Unexpended Appropriations		
Unexpended Appropriations - Funds from Dedicated Collections (Note 19)	\$ 15	\$ 21
Unexpended Appropriations - Other Funds	19,912	22,564
Cumulative Results of Operations	==,,,12	==,001
Cumulative Results of Operations - Funds from Dedicated Collections (Note 19)	(10,410)	(7,961)
Cumulative Results of Operations - Other Funds	(301,946)	
Total Net Position	\$ (292,429)	
Total Liabilities and Net Position	\$ 182,776	\$ 181,098

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, 2015 and 2014

(\$ IN MILLIONS)	FY 2015	FY 2014
STRATEGIC GOALS:		
Science and Energy		
Program Costs (Note 21)	\$ 13,221	\$ 14,584
Less: Earned Revenues (Note 22)	(4,962)	(5,432)
Net Cost of Science and Energy	8,259	9,152
Nuclear Security		
Program Costs (Note 21)	9,267	9,883
Less: Earned Revenues (Note 22)	(24)	(22)
Net Cost of Nuclear Security	9,243	9,861
Management and Performance		
Program Costs (Note 21)	5,790	5,371
Less: Earned Revenues (Note 22)	(233)	(233)
Net Cost of Management and Performance	5,557	5,138
Net Cost of Strategic Goals	23,059	24,151
OTHER PROGRAMS:		
Reimbursable Programs		
Program Costs	4,251	4,330
Less: Earned Revenues (Note 22)	(4,078)	(4,139)
Net Cost of Reimbursable Programs	173	191
Other Programs (Note 23)		
Program Costs	456	406
Less: Earned Revenues (Note 22)	(323)	(317)
Net Cost of Other Programs	133	89
Costs Applied to Reduction of Legacy Environmental Liabilities (Notes 15 and 24)	(5,308)	(5,067)
Costs Not Assigned (Note 25)	53,328	32,171
Net Cost of Operations (Note 26)	\$ 71,385	\$ 51,535

 ${\it The\ accompanying\ notes\ are\ an\ integral\ part\ of\ these\ statements}.$

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

For the Years Ended September 30, 2015 and 2014

For the Years Ended September 30, 2015 and 2014							
	FUNDS FROM						
				LL OTHER			
(\$ IN MILLIO NS)		(Note 19)		FUNDS	ELIMINATIONS	CON	SOLIDATED
				FY	2015		
CUMULATIVE RESULTS OF OPERATIONS:							
Beginning Balances	\$	(7,961)	\$	(260,619)	\$ -	\$	(268,580)
Budgetary Financing Sources:							
Appropriations Used	\$	15	\$	27,427	\$ -	\$	27,442
Non-Exchange Revenue		2		1	-		3
Donations and Forfeitures of Cash		-		5	-		5
Transfers - In/(Out) Without Reimbursement		(397)		1	-		(396)
Other Budgetary Financing Sources		35		-	-		35
Other Financing Sources (Non-Exchange):							
Donations and Forfeitures of Cash		15		4	-		19
Transfers - In/(Out) Without Reimbursement (Note 26)		(67)		(53)	-		(120)
Imputed Financing from Costs Absorbed by Others (Note 26)		8		858	-		866
Other		13		(258)	-		(245)
Total Financing Sources	\$	(376)	\$	27,985	\$ -	\$	27,609
Net Cost of Operations		(2,073)		(69,312)	-		(71,385)
Net Change	\$	(2,449)	\$	(41,327)	\$ -	\$	(43,776)
Total Cumulative Results of Operations	\$	(10,410)	\$	(301,946)	\$ -	\$	(312,356)
UNEXPENDED APPROPRIATIONS:							
Beginning Balances	\$	21	\$	22,564	\$ -	\$	22,585
Budgetary Financing Sources:			Ť	,	Ť	_	
Appropriations Received (Note 27)	\$	14	\$	27,513	\$ -	\$	27,527
Appropriations Received Appropriations Transferred - In/(Out)	φ	-	φ	(31)	-	φ	(31)
Other Adjustments		(6)		(2,706)	-		(2,712)
Appropriations Used		(14)		(27,428)			(27,442)
Total Budgetary Financing Sources	\$	(6)	\$	(2,652)	\$ -	\$	(2,658)
Total Unexpended Appropriations	\$	15	\$	19,912	\$ -	\$	19,927
Net Position	\$	(10,395)	\$	(282,034)	\$ -	\$	(292,429)
		(),2,1 0)			2014	<u> </u>	
CUMULATIVE RESULTS OF OPERATIONS:					2014		
	ф.	(0.050)	Φ.	(240.210)	Ф	ф	(240.160)
Beginning Balances	\$	(8,950)	\$	(240,219)	\$ -	\$	(249,169)
Budgetary Financing Sources:							
Appropriations Used	\$	12	\$	26,351	\$ -	\$	26,363
Non-Exchange Revenue		3		50			53
Donations and Forfeitures of Cash		(272)		5	-		5
Transfers - In/(Out) Without Reimbursement		(273)		(1)	-		(274)
Other Budgetary Financing Sources		-		-	-		-
Other Financing Sources (Non-Exchange):		20		20			40
Donations and Forfeitures of Cash		29		20	-		49
Transfers - In/(Out) Without Reimbursement (Note 26)		4,924		(72)	-		4,852
Imputed Financing from Costs Absorbed by Others (Note 26)		1		1,921	-		1,922
Other		(451)		(395)	-		(846)
Total Financing Sources	\$	4,245	\$	27,879	\$ -	\$	32,124
Net Cost of Operations		(3,256)	_	(48,279)	-		(51,535)
Net Change	\$	989	\$	(20,400)		\$	(19,411)
Total Cumulative Results of Operations	\$	(7,961)	\$	(260,619)	\$ -	\$	(268,580)
UNEXPENDED APPROPRIATIONS:							
Beginning Balances	\$	20	\$	24,537	\$ -	\$	24,557
Budgetary Financing Sources:							
Appropriations Received (Note 27)	\$	13	\$	27,244	\$ -	\$	27,257
Appropriations Transferred - In/(Out)		-		(42)	-		(42)
Other Adjustments		-		(2,824)	-		(2,824)
Appropriations Used		(12)		(26,351)	-		(26,363)
Total Budgetary Financing Sources	\$	1	\$	(1,973)	\$ -	\$	(1,972)
Total Unexpended Appropriations	\$	21	\$	22,564	\$ -	\$	22,585
Total Chemica Appropriations	\$			(238,055)	•	Ψ	(245,995)

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, 2015 and 2014

For the Years Ended September 30, 2015 and 2014						
			NON-			NON-
			GETARY			DGETARY
			REDIT FORM			CREDIT EFO RM
			ANCING			ANCING
(\$ IN MILLIONS)	BUI	OGETARY	COUNTS	BU	DGETARY	COUNTS
(VIIIIIII)		FY 2			FY 2	
BUDGETARY RESOURCES:						
Unobligated Balance Brought Forward, October 1	\$	7,979	\$ 1,685	\$	10.121	\$ 2,024
Recoveries of Prior Year Unpaid Obligations		2,348	156		406	360
Other Changes in Unobligated Balance (+ or -)		(2,470)	(779)		1	(931)
Unobligated Balance from Prior Year Budget Authority, Net	\$	7,857	\$ 1,062	\$	10,528	\$ 1,453
Appropriations (Note 27)		28,003	-		25,101	_
Borrowing Authority		620	2,018		603	6,474
Contract Authority		1,946	_		1,826	_
Spending Authority from Offsetting Collections		6,746	1,023		7,167	743
Total Budgetary Resources (Note 27)	\$	45,172	\$ 4,103	\$	45,225	\$ 8,670
STATUS OF BUDGETARY RESOURCES:						
Obligations Incurred (Notes 26 & 27)	\$	37,557	\$ 2,581	\$	37,246	\$ 6,985
Unobligated Balance, End of Year:						
Apportioned	\$	7,414	\$ 13	\$	7,327	\$ 64
Exempt from Apportionment		27	-		19	_
Unapportioned (Note 27)		174	1,509		633	1,621
Total Unobligated Balance, End of Year	\$	7,615	\$ 1,522	\$	7,979	\$ 1,685
Total Budgetary Resources (Note 27)	\$	45,172	\$ 4,103	\$	45,225	\$ 8,670
CHANGE IN OBLIGATED BALANCE:						
Unpaid Obligations:						
Unpaid Obligations, Brought Forward, October 1	\$	27,805	\$ 5,908	\$	27,358	\$ 2,318
Obligations Incurred (Notes 26 & 27)		37,557	2,581		37,246	6,985
Outlays (Gross) (-)		(37,334)	(3,044)		(36,393)	(3,035)
Recoveries of Prior Year Unpaid Obligations (-)		(2,348)	(156)		(406)	(360)
Unpaid O bligations, End of Year (Note 27)	\$	25,680	\$ 5,289	\$	27,805	\$ 5,908
Uncollected Payments:						
Uncollected Pymts, Fed Sources, Brought Forward, October 1 (-)	\$	(4,143)	\$ (142)	\$	(4,313)	\$ (350)
Change in Uncollected Pymts, Fed Sources (+ or -)		(11)	43		170	208
Uncollected Pymts, Fed Sources, End of Year (-)	\$	(4,154)	\$ (99)	\$	(4,143)	\$ (142)
Memorandum (non-add) Entries:						
Obligated Balance, Start of Year (+ or -)	\$	23,662	\$ 5,766	\$	23,045	\$ 1,968
Obligated Balance, End of Year (+ or -)	\$	21,526	\$ 5,190	\$	23,662	\$ 5,766
BUDGET AUTHORITY AND OUTLAYS, NET:						
Budget Authority, Gross	\$	37,315	\$ 3,041	\$	34,697	\$ 7,217
Actual Offsetting Collections (-)		(8,886)	(1,828)		(9,147)	(2,136)
Change in Uncollected Pymts, Fed Sources (+ or -)		(11)	43		170	208
Budget Authority, Net	\$	28,418	\$ 1,256	\$	25,720	\$ 5,289
Outlays, Gross	\$	37,334	\$ 3,044	\$	36,393	\$ 3,035
Actual Offsetting Collections (-)		(8,886)	(1,828)		(9,147)	(2,136)
Outlays, Net	\$	28,448	\$ 1,216	\$	27,246	\$ 899
Distributed Offsetting Receipts (-) (Notes 26 & 27)		(3,026)	-		(3,556)	
Agency Outlays, Net (Note 27)	\$	25,422	\$ 1,216	\$	23,690	\$ 899

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, 2015 and 2014

(\$ IN MILLIONS)	FY 2015	FY 2014			
SOURCES OF COLLECTIONS:					
Cash Collections: (Note 28)					
Power Marketing Administrations	\$ 725	\$	872		
Federal Energy Regulatory Commission	36		43		
Total Cash Collections	\$ 761	\$	915		
Accrual Adjustment	(2)		(18)		
Total Custodial Revenue	\$ 759	\$	897		
DISPOSITION OF REVENUE:					
Transferred to Others:					
Bureau of Reclamation	\$ (284)	\$	(456)		
Department of the Treasury	(234)		(260)		
Army Corps of Engineers	(238)		(199)		
Others	(5)		-		
Decrease/(Increase) in Amounts to be Transferred	2		18		
Net Custodial Activity	\$ -	\$	-		

 ${\it The\ accompanying\ notes\ are\ an\ integral\ part\ of\ these\ statements.}$

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 or DOE). 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 for Science and Energy; the Under Secretary for Nuclear Security/Administrator for the National Nuclear Security Administration; the Under Secretary for Management and Performance; Secretarial staff organizations; and program organizations that provide technical direction and support for the Department's principal programmatic missions; and the PMAs (Bonneville Power Administration, Southeastern Power Administration, Southwestern Power Administration, and Western Area Power Administration) whose primary offices are located in the region served by each PMA. 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, 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 operational offices, field offices, primary offices and operations of the PMA s, 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. 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 officebranch 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 Gustodial 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 which 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 U.S. 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, NET

The Department has two loans that were obligated and disbursed prior to FY 1992, and are presented net of an allowance for loss. All loans obligated after FY 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 the Fiscal Service (BFS) and Federal Financing Bank (FFB) debt is calculated in accordance with the OMB Circular (No.) A-11, Sections 185.32 and 185.34 using the Credit Subsidy Calculator 2. 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. The capitalization threshold for Nuclear Waste Fund (NWF) is \$50,000. The capitalization threshold for the PMAs and FERC range from \$5,000 to \$50,000 or may depend on whether particular equipment is considered a major unit of property, which is capitalized upon purchase, or a minor unit, which is generally expensed. 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. DEDICATED COLLECTIONS

Dedicated collections 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 and the Employee Retirement Income Security Act (ERISA), as amended. For qualified defined benefit pension plans, the Department's current funding policy is to reimburse contractors for the minimum required contributions made, absent the Department's agreement to reimburse at a different level. For nonqualified plans, the funding policy is pay-as-you-go. 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-yougo 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 2014-2018 Strategic Plan. Program costs reflect full costs including all direct and indirect costs consumed by these strategic goals and objectives. Administrative costs are reported in the Management and Performance line of the Statements of Net Costs. Costs included in this line support the activities reported in all of the Department's goals. 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 Fund (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, estimated accrued unbilled revenues for PMAs, and managerial cost allocations. Actual results could differ from these estimates.

O. COMPARATIVE DATA

Certain FY 2014 amounts have been reclassified to conform to the FY 2015 presentation.

R. ALLOCATION TRANSFERS WITH OTHER FEDERAL AGENCIES

The Department is a party to an allocation transfer with another federal agency as a transferring (parent) 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 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 USACE.

2. Non-Entity Assets

(\$ IN MILLIONS)	FY 2015	ļ	FY 2014
Intragovernmental			
Other	\$ 5	\$	-
Subtotal	\$ 5	\$	-
Investments - Petroleum Pricing Violation Escrow Fund (Notes 4 and 14)	254		254
Inventories - Department of Defense stockpile oil (Notes 8 and 14)	123		123
Other	1		1
Total non-entity assets	\$ 383	\$	378
Total entity assets	182,393		180,720
Total assets	\$ 182,776	\$	181,098

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. The investments are liquidated, as needed, to make payments to claimants from this Fund.

3. Fund Balance with Treasury

	APPROPRIATE	D	REVOLVING				
(\$ IN MILLIONS)	FUNDS	, ע	FUNDS	SPECIAL FUNDS	O THER FUNDS		TO TAL
(\$ IN HILLIONS)				FY 2015			
Unobligated budgetary resources				112010		П	
Available	\$ 6,560	0 \$	5 220	\$ 674	\$ -	\$	7,454
Unavailable (Note 27)	174		1,508	1	_		1,683
Obligated balance not yet disbursed		•	1,000				1,000
Unpaid obligations (Note 27)	21,456	6	8,782	731	-		30,969
Uncollected pymts, Fed sources	,		(428)	(46)			
Deposit funds, clearing accounts and unavailable general fund	(3,779	9)	(428)	(40)	-		(4,253)
receipts		_	_	_	48		48
Other adjustments					.0		
Contract authority			(1,946)				(1,946)
· · · · · · · · · · · · · · · · · · ·		-	(1,940)	-	-		(1,940)
Appropriations, borrowing authority and spending authority							
from offsetting collections temporarily not available pursuant		,	0				71
to public law	62	2	9 44	-	-		71 44
Invested balances - payable - to be transferred		-	44	2,465	-		2,465
Unavailable receipt accounts		-	-	2,403	-		•
Borrowing authority not yet converted to fund balance		-	(5,308)	-	-		(5,308)
Budgetary resources invested in Treasury securities:							
Nuclear Waste Fund		-	-	(14)	-		(14)
D&D Fund		-	- (500)	(299)	-		(299)
Power Marketing Administrations		-	(690)	-	-		(690)
Total Fund Balance with Treasury	\$ 24,473	3 \$	2,191	\$ 3,512	\$ 48	\$	30,224
				FY 2014			
Unobligated budgetary resources							
Available	\$ 6,515	5 \$	248	\$ 647	\$ -	\$	7,410
Unavailable (Note 27)	613	3	1,640	1	-		2,254
Obligated balance not yet disbursed							
Unpaid obligations (Note 27)	23,643	3	9,361	709	-		33,713
Uncollected pymts, Fed sources	(3,797	7)	(447)	(41)	-		(4,285)
Deposit funds, clearing accounts and unavailable general fund							
receipts		-	-	-	31		31
Other adjustments							
Contract authority		-	(1,827)	-	-		(1,827)
Appropriations, borrowing authority and spending authority							
from offsetting collections temporarily not available pursuant							
to public law	62	2	11	-	-		73
Invested balances - payable - to be transferred		-	41	-	-		41
Unavailable receipt accounts		-	-	2,288	-		2,288
Borrowing authority not yet converted to fund balance		-	(5,933)	-	-		(5,933)
Budgetary resources invested in Treasury securities:							
Nuclear Waste Fund	1		_	(20)	-		(20)
Nuclear waste Fund		-		(20)		_	
D&D Fund		-	-	(336)			(336)
		-	(594)				

4. Investments and Related Interest, Net

(\$ IN MILLIONS)	FACE VALUE		E VALUE UNAMO RTIZED PREMIUM (DISCO UNT)		INTEREST RECEIVABLE		INVESTMENTS, NET		UNREALIZED MARKET GAINS (LOSSES)			MARKET VALUE
		·		·	,	FY	201	15		· ·	'	
Intragovernmental Non-Marketable												
Nuclear Waste Fund	\$	51,812	\$	(17,596)	\$	79	\$	34,295	\$	8,109	\$	42,404
D&D Fund		3,181		97		20		3,298		13		3,311
U.S. Enrichment Corporation Fund		1,615		-		3		1,618		-		1,618
Power Marketing Administrations		690		4		3		697		-		697
Subtotal	\$	57,298	\$	(17,495)	\$	105	\$	39,908	\$	8,122	\$	48,030
Petroleum Pricing Violation Escrow Fund (Notes 2 and 14)		254		-		-		254		-		254
Total investments and related interest, net	\$	57,552	\$	(17,495)	\$	105	\$	40,162	\$	8,122	\$	48,284
						FY:	201	14				
Intragovernmental Non-Marketable												
Nuclear Waste Fund	\$	51,527	\$	(18,696)	\$	78	\$	32,909	\$	6,844	\$	39,753
D&D Fund		3,344		96		24		3,464		11		3,475
U.S. Enrichment Corporation Fund		1,612		-		2		1,614		-		1,614
Power Marketing Administrations		594		2		1		597		-		597
Subtotal	\$	57,077	\$	(18,598)	\$	105	\$	38,584	\$	6,855	\$	45,439
Petroleum Pricing Violation Escrow Fund (Notes 2 and 14)		254		-		-		254		-		254
Total investments and related interest, net	\$	57,331	\$	(18,598)	\$	105	\$	38,838	\$	6,855	\$	45,693

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 NWF and the Uranium Enrichment Decontamination and Decommissioning (D&D) Fund. Fees collected from owners and generators of spent nuclear fuel (SNF) 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 Fund (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. Governmentwide financial statements. Treasury securities provide the Department with ability to draw upon the 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

	FY 2015							FY 2014						
(\$ IN MILLIONS)	REC	EIVABLE	ΑI	LOWANCE		NET	RI	ECEIVABLE	ΑI	LOWANCE		NET		
Intragovernmental	\$	537	\$	-	\$	537	\$	489	\$	-	\$	489		
Nuclear Waste Fund	\$	3,085	\$	-	\$	3,085	\$	3,084	\$	-	\$	3,084		
Power Marketing Administrations		497		-		497		475		-		475		
Other		665		(551)		114		575		(500)		75		
Subtotal	\$	4,247	\$	(551)	\$	3,696	\$	4,134	\$	(500)	\$	3,634		
Total accounts receivable, net	\$	4,784	\$	(551)	\$	4,233	\$	4,623	\$	(500)	\$	4,123		

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 fees due from owners and generators of SNF and high-level radioactive waste (HLW) that contribute resources to the NWF. The NWF receivables are supported by contracts and are comprised of amounts due for two types of fees to be paid to the Department for disposal services: (a) a one-time charge for SNF or HLW existing prior to April 7, 1983; and (b) an ongoing per kWh fee on all net electricity generated and sold by civilian nuclear power reactors after

April 7, 1983. On November 19, 2013, the U.S. Court of Appeals for the District of Columbia Circuit sustained a challenge to the Department's determination of the adequacy of the Nuclear Waste Fund fee, and directed the Department to transmit to Congress a proposal to reduce the fee to zero. The Department complied and, after a congressional review period, its proposal became effective May 16, 2014.

For power marketing administrations receivables due from the public primarily arise from the sale of power and transmission services. Other receivables due from the public include reimbursable work billings, trade receivables, and other miscellaneous receivables.

6. Regulatory Assets

(\$ IN MILLIONS)	FY 2015	FY	2014
Refinanced and additional appropriated capital	\$ 5,47	7 \$	5,479
Residential exchange program scheduled and refund amounts	2,97	3	3,160
Non-operating facilities	2,04	5	2,047
Conservation and fish and wildlife measures	67)	650
Other regulatory assets	28	5	325
Total regulatory assets	\$ 11,460	5 \$	11,661

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 repaying the Treasury for transmission and power generating assets that were funded by appropriations, including those of the USACE and BOR. In accordance with FASB ASC 980, BPA records a regulatory asset based on this deferred cost that must be repaid to the Treasury for those assets owned by the USACE and BOR. This regulatory asset is amortized over a period of between 68 and 75 years on a straight-line method based on the estimated service lives of the assets. The Consolidated Balance Sheets include a regulatory asset and a corresponding intragovernmental debt for refinanced and additional appropriations owed to the Treasury. (BPA refinanced its unpaid capital appropriations as of September 30, 1996, and is responsible for the repayment of additional appropriated capital investment after the BPA Refinancing Section of the

Omnibus Consolidated Rescissions and Appropriations Act of 1996 (Refinancing Act), 16 U.S.C. 838i(see Note 12)).

RESIDENTIAL EXCHANGE PROGRAM SCHEDULED AND REFUND AMOUNTS

Under the provisions of the 2012 Residential Exchange Program (REP) Settlement Agreement, BPA's Investor Owned Utilities (IOUs) receive a fixed schedule of benefit payments (Scheduled Amounts) that will be recovered in rates through 2028. These amounts amortize to program costs. REP Refund Amounts reduce the IOU REP benefit payments through FY 2019, are recoverable in future rates and are equal to the regulatory liability for REP Refund Amounts to Consumer Owned Utilities (COUs).

NON-OPERATING FACILITIES

BPA is responsible for repayment of debt for terminated Energy Northwest Nuclear Projects 1 and 3, as well as the Northern Wasco hydroelectric project for which BPA terminated its participation. These assets are amortized to program costs over the term of the related outstanding debt (See Note 12).

CONSERVATION AND FISH AND WILDLIFE MEASURES

Conservation measures consist of the costs of deferred conservation measures and are amortized to program costs over periods from 12 to 20 years. Fish and wildlife measures consist of deferred fish and wildlife project expenses and are amortized to program costs over a period of 15 years.

56

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 BPA); spacer damper replacement program costs to replace

deteriorated spacer dampers (amortized over a period of 25 or 30 years); and decommissioning and site restoration costs that reflect amounts to be recovered in future rates for funding the asset retirement obligation liability related to the former Trojan nuclear facility.

7. Direct Loans and Loan Guarantees, Net

(\$ IN MILLIONS)	FY 2015	FY 2014
Pre-FCRA loans	\$ 1	\$ 2
FCRA Direct loans		
ATVM	4,413	5,036
Title XVII	10,100	8,365
Total direct loans and 100% guarantee loans, net	\$ 14,514	\$ 13,403
FCRA Guarantee loans (guaranteed value)		
Title XVII	2,469	2,589
Total direct loans and loan guarantees, net	\$ 16,983	\$ 15,992

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 \$29 million as of September 30, 2015 and September 30, 2014.

FCRA DIRECT LOANS AND LOAN GUARANTEES

The Department's direct loans and loan guarantees made and issued, respectively, post-FY 1991, are subject to FCRA. These FCRA loans and loan guarantees are valued at the net present value of expected future cash flows, discounted at the interest rate of Treasury marketable securities. The net present value of the FCRA loans and loan guarantees are not necessarily representative of proceeds that might be expected if these loans were sold on the open market.

The subsidy costs for FCRA loans and loan guarantees, which include interest rate differentials, delinquencies, defaults fees and other cash flow items, are intended to estimate the long-term cost to the U.S. Government of such loans and loan guarantees. These costs are recognized in the year the loan or loan guarantee is disbursed. A subsidy re-estimate is performed annually as of September 30. The subsidy re-estimates take into account factors that may have affected the estimated cash flows. Any increase in the subsidy resulting from the re-estimate is recognized as a subsidy expense.

For direct loans, 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 Vehicles 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 Loan 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 MY 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 FY 2009 Continuing Resolution (CR) enacted on September 30, 2008, appropriated \$7.5 billion to support a maximum of \$25.0 billion in loans under the ATVM.

The ATVM Program makes direct loans that 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 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 received a contingent financial interest and warrants in connection with the sales of defaulted ATVM loans. The Department has determined that the contingent financial interest has no value until certain conditions occur. The warrants have been determined to have no value at this time.

As of September 30, 2015, approximately \$8.3 billion in loans are obligated for six borrowers that have been approved, and total disbursements have amounted to \$7.3 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 satisfy the above criteria 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 subsidy 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 subsidy for 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 with a direct payment from the borrower to cover the total subsidy of a loan guarantee. For nuclear power, front-end nuclear and advanced fossil projects, Section 1703 continues to operate as a "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 FY 2009, appropriated \$6.0 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

\$2.0 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 guarantee and subsidy for both Sections 1703 and 1705 are obligated at the time the loan guarantee 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% guarantee, the Final Rule requires that the FFB provide the funding. Guarantees by the Department of 100% of loans made by FFB constitute direct loans under FCRA. For the purpose of determining the 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% 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 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.

As of September 30, 2015, conditional commitments to issue guarantees have been issued to two projects totaling \$2.2 billion under the Section 1703 program.

Approximately \$7.9 billion are obligated to one project of which \$3.9 billion has been disbursed. As of September 30, 2015, approximately \$13.4 billion are obligated to 26 projects under the Section 1705 program. Twenty projects with 100% guarantees of loans under the Section 1705

program, totaling approximately \$9.2 billion are obligated, of which \$9.1 billion has been disbursed. Six projects receiving partial guarantees of loans under the Section 1705 FIPP totaling approximately \$4.2 billion are committed, of which \$4.1 billion has been disbursed.

In FY 2014 two borrowers modified their loans. The changes included maturity date extensions and changes to the principal repayment schedule. The discount rates used

for these modifications were the economic assumption rates for FY 2014.

Two bankruptcy cases commenced in previous FYs of borrowers who received loans guaranteed under Section 1705 remain pending. The present value of the estimated recoveries on 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 MILLIO NS)	REC	LOANS EEVABLE, GROSS	INTEREST RECEIVABLE	LLOWANCE OR SUBSIDY COST (PRESENT VALUE)	VALUE OF ASSEIS RELATED TO LOANS, NET	DISBURSED IN FISCAL YEAR
				FY 2015		
ATVM	\$	4,510	\$ 4	\$ (101)	\$ 4,413	\$ -
Title XVII		11,630	67	(1,597)	10,100	2,370
Total loans	\$	16,140	\$ 71	\$ (1,698)	\$ 14,513	\$ 2,370
				FY 2014		
ATVM	\$	5,160	\$ 5	\$ (129)	\$ 5,036	\$ -
Title XVII		9,869	50	(1,554)	8,365	2,420
Total loans	\$	15,029	\$ 55	\$ (1,683)	\$ 13,401	\$ 2,420

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

(\$ IN MILLIO NS)	INTEREST DIFFERENTIAL	DEFAULTS	FEES AND OTHER COLLECTIONS	O THER	TO TAL
	FY 2015				
Subsidy expense for new direct loans disbursed					
Title XVII	(141)	95	-	-	(46)
Total	\$ (141)	\$ 95	\$ -	\$ -	\$ (46)
	INTERES T RE-ES TIMATES	TECHNICAL RE-ESTIMATES	TO TAL RE-ES TIMATES	TO TAL MO DIFICATIONS	TO TAL DIRECT LO AN SUBSIDY EXPENSE
Re-estimates and Modifications					
ATVM	\$ -	\$ (12)	\$ (12)	\$ -	\$ (12)
Title XVII	(231)	278	47	-	1
Total	\$ (231)	\$ 266	\$ 35	\$ -	\$ (11)

(\$ IN MILLIONS)	INTER DIFFERE		I	DEFAULTS		FEES AND OTHER LLECTIONS	O THER	тот	AL
	FY 2014								
Subsidy expense for new direct loans disbursed									
Title XVII		(129)		131		-	-		2
Total	\$	(129)	\$	131	\$		\$ -	\$	2
	INTER RE-ESTI			ECHNICAL ESTIMATES	RE	TO TAL -ES TIMATES	TO TAL MO DIFICATIONS	TO TAL E LO AN SU EXPE	BSIDY
Re-estimates and Modifications									
ATVM	\$	-	\$	(4)	\$	(4)	\$ -	\$	(4)
Title XVII		(140)		76		(64)	-		(62)
Total	\$	(140)	\$	72	\$	(68)	\$ -	\$	(66)

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

	INTEREST DIFFERENTIAL	DEFAULTS	FEES AND OTHER COLLECTIONS	OTHER	TO TAL
			FY 2015		
ATVM	0.00%	7.38%	(0.10%)	0.00%	7.28%
Title XVII	(6.22%)	4.98%	0.00%	0.00%	(1.24%)
Total	(6.22%)	12.36%	(0.10%)	0.00%	(6.04%)
			FY 2014		
ATVM	0.00%	0.00%	0.00%	0.00%	0.00%
Title XVII	(6.04%)	1.84%	0.00%	0.00%	(4.20%)
Total	(6.04%)	1.84%	0.00%	0.00%	(4.20%)

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 MILLIO NS)	FY 2015	FY 2014
Beginning balance of the subsidy cost allowance	\$ 1,683	\$ 1,900
Add: subsidy expense for direct loans disbursed during the reporting years by component		
Interest rate differential costs	(141	(129)
Default costs (net of recoveries)	95	131
Total of the above subsidy components	\$ (46) \$ 2
Adjustments:		
(b) Subsidy allowance amortization	26	(9)
(c) Loans written off	-	(142)
Ending balance of subsidy cost allowance before re-estimates	\$ 1,663	\$ 1,751
Add or subtract subsidy re-estimates by component:		
Interest rate re-estimates	(231	(140)
Technical/default re-estimates	266	72
Ending balance of subsidy cost allowance	\$ 1,698	\$ 1,683

Guaranteed Loans Outstanding

(\$ IN MILLIONS)	PRINCIPAL OF GUARANTEED LOANS FACE VALUE	AMO UNT O F O UTS TANDING PRINC IPAL GUARANTEED			
	FY 2015				
Title XVII	\$ 3,086	\$ 2,469			
	FY 2014				
Title XVII	\$ 3,236	\$ 2,589			

New Guaranteed Loans Disbursed

(\$ IN MILLIONS)	GU	NCIPAL OF JARANTEED JANS FACE VALUE		AMOUNT OF PRINCIPAL GUARANTEED		
		FY 2015				
Title XVII	\$	266	\$	213		
		FY 2	2014			
Title XVII	\$	598	\$	478		

Liability for Loan Guarantees, Present Value Method

(\$ IN MILLIONS)	FY 2015	FY 2014
Title XVII	\$ 154	\$ 208

Subsidy Expense for New Loan Guarantees by Program and Component

(\$ IN MILLIONS)	INTEREST SUPPLEMENTS	DEFAULTS	FEES AND OTHER COLLECTIONS	O THER	TO TAL
			FY 2015		
Subsidy expense for new loan guarantees Title XVII	\$ -	\$ 13	\$ -	\$ -	\$ 13
	INTEREST RE-ESTIMATES	TECHNICAL RE-ESTIMATES	TO TAL RE-ES TIMATES		TO TAL LO AN GUARANTEE SUBSIDY EXPENSE
Re-estimates Title XVII	\$ 1	\$ (75)	\$ (74)		\$ (61)
(\$ IN MILLIONS)	INTEREST SUPPLEMENTS	DEFAULTS	FEES AND OTHER COLLECTIONS	O THER	TO TAL
			FY 2014		
Subsidy expense for new loan guarantees Title XVII	\$ -	\$ 41	\$ -	\$ -	\$ 41
	INTEREST RE-ESTIMATES	TECHNICAL RE-ESTIMATES	TO TAL RE-ES TIMATES		TO TAL LO AN GUARANTEE SUBSIDY EXPENSE
Re-estimates Title XVII	\$ -	\$ (22)	\$ (22)		\$ 19

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

(\$ IN MILLIONS)	FY 2015	FY 2014
Beginning balance of the loan guarantee liability	\$ 208	\$ 183
Add: subsidy expense for guaranteed loans disbursed during the reporting years by component		
Default costs (net of recoveries)	13	41
Total of the above subsidy components	\$ 13	\$ 41
Adjustments:		
Interest Accumulation on the liability balance	7	6
Ending balance of loan guarantee liability before re-estimates	\$ 228	\$ 230
Add or subtract subsidy re-estimates by component		
Interest rate re-estimates	1	-
Technical/default re-estimates	(75)	(22)
Ending balance of loan guarantee liability	\$ 154	\$ 208

Administrative Expenses

(\$ IN MILLIONS)	FY 2015	FY 2014
Direct loan program - ATVM	\$ 5	\$ 6
Loan guarantee program - Title XVII	\$ 37	\$ 32

8. Inventory, Net

(\$ IN MILLIO NS)	FY	FY 2015		FY 2014
Strategic Petroleum, Northeast Home Heating Oil and Gasoline Supply Reserves	\$	21,044	\$	20,805
Nuclear Materials		22,207		21,374
Other Inventory		636		617
Total inventory, net	\$	43,887	\$	42,796

Inventory includes stockpile materials consisting of crude oil and gasoline held in the Strategic Petroleum Reserve

(SPR) and ultra-low sulphur diesel held in the Northeast Home Heating Oil Reserve, nuclear materials, 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, 2015, and September 30, 2014, the SPR contained crude oil with a historical cost of \$20.7 billion and \$20.4 billion, 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 FY 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, 2015, and September 30, 2014 (see Notes 2 and 14).

NORTHEAST HOME HEATING OIL RESERVE

The Northeast Home Heating Oil Reserve was established in FY 2000 pursuant to the Energy Policy and Conservation Act. This Reserve contains petroleum distillate in the New England geographical area. The historical cost of the reserve was \$141 million as of September 30, 2015 and September 30, 2014.

NORTHEAST GASOLINE SUPPLY RESERVE

The Northeast Gasoline Supply Reserve was established in FY 2014 pursuant to the Energy Policy and Conservation Act. This Reserve contains refined petroleum product in the New York Harbor area and the Boston/Northern New England area. The historical cost of the reserve was \$122 million as of September 30, 2015 and September 30, 2014.

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.

As of September 30, 2015, the Department has natural uranium inventories of 7,290 metric tons (MTU) of uranium hexafluoride (UF6). This material can be divided into two stockpiles of material: U.S. origin (3,978 MTU of UF6) and Russian origin material (3,312 MTU of UF6). This includes the Reclassified US Origin (142.3 MTU) to Russian and Canadian.

The Department has transferred uranium for services under contracts at Portsmouth since 2009. Transfers to USEC from 2009 through 2011 totaled 1,473 MTU (UF6). In addition, under the D&D contract awarded in the fall of 2010, an additional 825 MTU was bartered with Fluor, Babcock and Wilcox LLC in FY 2011. Prior to any transfers

and in accordance with Section 3112 of the USEC Privatization Act, the Secretary of Energy must determine that DOE's transfers of low enriched or natural uranium will not have an adverse material impact on the domestic uranium mining, conversion or enrichment industry. In 2011, the Secretary determined that bartering up to 1,600 MTU per year through FY 2013 would not have an adverse impact on the industry. In 2012, the Secretary determined that bartering up to 2,400 MTU per year of UF6 to DOE EM contractors through FY 2021, with an additional 400 MTU allocated to NNSA contracts would not have an adverse impact on the domestic uranium industry. In May 2014, the Secretary determined that bartering up to 2,055 MTU per year of natural uranium equivalent to DOE EM contractors through 2021, with an additional 650 MTU of natural uranium equivalent transferred to NNSA contractors through 2022 would not have an adverse impact on the domestic uranium industry. The current Secretarial Determination [the May 2015 determination], for the Sale or Transfer of Uranium authorizes 2,000 MTU (metric tons of uranium) in calendar year (CY) 2015 and in CY 2016 and thereafter, up to 1,600 MTU per CY for the cleanup activities at Portsmouth.

The nuclear materials inventory includes numerous items for which future use and disposition decisions have not been made. Decisions 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). Under a declaration by the Nuclear Weapons Council and an announcement by the Secretary of Energy in 1996, 175.1 MTU of the Department's HEU was identified as excess to national security needs. Most of this material (about 153 MTU) will be down-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 22 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 coming decades.

The Department released the Excess Uranium Inventory Management Plan on July 3, 2013 (2013 Plan). The 2013 Plan seeks to provide the public and interested

stakeholders updated information on programs and foreseeable mission needs, including additions to and deletions from the inventory and changes to DOE's uranium management strategy since the issuance of a previous plan in 2008.

9. General Property, Plant, and Equipment, Net

(\$ IN MILLIONS)			N ACCUMULATED DEPRECIATION						ACCUMULATED DEPRECIATION		N	NET BOOK VALUE
	FY 2015			FY 2014								
Land and land rights	\$	2,152	\$	(1,004)	\$	1,148	\$	2,121	\$	(985)	\$	1,136
Structures and facilities		48,430		(28,352)		20,078		46,987		(27,634)		19,353
Internal use software		1,013		(696)		317		958		(648)		310
Equipment		19,352		(12,506)		6,846		19,030		(12,254)		6,776
Natural resources		116		(17)		99		112		(17)		95
Construction work in process		5,053		-		5,053		5,311		-		5,311
Total general property, plant & equipment	\$	76,116	\$	(42,575)	\$	33,541	\$	74,519	\$	(41,538)	\$	32,981

10. Other Non-Intragovernmental Assets

(\$ IN MILLIONS)	FY 2015	FY 2014	
Operating non-federal projects	\$ 3,534	\$ 3,361	
Prepaid pension plan costs (Note 16)	94	115	
Prepayments and advances	201	185	
Non-federal nuclear decommissioning trusts	283	279	
Lease-purchase trust funds	338	358	
Other	270	159	
Total other non-intragovernmental assets	\$ 4,720	\$ 4,457	

OPERATING NON-FEDERAL PROJECTS

BPA is party to long-term contracts for BPA to acquire all of the generating capability of Energy Northwest's Columbia Generating Station (CGS) and Lewis County PUD's Cowlitz Falls Hydroelectric project. These contracts require that BPA meet all of the operating, maintenance and debt service costs for these projects. Under certain agreements, BPA also assumed financial responsibility for meeting all costs of Energy Northwest's Nuclear Projects 1 and 3, including debt service costs of bonds and other financial instruments issued for the projects, even though these projects were terminated. BPA is also required by a "Settlement and Termination Agreement" between BPA and Northern Wasco PUD to pay amounts equal to annual debt service on the Northern Wasco Hydro Project for which BPA ceased its participation.

BPA recognizes program costs for these projects based upon total project cash funding requirements. These assets in the *Consolidated Balance Sheets* are related to non-federal debt associated with the generation 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. 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 Nuclear Regulatory Commission (NRC) requirements. The NRC requires that this period be no longer than 60 years from the time the plant ceases operations. Trust fund requirements for CGS are based on an NRC decommissioning cost estimate and the license termination date, which is in 2043. The CGS trusts are funded and managed by BPA in accordance with the NRC requirements and site certification agreements.

LEASE-PURCHASE TRUST FUNDS

Lease-Purchase Trust Funds are amounts held in separate trust accounts outside the Bonneville Power Administration Fund for the construction of leased transmission assets, the use of which BPA has received under lease-purchase agreements. The amounts held in trust are also used in part for debt service payments during the construction period and include an investment

fund mainly for future principal and interest debt service payments.

OTHER

Other non-intragovernmental assets primarily include settlements and funding agreements for certain joint transmission projects.

11. Liabilities Not Covered By Budgetary Resources

(\$ IN MILLIO NS)	FY 2015		FY 2014
Intragovernmental			
Debt (Note 12)	\$	10,063	\$ 9,777
Other		15	15
Total intragovernmental	\$	10,078	\$ 9,792
Debt held by the public (Note 12)		5,955	5,828
Nuclear Waste Fund deferred revenues (Note 13)		37,387	35,995
Environmental liabilities (Note 15)		338,439	298,032
Pension and other actuarial liabilities (Note 16)		26,392	23,554
Capital leases (Note 17)		32	81
Other liabilities			
Residential exchange - scheduled amounts (Note 14)		2,684	2,795
Environment, safety, and health compliance activities (Notes 14, 25 and 26)		1,107	1,135
Energy savings performance contracts and similar unfunded contracts (Note 14)		533	567
Accrued annual leave for federal employees		143	141
Other		53	59
Contingencies and commitments (Note 18)		25,090	22,759
Total liabilities not covered by budgetary resources	\$	447,893	\$ 400,738
Total liabilities covered by budgetary resources	<u> </u>	27,312	26,355
Total liabilities	\$	475,205	\$ 427,093

12. Debt

(\$ IN MILLIONS)		GINNING ALANCE	BO	NET RRO WINGS	ENDING ALANCE		GINNING ALANCE	вс	NET) RRO WINGS]	ENDING BALANCE
	FY 2015				FY 2014						
Intragovernmental - not covered (Note 11)											
Borrowing from Treasury	\$	4,334	\$	412	\$ 4,746	\$	3,943	\$	391	\$	4,334
Appropriated capital		1,020		27	1,047		3,916		(2,896)		1,020
Refinanced & additional											
appropriations		3,017		(88)	2,929		3,866		(849)		3,017
Capitalization adjustment		1,406		(65)	1,341		1,472		(66)		1,406
Subtotal	\$	9,777	\$	286	\$ 10,063	\$	13,197	\$	(3,420)	\$	9,777
Intragovernmental - covered											
Borrowing from Treasury	\$	119	\$	96	\$ 215	\$	24		95	\$	119
Borrowing from FFB		14,529		1,000	15,529		13,856		673		14,529
Subtotal	\$	14,648	\$	1,096	\$ 15,744	\$	13,880	\$	768	\$	14,648
Debt held by the public (Note 11)		5,828		127	5,955		5,949		(121)		5,828
Total debt	\$	30,253	\$	1,509	\$ 31,762	\$	33,026	\$	(2,773)	\$	30,253

BORROWING FROM TREASURY

BPA is authorized by Congress to issue and sell to the Treasury, and have outstanding at any one time, up to \$7.7 billion aggregate principal amount of bonds. Of the \$7.7 billion in Treasury borrowing authority, \$1.3 billion is

available for electric power conservation and renewable resources, including capital investment at the Federal Columbia River Power System (FCRPS) hydroelectric facilities owned by the USACE and BOR, and \$6.4 billion is available for BPA's transmission capital program and to

implement BPA's authorities under the Northwest Power Act. Of the \$7.7 billion, \$750 million can be issued to finance Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) related expenses. The interest on BPA's outstanding bonds is set at rates comparable to rates on debt issued by other comparable federal government institutions at the time of issuance. Bonds can be issued with call options.

The WAPA has authority to borrow up to \$3.3 billion from the 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 and other items related to the ATVM and Title XVII loan programs. As of September 30, 2015, the maturity range of the debt was September 30, 2036 to September 30, 2047 and the interest rate range was 2.835 percent to 4.723 percent. As of September 30, 2014 the maturity range of the debt was September 30, 2036 to September 30, 2047 and the interest rate range was 2.835 to 4.723 percent. Borrowings from Treasury related to ATVM and Title XVII 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 percent loan guarantees of the Title XVII program. As of September 30, 2015 and September 30, 2014, the maturity range of the debt was from October 2, 2015 to April 3, 2045 and October 27, 2014 to February 22, 2044, respectively. The interest rate range was from 1.000 percent to 4.723 percent and from 1.000 percent to 4.723 percent as of both September 30, 2015 and September 30, 2014. 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 WAPA, Southwestern Power Administration (SWPA) and Southeastern Power Administration (SEPA) for construction, operation, and maintenance of power facilities that will be repaid to the Treasury General 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.

WAPA, SWPA and SEPA receive an annual appropriation from Treasury's General Fund to fund certain construction, operation, and maintenance expenses. 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 treated these appropriations as a debt owed to Treasury's General Fund and the Department of Interior's Reclamation Fund, and as such, the *Consolidated Statements of Changes in Net Position* do not reflect these funds as appropriated capital used.

Prior to September 30, 2014, appropriated capital also included funds that were due to DOI's Reclamation Fund from the revenues generated from the sale of power and transmission services by the PMAs, if available as noted above.

A Memorandum of Understanding between DOI and DOE transferred the financial reporting for two receipt accounts in the Reclamation Fund from DOI to DOE as of September 30, 2014. As a result, the debt for appropriated capital previously reported as being due to DOI is no longer being reflected in DOE's financial statements and footnotes as it is being eliminated against the corresponding loan receivable that was transferred from DOI (see Note 19).

Except for the appropriation refinancing asset described in Note 6 and in the next section, the Department's financial statements do not reflect the federal investment in power generating facilities owned by the USACE; DOI, BOR; and the Department of State (DOS), International Boundary and Water Commission. BPA makes annual payments to Treasury from its net proceeds.

REFINANCED AND ADDITIONAL APPROPRIATED CAPITAL

As discussed in Note 6, BPA refinanced its unpaid capital appropriations as of September 30, 1996. BPA is responsible to repay congressionally appropriated amounts in the FCRPS. Federal appropriations consist primarily of the remaining unpaid power portion of USACE and BOR capital investments funded through congressional appropriations and include appropriations for Columbia River Fish Mitigation as allocated to the power purpose of the USACE's FCRPS hydroelectric projects. BPA is obligated to establish rates to repay to the Treasury appropriations for federal generation and transmission plant investments within a specified repayment period, which is the reasonable expected service life of the facilities, not to exceed 50 years. BPA repays amounts owed to Treasury's General Fund and the Reclamation Fund. All outstanding federal appropriations are due in FY 2019 and thereafter. Federal appropriations may be paid early without penalty and BPA repaid appropriations early in FYs 2015 and 2014. BPA schedules the repayment of federal appropriations, which begin accruing interest once the related assets are placed into service.

Prior to September 30, 2014, refinanced and additional appropriated capital included amounts due to DOI's Reclamation Fund, as well as amounts due to the Treasury General Fund.

A Memorandum of Understanding between DOI and DOE transferred the financial reporting for two receipt accounts in the Reclamation Fund from DOI to DOE as of September 30, 2014. As a result, the debt for refinanced and additional appropriated capital previously reported as being due to DOI is no longer reflected in DOE's financial statements and footnotes as it is being eliminated against the corresponding loan receivable that was transferred from DOI (see Note 19).

CAPITALIZATION ADJUSTMENT

Capitalization adjustment is the difference between the outstanding balance of federal appropriations, plus \$100 million, before and after refinancing under the Refinancing Act. Consistent with treatment in BPA's power and transmission rate cases, this adjustment is being amortized over a 40-year period through FY 2036. Amortization of the capitalization adjustment was \$65 million for FY 2015 (see Note 6).

DEBT HELD BY THE PUBLIC

Debt held by the public primarily includes liabilities associated with the BPA non-operating facilities discussed in Note 6, the BPA purchased generating capability discussed in Note 10, and customer prepaid power purchases described below.

During FY 2013, BPA entered into agreements with four regional COUs for the advance payment of portions of their power purchases. Under this program, customers purchased prepaid power in blocks through FY 2028. For each block purchased, BPA repays the prepayment with interest as monthly fixed credits on the customers' power hills.

In March 2013, BPA received \$340 million representing \$474 million (principal plus interest) in scheduled credits for blocks purchased by customers. BPA accounts for the prepayment proceeds as a financing transaction and reports the value of the obligations associated with the fixed credits as a prepaid liability. Interest expense is recognized using a weighted-average effective interest rate of 4.5 percent. The prepaid liability is reduced as power is delivered and the credits are applied through FY 2028.

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

(\$ IN MILLIONS) FIS CAL YEAR	BORROWING FROM TREASURY	BORROWING FROM FFB	APPROPRIATED CAPITAL	REFINANCED APPROPRIATIONS	CAPITALIZATION ADJUSTMENT	DEBT HELD BY THE PUBLIC
2016	\$ 282	\$ 1,797	\$ 16	\$ -	\$ 65	\$ 646
2017	97	804	30	-	65	607
2018	9	842	44	-	65	938
2019	575	866	18	-	65	444
2020	389	887	7	83	65	388
2021+	3,609	10,333	932	2,846	1,016	2,932
Subtotal	\$ 4,961	\$ 15,529	\$ 1,047	\$ 2,929	\$ 1,341	\$ 5,955

13. Deferred Revenues and Other Credits

(\$ IN MILLIONS)	FY 2015		FY 2014
Intragovernmental	\$	82	\$ 83
Nuclear Waste Fund (Note 11)	\$	37,387	\$ 35,995
Power Marketing Administrations		1,304	1,251
Reimbursable work advances		376	394
Other		227	214
Subtotal	\$	39,294	\$ 37,854
Total deferred revenues and other credits	\$	39,376	\$ 37,937

NUCLEAR WASTE FUND

NWF revenues are accrued based on fees assessed against owners and generators of high-level radioactive waste and SNF 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

BPA's deferred revenues and other credits primarily represent advances and unearned revenue: 1) regulatory liabilities primarily relate to amounts previously collected through rates for accumulated plant removal costs collected through rates as part of depreciation and CGS decommissioning and site restoration costs; 2) customer

reimbursable projects that consist of advances received from BPA's customers where either the customer or BPA will own the resulting asset; 3) generation interconnection agreements funds held as security for requested new network upgrades and interconnection that will be returned as credits against future transmission service; 4)

unearned revenues from customers related to the Third AC intertie capacity project; 5) derivative instruments that reflect the unrealized loss of the derivative portfolio, which includes physical power purchase and sale transactions; and 6) fiber optic leasing fees that reflect unearned revenue related to the leasing of fiber optic cables.

14. Other Liabilities

(\$ IN MILLIONS)	FY 2015	FY 2014
Intragovernmental		
Oil held for Department of Defense (Notes 2 and 8)	\$ 123	\$ 123
Petroleum Pricing Violation Escrow Fund (Notes 2 and 4)	248	248
Negative subsidies and downward re-estimates on loans outstanding	114	149
Other	118	116
Total other intragovernmental liabilities	\$ 603	\$ 636
Environment, safety, and health compliance activities (Notes 11, 25 and 26)	\$ 1,107	\$ 1,135
Accrued payroll, benefits, and withholding taxes	1,444	1,383
Residential exchange	2,984	3,166
Petroleum Pricing Violation Escrow Fund (Notes 2 and 4)	6	6
Asset retirement obligations	185	176
Energy savings performance contracts and similar unfunded contracts (Note 11)	533	567
Other	221	229
Subtotal	\$ 6,480	\$ 6,662
Total other liabilities	\$ 7,083	\$ 7,298

NEGATIVE SUBSIDIES AND DOWNWARD RE-ESTIMATES ON LOANS OUTSTANDING

FCRA requires the Government's cost of issuing a loan be estimated at the time of obligation. There are cases where the interest received on the loan will exceed the project interest expense and potential defaults; in essence the loan makes money. This will cause a negative subsidy rate. These negative subsidies are owed to the Treasury's General Fund at the time of the loan disbursement.

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

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 liabilities estimate.

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 PROGRAM

As provided in the Northwest Power Act, in 1981 BPA began to implement the REP through various contracts with eligible regional utility customers. BPA's implementation of the REP has been the subject of various litigations and settlement agreements.

Beginning in April 2010, over 50 litigants and other regional parties entered into mediation to resolve their numerous disputes over the REP. Participants reached an agreement in principle in early September 2010 and in February 2011 reached a final settlement agreement – the 2012 Residential Exchange Program Settlement Agreement (2012 REP Settlement Agreement).

In July 2011, the BPA administrator signed the REP-12 Final Record of Decision and the 2012 REP Settlement Agreement, and BPA recorded an associated long-term IOU exchange benefits liability and corresponding regulatory asset of \$3.1 billion. Beginning in FY 2012, under the provisions of the 2012 REP Settlement Agreement the IOUs began to receive Scheduled Amounts annually starting at \$182 million with increases over time to \$286 million as the final payment in FY 2028. The distribution of these payments is established in the 2012 REP Settlement Agreement that relies upon each IOU's average system cost, BPA's Priority Firm Exchange rates and exchange load. The settled Scheduled Amounts to be paid to the IOUs total \$4.1 billion over the 17-year period through 2028. Amounts recorded of \$2.7 billion at September 30, 2015, represent the present value of future cash outflows for these exchange benefits.

In addition to Scheduled Amounts, the 2012 REP Settlement Agreement calls for Refund Amounts to be paid to COUs in the amount of \$77 million each year from FY 2012 through FY 2019. The Refund Amounts were established as a regulatory asset and regulatory liability for the refunds that will be provided to BPA customers as bill credits. The 2012 REP Settlement Agreement established Refund Amounts totaling \$612 million. Amounts recorded as a regulatory liability of \$294 million at September 30, 2015, represent the present value of future cash flows for the amounts to be refunded to COUs, including any accumulated provision for a rate refund.

ASSET RETIREMENT OBLIGATIONS

BPA recognizes asset retirement obligations (AROs) based on the estimated fair market value of the dismantlement

and restoration costs associated with the retirement of certain tangible long-lived assets. The liability is adjusted for any revisions, expenditures and the passage of time.

The AROs relate primarily to CGS decommissioning and site restoration, terminated Energy Northwest Projects 1 and 4 site restoration, and decommissioning costs for the former Trojan nuclear power plant. BPA also has tangible long-lived transmission assets without an associated ARO because no obligation exists to remove these assets.

ENERGY SAVINGS PERFORMANCE CONTRACTS AND OTHER SIMILAR CONTRACTS

The Department has entered into a number of Energy Savings Performance Contracts (ESPCs) or Utility Energy Service Contracts (UESCs) which are fixed-price, performance-based contracts that are paid back over time through generated savings guaranteed by the contractor. They represent a partnership between a federal agency and a energy service company (ESCO) or utility to make third-party financed investments in energy and water saving projects which enables the Department to fund these projects without up-front capital or advance appropriations. The liability is the amount owed to the ESCO over the post construction performance period of the contract.

OTHER LIABILITIES

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

15. Environmental Cleanup and Disposal Liabilities

(\$ IN MILLIONS)	FY 2015	FY 2014
Beginning balance	\$ 299,828	\$ 280,270
Changes to environmental cleanup and disposal liability estimates	46,806	25,983
Costs applied to reduction of legacy environmental liabilities (Note 24)	(5,308)	(5,067)
Capital expenditures related to remediation activities	(1,507)	(1,358)
Ending environmental cleanup and disposal liabilities	\$ 339,819	\$ 299,828
Unfunded environmental liabilities (Note 11)	\$ 338,439	\$ 298,032
Funded environmental liabilities	1,380	1,796
Total environmental cleanup and disposal liabilities	\$ 339,819	\$ 299,828

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, or groundwater. In particular, the environmental legacy of nuclear weapons production also included thousands of contaminated buildings and large volumes of waste and special nuclear materials requiring treatment, stabilization, and disposal.

The Nuclear Waste Policy Act of 1982 (the Act) established the Federal Government's responsibility to provide for permanent disposal of the Nation's high-level radioactive waste and SNF. The Act requires all owners and generators

of high-level nuclear waste and SNF, including the Department, to pay their respective shares of the full cost of disposal. The Department's liability for disposal reflects its share of the estimated future costs of the disposal of its inventory of high-level waste and SNF. The Department's liability does not include the portion of the cost attributable to commercial owners and generators.

The Department has estimated environmental cleanup liability for the environmental contamination and waste disposition obligations discussed above. The estimates provide for a site-by-site projection of the work required to safely complete all EM projects, while complying with regulatory agreements, statutes, and regulations. Project estimates include projections of the technical scope, schedule, and estimable costs at each site for their cleanup.

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 liabilities related to these sites.
- Cost estimates for management of the Department's high-level waste and SNF have been predicated upon assumptions as to the timing and rate of acceptance of the waste at a geologic repository. Changes in highlevel waste and SNF disposition plans could cause departmental projected costs to change.
- 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 approaches 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 FYs 2015 and 2014 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 including additional contamination; updated estimates of projected waste volume; changes in the Department's allocable percentage share of future costs; legal and 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 USACE). The costs for these post-closure activities are estimated for a period of 75 years after the balance sheet date, i.e., through 2090 in FY 2015 and through 2089 in FY 2014. While some post-cleanup monitoring and other long-term stewardship activities post 2090 are included, there are others the Department expects to continue beyond 2090 for which the costs cannot reasonably be estimated.

A portion of the environmental liabilities 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. These estimates are 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 FY 1997, 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 \$742 million at September 30, 2015, and \$710 million at September 30, 2014.

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 secured, monitored, 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 legal requirements and stakeholder input. The environmental liabilities estimate include contingency estimates intended to account for the uncertainties associated with the technical cleanup scope of the program. The environmental liabilities estimate are dependent on annual funding levels and achievement of work as scheduled. Congressional appropriations at lower-thananticipated levels or unplanned delays in project completion would cause increases in life-cycle costs. All environmental liabilities as of September 30, 2015, and September 30, 2014, are stated in FY 2015 dollars and FY 2014 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. The major activities comprising the environmental liabilities at Hanford include the following:

- The Waste Treatment Plant is a multi-year construction project that once complete will process and treat the high-level waste currently stored underground in tanks. The estimate for this project is undergoing updates that are expected to continue beyond FY 2015 and will result in revisions of the liability.
- The River Corridor Closure Project addresses the remediation of contaminated soils and facilities adjacent to the Columbia River. Much of this work has been completed but remediation activities continue for the 300-296 waste site beneath the 324 Building, the treatment and packaging of radioactive sludge to interim storage; and the high risk 618-10 and 618-11 burial grounds.

SAVANNAH RIVER SITE

The Savannah River Site (SRS), located in South Carolina, is 310 square miles in size with 1,000 facilities concentrated within 10 percent of the total land area. The SRS estimate includes disposition of radioactive liquid waste through vitrification of the high activity component at the site's Defense Waste Processing Facility, and decommissioning of facilities. 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 stored in 46 underground storage tanks.
- The surplus plutonium disposition program provides the capability to disposition certain of the nation's surplus, weapons-usable plutonium by converting it 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. Given greater than anticipated costs, the Department is currently evaluating options, including the MOX fuel approach, to disposition such plutonium. The Department remains committed to the U.S.-Russia Plutonium Management and Disposition Agreement.

IDAHO NATIONAL LABORATORY SITE

The Idaho National Laboratory (Idaho) is a research and engineering complex that occupies 890 square miles in southeastern Idaho and has been the center of nuclear energy research since 1949. The Idaho Site has fulfilled numerous DOE missions including the design and testing of 52 nuclear reactors and reprocessing spent nuclear fuel to recover fissile materials. These activities resulted in inventories of high-level, transuranic, mixed low-level, and low-level wastes. 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 from research reactors.
- The Radioactive Liquid Tank Waste Stabilization and Disposition Project is treating and disposing the sodium-bearing tank wastes, closing the underground waste tanks, as well as maintaining the Idaho Nuclear Technology and Engineering Center.

GASEOUS DIFFUSION PLANTS

The Department constructed and formerly operated three gaseous diffusion plants (GDPs) located in Oak Ridge, Tennessee; Portsmouth, Ohio; and Paducah, Kentucky to enrich uranium which resulted in radioactive and chemical contamination at the sites. 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 that include the
 operation 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.
- Portsmouth and Paducah Nuclear Facility D&D projects that include environmental cleanup and surveillance and maintenance activities, and decontamination and decommissioning of inactive or excess facilities.

ENVIRONMENTAL LIABILITIES ESTIMATE 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, including, depending on the site, soil and groundwater remediation; waste retrieval, treatment, and disposal; and decontamination and decommissioning of nuclear reactors and other facilities.

16. Pension and Other Actuarial Liabilities

(\$ IN MILLIONS)	F	TY 2015	FY 2014
Contractor pension plans	\$	16,049	\$ 13,104
Contractor postretirement benefits other than pensions		10,231	10,330
Contractor disability and life insurance plans		16	16
Federal Employees' Compensation Act		96	104
Total pension and other actuarial liabilities (Note 11)	\$	26,392	\$ 23,554

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. As such, the Department follows FASB ASC 715, Compensation -Retirement Benefits, for reporting contractor pension and PRB plans for which the Department has a continuing obligation to reimburse allowable costs. The Department also reimburses these contractors for employee disability insurance plans, and estimates are recorded as unfunded liabilities for these plans.

CONTRACTOR PENSION PLANS

As of September 30, 2015, 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 \$83 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 \$16 billion. The Department has a continuing obligation to reimburse allowable costs for a variety of contractor-sponsored pension plans (35 qualified and 13 nonqualified).

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

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 assumptions consistent with an expected long-term inflation rate of 2.5 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 4.25 percent for FY 2015 and 4.75 percent for FY 2014; the weighted average long-term rate of return on assets was 6.67 percent for FY 2015 and 7.05 percent for FY 2014; and the average rate of compensation increase was 3.9 percent for FY 2015 and FY 2014. 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 rate used to determine the benefit obligations as of September 30, 2015, and September 30, 2014, was 4.25 percent.

The September 30, 2015, aggregate accumulated benefit obligation and aggregate fair value of plan assets for plans with accumulated benefit obligations in excess of plan assets are \$45.2 billion and \$32.4 billion, respectively. The September 30, 2015, aggregate projected benefit obligation and aggregate fair value of plan assets for plans with projected benefit obligations in excess of plan assets are \$48.4 billion and \$32.4 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 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 (\$48) million and \$723 million in FY 2015, and (\$41) million and \$524 million in FY 2014, respectively. Additional amortization of \$20 million due to curtailments and settlements would also have been included in FY 2014. 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 2016 are (\$61) million, and \$781 million, respectively.

CONTRACTOR POSTRETIREMENT BENEFITS OTHER THAN PENSIONS

As of September 30, 2015, the Department reports contractor PRB assets of \$11 million and contractor PRB liabilities of \$10.2 billion. The Department accrues the cost of PRB during the years that the employees render service. 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 partially prefunding benefits as permitted by law. The Department's contractors sponsor a variety of postretirement benefits other than pensions.

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 projected medical trend rates for a point of service plan, HMO, PPO, or similar plan grade (i.e., decrease) from 7.6 percent in 2015 down to 5.0 percent in 2022 and later for under age 65; and 9.0 percent in 2015 down to 5.0 percent in 2026 and later for age 65 and older. The medical trend rates for a traditional indemnity or similar plan grade from 8.5 percent in 2015 down to 5.0 percent in 2026 and later for under age 65; and 9.9 percent in 2015 down to 5.0 percent in 2026 and later for age 65 and older. Separate trend rates were used for a Medicare Advantage plan depending on the current per member per month (PMPM) level of employer cost that grade from 17.15 percent, 16.89 percent, or 12.26 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 a Part D prescription drug plan (PDP)

grade from 9.8 percent in 2015 down to 5.0 percent in

percent in 2015 down to 5.0 percent in 2027 and later.

The medical trend rates or combination of rates used to

2027 and later; and for a Non-Part D PDP grade from 10.0

determine the PRB estimates are dependent on each of the contractor's specific plan design and impact of health care reform, if applicable. The projected dental trend rates at all ages grade from 5.0 percent in 2015 down to 4.75 percent in 2016 and later.

The weighted average discount rates of 4.25 percent for FY 2015 and 4.75 percent for FY 2014, and the weighted average long-term rate of return on assets of 4.94 percent for FY 2015 and 5.27 percent for FY 2014 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 rate used to determine the benefit obligations as of September 30, 2015, and September 30, 2014, was 4.25 percent.

The September 30, 2015, aggregate accumulated benefit obligation and aggregate fair value of plan assets for plans with accumulated benefit obligations in excess of plan assets are \$10.4 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 (\$618) million and \$101 million in FY 2015, and (\$532) million and \$31 million in FY 2014, respectively. Additional amortization of (\$3) million due to curtailments and settlements would also have been included in FY 2015. 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 2016 are (\$599) million and \$69 million, respectively.

The FY 2015 and FY 2014 values reflect the impact of the passage of health care reform legislation in March 2010. 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 as additional guidance is issued under the laws.

	PENSION BENEFITS				0,	REMENT		
(\$ IN MILLIONS)	FY 2015 FY 2014			Y 2014	I	FY 2015	FY 2014	
NET AMOUNT RECOGNIZED IN THE COMBINED BALANCE SHEET								
Accumulated benefit obligation	\$	45,923	\$	43,917				
Effect of future compensation increases		3,185		2,978				
Benefit obligation	\$	49,108	\$	46,895	\$	10,374	\$	10,474
Plan assets		33,142		33,894		154		156
Net amount recognized in the balance sheet (net funded status)	\$	(15,966)	\$	(13,001)	\$	(10,220)	\$	(10,318)
RECONCILIATION OF AMOUNTS RECOGNIZED IN THE COMBINED BALANCE SHEET								
Asset (prepaid pension plan costs) (Note 10)	\$	83	\$	103	\$	11	\$	12
Liability		(16,049)		(13,104)		(10,231)		(10,330)
Net amount recognized in the balance sheet (net funded status)	\$	(15,966)	\$	(13,001)	\$	(10,220)	\$	(10,318)
COMPONENTS OF NET PERIODIC COSTS								
Service costs (Note 26)	\$	949	\$	862	\$	208	\$	205
Interest costs		2,015		1,999		423		472
Expected return on plan assets		(2,191)		(2,096)		(7)		(8)
(Gain)/loss due to curtailments, settlements or special termination benefits		-		(5)		(2)		-
Net prior service cost/(credit)		3		(61)		(525)		(904)
Net (gain)/loss		3,497		3,279		179		233
Total net periodic costs	\$	4,273	\$	3,978	\$	276	\$	(2)
CONTRIBUTIONS AND BENEFIT PAYMENTS								
Employer contributions (Note 26)	\$	1,309	\$	1,486	\$	366	\$	383
Participant contributions		95		84		77		94
Benefit payments		1,938		1,890		451*		483*

Includes \$7 million paid from plan assets for FY 2015, and \$6 million paid from plan assets for FY 2014. For FY 2015, gross benefit payments were \$458 million including \$7 million of Federal Medicare subsidy. This resulted in net benefit payments of \$451 million for FY 2015. For FY 2014, gross benefit payments were \$492 million including \$9 million of Federal Medicare subsidy. This resulted in net benefit payments of \$483 million for FY 2014.

(\$ IN MILLIONS)	PENSIO	N BENEFITS	POSTRE	THER TIREMENT NEFITS
Expected contributions for fiscal year ending September 30, 2016				
Employer contributions	\$	1,282	\$	425
Participant contributions		97		88

		OTHER POSTRETIREMENT BENEFITS					
(\$ IN MILLIONS)	PENSION BENEFITS	GROSS PAYMENT	LESS FEDERAL MEDICARE PART D SUBSIDY *	NET PAYMENT			
ESTIMATED FUTURE BENEFIT PAYMENTS							
FY:							
2016	\$ 2,057	\$ 510	\$ 7	\$ 503			
2017	2,137	545	8	537			
2018	2,233	579	8	571			
2019	2,349	614	9	605			
2020	2,449	644	11	633			
2021 to 2025	13,755	3,585	73	3,512			

^{*} Under the Medicare Prescription Drug, Improvement and Modernization Act of 2003, a Federal subsidy is provided to sponsors of retiree healthcare benefit plans that provide a benefit at least actuarially equivalent to the benefit established by the law. Generally, the Department has reflected the impact of the subsidy as a reduction to the employers' cost of the benefits.

The following chart shows the average target allocation for the 35 pension benefit plans and five other postretirement benefit plans with assets. The weighted average actual FY 2015 and FY 2014 allocations of assets are also shown.

	P	ENSION BENEFIT	rs .	OTHER PO	OTHER POSTRETIREMENT BENEFITS				
ASSET CLASS	TARGET ALLOCATION	PERCENT OF PLAN ASSETS AT END FY 2015	PERCENT OF PLAN ASSETS AT END FY 2014	TARGET ALLOCATION	PERCENT OF PLAN ASSETS AT END FY 2015	PERCENT OF PLAN ASSETS AT END FY 2014			
Cash and Equivalents	1.5%	3.0%	2.6%	0.2%	0.2%	0.1%			
US Government Bonds	10.3%	10.8%	10.6%	3.9%	2.7%	2.8%			
State and Municipal Government Bonds	0.8%	0.8%	0.8%	0.0%	1.1%	0.9%			
Foreign Government Bonds	0.5%	0.8%	1.7%	0.0%	0.2%	0.0%			
High-yield Corporate Bonds	0.9%	1.1%	1.3%	0.0%	0.0%	0.0%			
Corporate Bonds other than high-yield	11.7%	22.7%	20.4%	4.0%	3.3%	3.1%			
Domestic Equities	24.7%	24.6%	25.3%	1.5%	1.0%	1.1%			
International Equities	21.3%	21.4%	22.5%	0.1%	1.2%	1.4%			
Real Estate Investment Funds	3.0%	2.7%	2.3%	1.1%	0.0%	0.0%			
Other Real Estate	0.3%	0.8%	0.7%	1.2%	0.0%	0.0%			
Mortgage-Backed Securities	1.2%	2.2%	2.4%	0.0%	0.3%	0.3%			
Asset-Backed Commercial Paper	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%			
Bonds/Notes Issued by Structured Investment Vehicles	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Derivatives, including Collateralized Debt Obligations and Credit Default Swaps	0.0%	0.9%	0.6%	0.0%	0.6%	0.0%			
Private Investment Funds, including Hedge Funds	6.6%	5.7%	6.1%	0.0%	0.0%	0.0%			
Insurance Contracts (general accounts)	0.2%	0.3%	0.3%	82.4%	82.4%	72.3%			
Insurance Contracts (separate accounts)	0.0%	0.1%	0.2%	5.6%	5.6%	15.5%			
Employer Securities	0.3%	0.3%	0.3%	0.0%	0.0%	0.0%			
Aggregate Bond Index, Long Bond Index	1.1%	1.2%	1.2%	0.0%	0.0%	0.0%			
Other	15.6%	0.5%	0.6%	0.0%	1.4%	2.5%			
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			

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 35 pension benefit plans with assets among the levels in the fair value hierarchy.

(\$ IN MILLIONS)		AC'	OTED PRICES IN TIVE MARKETS OR IDENTICAL ASSETS	SIGNIFICANT OBSERVABLE INPUTS		SIGNIFICANT NOBSERVABLE INPUTS		
Asset Class	Total		Level 1	Level 2		Level 2		Level 3
Cash and Equivalents	\$ 991	\$	336	\$	585	\$ 70		
US Government Bonds	3,580		948		2,347	285		
State and Municipal Government Bonds	251		-		251	-		
Foreign Government Bonds	273		2		271	-		
High-yield Corporate Bonds	380		23		357	-		
Corporate Bonds other than high-yield	7,526		100		7,426	-		
Domestic Equities	8,144		6,175		1,417	552		
International Equities	7,085		3,078		4,007	-		
Real Estate Investment Funds	878		63		148	667		
Other Real Estate	260		-		-	260		
Mortgage-Backed Securities	734		5		729	-		
Asset-Backed Commercial Paper	43		-		43	-		
Bond/Notes Issues by Structured Investment Vehicles	9		-		9	-		
Derivatives	285		-		285	-		
Private Investment Funds	1,887		-		480	1,407		
Insurance Contracts (general accounts)	98		-		58	40		
Insurance Contracts (separate accounts)	29		-		29	-		
Employer Securities	114		114		-	-		
Aggregate Bond Index, Long Bond Index	393		2		391	-		
Other	182		20		140	22		
Total Assets	\$ 33,142	\$	10,866	\$	18,973	\$ 3,303		

The following chart shows the reconciliation of the Level 3 assets for FY 2015 for the 35 pension benefit plans with assets.

(\$ IN MILLIONS)	CASH AND EQUIVALENTS	-	.S. NDS	DO MESTIC EQUITIES	REAL ESTATE INVESTMENT FUNDS	O THER REAL ESTATE	PRIVATE INVESTMENT FUNDS	INSURANCE CONTRACTS (GENERAL ACCOUNTS)	OTHER	Т	O TAL
Beginning Balance	\$ 128	\$	307	\$ 660	\$ 575	\$ 250	\$ 1,513	\$ 45	\$ 11	\$	3,489
Actual return on plan assets:											
Relating to assets still held at the reporting date	-		(3)	60	69	35	42	2	_		205
Relating to assets sold during the period	-		(4)	81	49	-	32	-			158
Purchases, sales, and settlements	(58)		(15)	(249)	(8)	(22)	(132)	(7)	-		(491)
Transfers in and/or out of Level 3	-		-	-	(14)	(5)	(34)	-	-		(53)
Other	-		_	-	(4)	2	(14)	-	11		(5)
Ending Balance	\$ 70	\$	285	\$ 552	\$ 667	\$ 260	\$ 1,407	\$ 40	\$ 22	\$	3,303

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. Cash and domestic equities under Level 3 generally represent commingled fund investments held in an account utilizing an equity index and cash funds and are valued based on the values of the underlying holdings of the account.

There are two pension 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 FY.

The \$154 million of assets in the five other postretirement benefit plans include \$136 million of investments in insurance contracts of which \$108 million is valued using significant unobservable inputs (Level 3). The balance of the Level 3 insurance contracts decreased by \$4 million during FY 2015 from \$112 million to \$108 million due to

the return on assets still held at the reporting date. 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. 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.

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) and 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 MILLIO NS)	FY 2015		FY 2014
SUMMARY OF ASSETS UNDER CAPITAL LEASE			
Power line equipment	\$ 90)9 9	671
ADP equipment	42	21	370
Construction work in progress	4	10	422
Lease-purchase trust funds (Note 10)	3	15	333
Other assets		1	96
Total capital lease assets	\$ 2,08	6	1,892
Less accumulated depreciation	(38	30)	(343)
Net assets under capital leases	\$ 1,70	6	1,549

(\$ IN MILLIONS)	PO WER LINE EQUIPMENT	OTHER	TOTAL
FISCAL YEAR	EQUIPMENT		
Future lease payments:			
2016	\$ 171	\$ 18	\$ 189
2017	50	9	59
2018	50	5	55
2019	258	-	258
2020	364	-	364
2021+	1,249	1	1,250
Total future lease payments	\$ 2,142	\$ 33	\$ 2,175
Less imputed interest	(460)	-	(460)
Less executory costs	(33)	_	(33)
Net capital lease liability	\$ 1,649	\$ 33	\$ 1,682
Capital lease liabilities covered by budgetary resources			\$ (1,650)
Capital lease liabilities not covered by budgetary resources (Note 11)			(32)
Total capital lease liability			\$ (1,682)

18. Contingencies and Commitments

(\$ IN MILLIO NS)	FY 2015	FY 2014
Unfunded contingencies (Note 11)		
Spent nuclear fuel litigation	\$ 23,699	\$ 22,634
Other	1,391	125
Subtotal	\$ 25,090	\$ 22,759
Funded contingencies		
Other	1	=
Total contingencies	\$ 25,091	\$ 22,759

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 Nuclear Waste Policy Act of 1982 (NWPA), the Department entered into contracts with more than 45 utilities in which, in return for payment of fees established by the NWPA into the NWF, the Department agreed to begin disposal of 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, 35 suits have been settled involving utilities that collectively produce about 82 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 \$3.9 billion to the settling utilities for delay damages they have incurred through September 30, 2015. In addition, 33 cases have been resolved by final judgments. Eight of those cases resulted in an award of no damages by the trial court and the remaining 25 cases resulted in a total of \$1.4 billion in damages that have been paid.

The Department's SNF 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 SNF. The Department believes its assumptions and methodology provide a reasonable basis for the contingent liability estimate.

Nineteen 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 \$50.0 billion. The Department believes that the industry's estimate is highly inflated and that the disposition of the 70 cases that have either been settled or subject to a final judgment or trial 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 \$29.0 billion. After deducting the amount paid as of September 30, 2015, under these settlements and as a result of final judgments, a total of \$5.3 billion, the remaining liability is estimated to be approximately \$23.7 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. The Administration determined that the development of a repository at Yucca Mountain is unworkable and directed the Secretary to establish the Blue-Ribbon Commission (the Commission) on America's Nuclear Future to evaluate alternative approaches for meeting the Federal Government's responsibility. The Commission submitted a final report in January 2012 with its recommendations for consideration by the Administration and Congress. The Administration issued the "Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Waste" on January 11, 2013 (Strategy). The successful implementation of the Strategy is contingent on the new statutory authority and the availability of appropriations. In the interim, the Department's position is that its existing SNF litigation model provides a reasonable basis for its accounting liability estimate using key assumptions from the Strategy: (1) a pilot storage facility will be operational in 2021 to allow for the removal of SNF from shut down reactors; (2) an interim storage facility will be operational in 2025 to begin the removal of SNF from operating nuclear power reactors and (3) that reactors will incur costs reimbursable by the Department until the Department has fulfilled its obligations under the agreements. For the purposes of past liability estimates, new legislation was assumed to have been enacted by the end of calendar year 2014. While the Department believes the operational dates for facilities set forth in the Strategy may still be attainable, because legislation has not passed, operational dates were moved forward one year for the purposes of estimating the 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; and Brookhaven, New York. Collectively, in these cases, damages in excess of \$102.0 billion are sought.

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 and the District Court entered judgment in favor of the plaintiffs, the Court of Appeals subsequently vacated that judgment and remanded the case to the District Court. On remand, the plaintiffs sought reinstatement of the jury verdict and entry of a judgment. The District Court ruled that the plaintiffs could not obtain reinstatement of the jury verdict, but the Court of Appeals reversed that decision and remanded the case to the District Court. The Court of Appeals denied the defendants' petition for rehearing and rehearing en banc of the Court of Appeals' decision, and the defendants have obtained an extension of time until December 17, 2015 in which to file a petition for

writ of certiorari with the Supreme Court. In the remanded proceedings before the District Court, the plaintiffs have moved for entry of judgment. This case remains in active litigation, and there are several unresolved issues the outcome of which is uncertain. If certain still-pending legal issues were decided in the defendants' favor, it would affect the total loss to the Department—including, potentially, a result where there is no loss to the Department. However, the unfunded contingencies identified in this report are based on a scenario in which all pending issues are decided adversely to the Department's interests. 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. Settlements have diminished the number of remaining Hanford plaintiffs' claims to around 200. The cases have been proceeding through mediation and, if no settlement is reached, will go to trial.

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 Nation has 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. Two of the four claims have been settled, the third claim remains stayed, and the fourth has been dismissed. The government reimbursed the Yakama Nation for its past response costs under claim one of the complaint. Under the settlement for claim two, the government will reimburse the plaintiffs through the Trustee Council for natural resource damage assessments. Claim three, which seeks natural resource damages recovery, remains stayed, until the issue of resource damages (if any) is resolved. Claim four was dismissed.

REFUNDS TO UTILITY COMPANIES

The Bonneville Power Administration (BPA) and the Western Area Power Administration (Western) were parties to proceedings at the Federal Energy Regulatory Commission (FERC) that sought refunds for sales into markets operated by the California Independent System Operator and the California Power Exchange during the California energy crisis of 2000-2001. In BPA v. FERC, 422 F.3d 908 (9th Cir. 2005) the Ninth Circuit Court of Appeals found that governmental utilities, like BPA and Western, were not subject to FERC's statutory authority to order market participants to pay refunds. As a consequence of the Ninth Circuit's decision, three California investorowned utilities along with the State of California (collectively referred to as the California Parties) filed breach of contract claims in the United States Court of Federal Claims (COFC) against BPA and Western. The

complaints, filed in 2007, alleged that BPA and Western were contractually obligated to pay refunds on transactions where the BPA and Western received amounts in excess of revised prices set by FERC.

Holding that the California Parties lacked standing to sue because they had no contractual privity with BPA and Western, on March 12, 2015, the judge in the COFC dismissed the claims against BPA and Western. Further the COFC judge found that even if the California Parties had standing, the breach of contract claims should nevertheless be dismissed because the factual predicate for a breach of contract claim against the agencies did not exist because FERC did not retroactively revise the rates as alleged by the California Parties. Thereafter the California parties filed appeals of the order in the Federal Circuit Court of Appeals, where the matter is currently pending.

In a separate proceeding as part of FERC's California Refund Case dockets, an administrative law judge appointed by the FERC Commissioners conducted a hearing in 2012 to make certain findings related to certain classes of transactions. On November 10, 2014, FERC dismissed BPA and Western from the FERC California Refund Case proceedings. The California Parties did not seek rehearing the dismissal of agencies from the proceeding effectively ending their involvement in these dockets.

RATES

In 2011, representatives from most of the consumer- and investor-owned utilities in BPA's region reached an agreement on how BPA should establish REP benefits and recover the costs of those benefits through rates for the FYs 2002 through 2028. BPA signed the settlement agreement (the 2012 REP Settlement Agreement) in July 2011. In 2011, BPA and many COUs filed respective motions in the Ninth Circuit Court to dismiss certain pending, stayed challenges to certain BPA decisions affecting the REP prior to the 2012 REP Settlement. The stayed challenges sought review of a number of matters including BPA's calculation of certain refunds (referred to as "Lookback Amounts") by BPA to COUs to redress the adverse effects on COU rates from FYs 2002 through 2008 arising from a prior REP settlement that the Ninth Circuit Court overturned. On October 28, 2013, the Ninth Circuit Court affirmed the 2012 REP Settlement Agreement and on May 20, 2015, issued an order dismissing the prior stayed challenges as moot. A petitioner filed a request for rehearing of the order of dismissal and in an order dated July 10, 2015, the court denied the request, and the pending challenges were dismissed on July 20, 2015 and on August 3 and 4, 2015, thereby ending the litigation. This matter is now resolved (See Note 14).

The cost of providing REP benefits will be recovered through future rates. BPA has recorded regulatory assets, and non-intragovernmental liabilities for the effects of the 2012 REP Settlement Agreement.

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. DOE has submitted a draft Director's Final Findings and Order to Ohio EPA to initiate discussions toward a possible settlement of its claims for natural resource damages at the Portsmouth site. The current plan is to perform an environmental project in return for a release of liability from Ohio. 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 they take a variety of operational and business steps to cover a potential 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.

As directed by law, WAPA and BPA are required to establish rates sufficient to make cash distributions to the Treasury for the portion of BOR's original capital construction costs allocated to irrigation purposes, which were determined by the Secretary of the Interior to be beyond the ability of the irrigation customers to pay. These irrigation distributions do not specifically relate to power generation. In establishing power rates, particular statutory provisions guide the assumptions that BPA makes as to the amount and timing of such distributions. As a result, WAPA 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 BOR determines the irrigators' inability to pay. Future irrigation assistance payments are scheduled for BPA to total \$502 million over a maximum of 66 years since the time the irrigation

facilities were completed and placed in service, and WAPA's payments are scheduled to total \$1.8 billion by 2041

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.

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. BPA has several power purchase agreements with wind-powered and other generating facilities that are not included because payments are based on the variable amount of future energy generated, and there are no minimum payments required.

(\$ IN MILLIONS) FISCAL YEAR	PO W TRANS	CHASE ER AND MISSION PMA's)	ASS (E	IGATION ISTANCE BPA and WAPA)
2016	\$	126	\$	70
2017		167		55
2018		155		28
2019		153		57
2020		101		77
2021+		175		2,060
Total	\$	877	\$	2,347

BONNEVILLE POWER ADMINISTRATION

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. As of September 30, 2015, BPA has entered into long-term fish and wildlife agreements with estimated contractual commitments of \$595 million. These agreements will expire at various dates between FYs 2018 and 2025.

19. Dedicated Collections

							F	Y 2015				
(\$ IN MILLIONS)	WA	CLEAR ASTE JND	D&D FUND USEC		USEC		PMAs	OTHER FUNDS FROM DEDICATED COLLECTIONS		D	TAL FUNDS FROM EDICATED LLECTIONS	
BALANCE SHEET												
ASSETS												
	d.	7	ф	24	ф		ф	2.074	ď	070	ф	4.204
Fund Balance with Treasury	\$	7 34,295	\$	34	\$	1,618	\$	3,274 697	\$	979	\$	4,294
Investments and related interest, net				3,298		1,018				22		39,908
Accounts receivable, net Direct loans and loan guarantees, net		3,085		-		-		661		32		3,778
Inventory, net		-		-		-		142		156		298
General property plant and equipment, net		-		-		-		9,627		33		9,660
Regulatory assets		-		-		-		11,466		33		11,466
Other assets		-		41		-		4,409		-		4,450
Total Assets	\$ 3	7,387	\$	3,373	\$	1,618	¢	30,277	\$	1,200	\$	73,855
	φ 3	1,301	φ	3,373	φ	1,010	φ	30,277	Ψ	1,200	φ	13,033
LIABILITIES AND NET POSITION			Φ.	20.5					Φ.			= 40
Accounts payable	\$	-	\$	206	\$	1	\$	511	\$	24	\$	742
Debt		-		-		-		16,018		1		16,019
Deferred revenues and other credits		37,387		- 00.556		-		1,446		2		38,835
Environmental cleanup and disposal liabilities		-		23,576		-		12		-		23,588
Pensions and other actuarial liabilities		-		-		-		52		-		52
Obligations under capital leases		-		-		-		1,649		-		1,649
Other liabilities		-		3		-		3,298		21		3,322
Contingencies and commitments		-		-		-		43		1.5		43
Unexpended appropriations		-		(20, 412)		1 (17		7.040		15		15
Cumulative results of operations				(20,412)		1,617		7,248		1,137	_	(10,410)
Total Liabilities and Net Position	\$ 3	7,387	\$	3,373	\$	1,618	\$	30,277	\$	1,200	\$	73,855
STATEMENT OF NET COST												
Program costs	\$	1	\$	22	\$	-	\$	3,746	\$	152	\$	3,921
Less earned revenues		(5)		(630)		-		(4,676)		(84)		(5,395)
Net program costs	\$	(4)	\$	(608)	\$	-	\$	(930)	\$	68	\$	(1,474)
Costs not assigned		-		3,548		-		(1)		-		3,547
Net cost of operations	\$	(4)	\$	2,940	\$	-	\$	(931)	\$	68	\$	2,073
STATEMENT OF CHANGES IN NET POSITION												
Cumulative results of operations, beginning balance	\$	_	\$	(17,523)	\$	1,614	\$	6,752	\$	1,196	\$	(7,961)
Appropriations used	4	_	Ψ	-	<u> </u>	-	Ψ	7	Ψ.	8		15
Non-exchange revenue		_		-		3		-		(1)		2
Donations and forfeitures of cash		_		_		-		15		-		15
Transfers - in/(out) without reimbursement		(4)		51		-		(513)		2		(464)
Other budgetary financing sources		-		-		-		35		-		35
Imputed financing		-		-		-		8		-		8
Other		_		-		-		13		-		13
Net cost of operations		4		(2,940)		-		931		(68)		(2,073)
Cumulative results of operations, ending balance	\$	-	\$	(20,412)	\$	1,617	\$	7,248	\$	1,137	\$	(10,410)
Unexpended appropriations, beginning balance	\$	-	\$	-	\$	-	\$	-	\$	21	\$	21
Appropriations received	Ť	_	-	_	<u> </u>	_	Ú	7	Ť	7	7	14
Other adjustments		-		-		-				(6)		(6)
Appropriations used		-		-		_		(7)		(7)		(14)
Unexpended appropriations, ending balance	\$		\$		\$		\$	-	\$	15	\$	15
encapended appropriations, charing barance	Φ	-	Φ		ψ		Φ	-	Ψ	13	Ψ	13

Dedicated Collections (continued)

							F	Y 2014				
(\$ IN MILLIONS)	1	UCLEAR VASTE FUND	D	&D FUND		USEC		PMAs	DE	IER FUNDS FROM DICATED LECTIONS	Di	TAL FUNDS FROM EDICATED LLECTIONS
BALANCESHEET												
ASSETS												
	Φ.	_	Φ.	_			_	2.1.10	ф.	10==		
Fund balance with Treasury	\$	1	\$	5	\$	- 1 61 4	\$	3,148	\$	1,057	\$	4,211
Investments and related interest, net		32,909		3,464		1,614		597		-		38,584
Accounts receivable, net		3,084		-		-		643		4		3,731
Direct loans and loan guarantees, net		-		-		-		138		157		295
Inventory, net General property plant and equipment, net		-		-		-		9,042		33		9,075
		-		-		-		11,661		33		11,661
Regulatory assets Other assets		1		20		-		4,168		-		4,189
Total Assets	\$	35,995	\$	3,489	\$	1,614	\$	29,398	\$	1,251	\$	71,747
	Ψ	33,773	Ψ	3,407	Ψ	1,014	Ψ	27,570	Ψ	1,231	Ψ	71,747
LIABILITIES AND NET POSITION	ф		Ф	1.40	Ф		ф	550	Ф	1.1	ф	717
Accounts payable	\$	-	\$	148	\$	-	\$	558	\$	11	\$	717
Debt Deferred revenues and other credits		25,005		-		-		15,605		2		15,605
Environmental cleanup and disposal liabilities		35,995		20,863		-		1,385		3		37,383 20,877
Pensions and other actuarial liabilities		-		20,803		-		57		-		57
Obligations under capital leases		_		-		-		1,453		-		1,453
Other liabilities		-		1		-		3,476		20		3,497
Contingencies and commitments		-		1		-		98		20		98
Unexpended appropriations		_		_		_		- 70		21		21
Cumulative results of operations				(17,523)		1,614		6,752		1,196		(7,961)
Total Liabilities and Net Position	\$	35,995	\$	3,489	\$	1,614	\$	29,398	\$	1,251	\$	71,747
STATEMENT OF NET COST	_		T	2,131			Ť				T	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	\$	3	\$	15	\$		\$	4,221	\$	120	\$	4,359
Program costs Less earned revenues	ф	(9)	Ф	(200)	Ф	-	Þ	(4,778)	Þ	(510)	Ф	(5,497)
Net program costs	\$	(6)	\$	(185)	\$	-	\$	(557)	Φ.	(390)	\$	(1,138)
Costs not assigned	φ	3	φ	4,391	φ	_	φ	(331)	Ψ	(390)	φ	4,394
Net cost of operations	\$	(3)	\$	4,206	\$		\$	(557)	\$	(390)	\$	3,256
	Ψ	(5)	Ψ	4,200	Ψ		Ψ	(551)	Ψ	(370)	Ψ	3,230
STATEMENT OF CHANGES IN NET POSITION												
Cumulative results of operations, beginning balance	\$	-	\$	(13,385)	\$	1,612	\$	1,572	\$	1,251	\$	(8,950)
Appropriations used		-		-		-		5		7		12
Non-exchange revenue		-		-		2		-		1		3
Donations and forfeitures of cash		- (2)		-		-		29		-		29
Transfers - in/(out) without reimbursement		(3)		68		-		4,585		1		4,651
Other budgetary financing sources		-		-		-		- 1		-		- 1
Imputed financing Other		-		-		-		3		(454)		(451)
Net cost of operations		3		(4,206)		-		557		390		(3,256)
•	Φ.	<u> </u>	ф		φ	1 (14	φ		ф		φ	
Cumulative results of operations, ending balance	\$	-		(17,523)		1,614	\$	6,752	\$	1,196	\$	(7,961)
Unexpended appropriations, beginning balance Appropriations received	2	-	\$	-	\$	-	\$	5	Ф	20	ф	20
Other adjustments		-		-		-		3		8		13
Appropriations used		-		-		-		(5)		(7)		(12)
Unexpended appropriations, ending balance	φ		¢		¢		ø		ф		¢	
Onexpended appropriations, ending parance	\$	-	\$	-	\$	-	\$	-	\$	21	\$	21

NUCLEAR WASTE FUND

The NWPA requires the owners and generators of nuclear waste to pay their share of disposal costs into 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 those fees. Fees are invested in Treasury securities and any interest earned is available to pay expenditures related to radioactive waste disposal activities covered by the NWF. The NWPA requires preparation of annual financial statements.

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 FUND

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, and annual appropriations. Each of the PMAs, except for BPA, receives an annual appropriation from Treasury's General Fund. WAPA also receives an annual appropriation from a receipt fund within the Reclamation Fund. In most instances, these appropriated funds are repaid to Treasury's General Fund and the Reclamation Fund from the receipts generated from power sales.

A Memorandum of Understanding between the DOI and DOE redefined the reporting treatment of two specific receipt accounts within the Reclamation Fund from DOI to DOE as of September 30, 2014 in accordance with SFFAS No. 27, Identifying and Reporting Funds from Dedicated Collections. The receipt accounts consisted of balances in Fund Balance with Treasury and Loans Receivable from the PMAs. As a result of the transfer, Fund Balance with Treasury of \$1.4 billion that was previously reported by the DOI was transferred to DOE and is included within these financial statements and footnotes. Furthermore, DOE's appropriated capital of \$3.0 billion and refinanced and additional appropriated capital of \$635 million (see Note 12) due to the transferred receipt accounts is being eliminated against the corresponding Loans Receivable.

20. Gross Costs, Intragovernmental

(\$ IN MILLIONS)	FY	Y 2015	F	Y 2014
Imputed costs, Compensation Program for Occupational Illnesses - Department of Labor (Notes 25 and 26)	\$	(128)	\$	1,012
Interest costs on debt (Note 12)				
Borrowing from Treasury		200		191
Borrowing from FFB		453		445
Power Marketing Administrations' appropriated capital - Treasury		139		172
Power Marketing Administrations' appropriated capital - Department of the Interior		-		129
Imputed costs, Judgment Fund payments made by Treasury				
Spent nuclear fuel contingency (Notes 25 and 26)		832		800
Other Judgment Fund payments (Notes 25 and 26)		71		8
Federal employee benefits				
Agency share of employee retirement benefits - OPM		329		307
Imputed costs, employee retirement benefits - OPM (Note 26)		91		102
Federal Insurance Contributions Act (FICA) employer contributions - Treasury		77		65
Other intragovernmental costs				
Defense agencies		212		194
General Services Administration		223		221
All other agencies		327		339
Total intragovernmental gross costs with other federal agencies	\$	2,826	\$	3,985
Costs with the public		78,179		57,693
Total gross costs	\$	81,005	\$	61,678

21. Gross Costs by Strategic Goals

(\$ IN MILLIONS)	FY 2015		F	Y 2014
Science and Energy				
Advance the goals and objectives in the President's Climate Action Plan	\$	7,786	\$	8,621
Support the U.S. energy infrastructure		629		733
Discover and strengthen science and technology innovation		4,806		5,230
Total program costs for science and energy	\$	13,221	\$	14,584
Nuclear Security				
Maintain the nation's nuclear deterrent without nuclear testing	\$	3,592	\$	3,917
Strengthen science, technology, and engineering capabilities		2,833		3,152
Reduce global nuclear security threats		1,683		1,733
Provide integrated nuclear propulsion systems for U.S. Navy		1,159		1,081
Total program costs for nuclear security	\$	9,267	\$	9,883
Management and Performance				
Continue cleanup from Manhattan Project and Cold War activities	\$	4,888	\$	4,464
Manage assets to support DOE mission		109		137
Manage projects, agreements, contracts, and contractor performance		156		121
Operate the DOE enterprise safely, securely, and efficiently		595		609
Attract, manage, train, and retain the best federal workforce		42		40
Total program costs for management and performance	\$	5,790	\$	5,371
Total program costs for strategic objectives	\$	28,278	\$	29,838

SCIENCE AND ENERGY

Goal: Advance foundational science, innovate energy technologies, and inform data driven policies that enhance U.S. economic growth and job creation, energy security, and environmental quality, with emphasis on implementation of the President's Climate Action Plan to mitigate the risks of and enhance resilience against climate change. Objectives include:

- Advance the goals and objectives in the President's Climate Action Plan - Support prudent development, deployment, and efficient use of "all of the above" energy resources that also create new jobs and industries.
- Support the U.S. energy infrastructure Support a more economically competitive, environmentally responsible, secure and resilient U.S. energy infrastructure.
- Deliver and strengthen science and technology innovation – Deliver the scientific discoveries and major scientific tools that transform our understanding of nature and strengthen the connection between advances in fundamental science and technology innovation.

NUCLEAR SECURITY

Goal: Strengthen national security by maintaining and modernizing the nuclear stockpile and nuclear security infrastructure, reducing global nuclear threats, providing for nuclear propulsion, improving physical and cybersecurity, and strengthening key science, technology, and engineering capabilities. Objectives include:

- Maintain the nation's nuclear deterrent without nuclear testing – Sustain a safe, secure, and effective nuclear arsenal.
- Strengthen science, technology, and engineering capabilities Strengthen key science, technology, and engineering capabilities and modernize the national security infrastructure.
- Reduce global nuclear security threats Prevent nuclear terrorism and the spread of nuclear weaponsrelated materials, technology, and expertise.
- Provide integrated nuclear propulsion systems for U.S. Navy – DOE provides the design, development, and operational support required to provide militarily effective nuclear propulsion plants and ensure their safe, reliable, and long-lived operation.

MANAGEMENT AND PERFORMANCE

Goal: Position the Department of Energy to meet the challenges of the 21st century and the nation's Manhattan Project and Cold War legacy responsibilities by employing effective management and refining operational and support capabilities to pursue departmental missions. Objectives include:

- Continue cleanup from Manhattan Project and Cold War activities – Continue cleanup of radioactive and chemical waste resulting from the Manhattan Project and Cold War activities.
- Manage assets to support DOE mission Manage assets in a sustainable manner that supports the DOE mission.
- Manage projects, agreements, contracts, and contractor performance - Improve the effectiveness

- and efficiency of DOE's financial assistance agreements, contract and project management performance.
- Operate the DOE enterprise safely, securely, and efficiently - Ensure the efficiency and effectiveness of DOE's mission success.
- Attract, manage, train, and retain the best federal workforce – Plan and improve outreach, recruitment programs, and human resource operations.

22. Earned Revenues

	INTRA- GOVERNMENTAL	PUBLIC	DEFERRED REVENUE ADJUSTMENT	TOTAL
(\$ IN MILLIONS)		TW 0		
Spinnes and France:		FY 2	015	
Science and Energy	¢ (125)	¢ (4.210)	¢	¢ (4.425)
Power Marketing Administrations	\$ (125)	\$ (4,310)		\$ (4,435)
Loan Programs	(87)	(421)	27	(481)
Petroleum reserve sales	-	(2)	-	(2)
Isotopes program	-	(42)	-	(42)
Other	1	(3)	-	(2)
Earned revenues for science and energy	(211)	(4,778)	27	(4,962)
Nuclear Security				
Other	(12)	(12)	-	(24)
Earned revenues for nuclear security	(12)	(12)	-	(24)
Management and Performance				
Nuclear Waste Fund	(1,396)	(1)	1,392	(5)
D&D Fund Other	(35)	(132)	-	(167)
Earned revenues for management and performance	(1.431)	(61) (194)	1,392	(61)
	(1,431)	`	1,392	, ,
Reimbursable programs Other programs	(3,477)	(601)	-	(4,078)
FERC (Note 23)		(215)		(215)
	-	(315)	-	(315)
Other (Note 23)	(2)	(6)	-	(8)
Earned revenues for other programs	(2)	(321)	-	(323)
Total earned revenues	\$ (5,133)	\$ (5,906)	\$ 1,419	\$ (9,620)
		FY 2	014	
Science and Energy				
Power Marketing Administrations	\$ (136)	\$ (4,297)	\$ -	\$ (4,433)
Loan Programs	(82)	(398)	(9)	(489)
Petroleum reserve sales		(476)	-	(476)
Isotopes program	(1)	(35)	-	(36)
Other	-	2	_	2
Earned revenues for science and energy	(219)	(5,204)	(9)	(5,432)
Nuclear Security	(=15)	(2,201)	(3)	(5,132)
Other	(21)	(1)	_	(22)
Earned revenues for nuclear security	(21)	(1)	-	(22)
Management and Performance	(21)	(1)	-	(22)
Nuclear Waste Fund	(1,443)	(434)	1,868	(9)
D&D Fund	(48)	(152)	-	(200)
Other	-	(24)	-	(24)
Earned revenues for management and performance	(1,491)	(610)	1,868	(233)
Reimbursable programs	(3,442)	(697)	-	(4,139)
Other programs				,
FERC (Note 23)	_	(307)	-	(307)
Other (Note 23)	(2)	(8)	-	(10)
Earned revenues for other programs	(2)	(315)	-	(317)
Total earned revenues	\$ (5,175)			\$ (10,143)
Total callicult wellues	φ (5,1/5)	φ (0,047)	Ф 1,059	ச (10,143

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 SEPA, SWPA, and WAPA 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 \$14 million and \$31 million were earned as of September 30, 2015 and September 30, 2014, 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 \$87 million and \$82 million and on loans from the borrower of \$407 million and \$367 million were earned as of September 30, 2015 and September 30, 2014, respectively. Amortization of the subsidy (see Note 7) is an adjustment made to the earned revenue and was \$(27) million and \$9 million as of September 30, 2015 and September 30, 2014, respectively.

PETROLEUM RESERVE OIL SALES

In FY 2014, the Secretary of Energy authorized a test sale of the SPR. The sale tested various aspects of the SPR drawdown process including sales and deliveries in the Texoma distribution system. The SPR sold five million barrels of crude oil. The crude oil had a historical cost of \$129 million and was sold for \$469 million.

NUCLEAR WASTE FUND

The NWPA authorizes the Department to enter into contracts that require the Department to collect fees from owners and generators of high-level radioactive waste and SNF to fund the costs associated with management and disposal activities under the Act. On November 19, 2013, the U.S. Court of Appeals for the District of Columbia Circuit sustained a challenge to the Department's determination of the adequacy of the Nuclear Waste Fund fee, and directed the Department to transmit to Congress a proposal to reduce the fee to zero. The Department complied and, after a congressional review period, its proposal became effective May 16, 2014. As a result, no fees were recorded as of September 30, 2015, and \$464 million was recorded as of September 30, 2014. Interest earned on fees owed and on accumulated funds totaled \$1.4 billion as of September 30, 2015, and September 30, 2014. Annual adjustments are made 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 \$35 million and \$48 million as of September 30, 2015, and September 30, 2014, respectively. Gains on the transfer of uranium to Fluor, Babcock and Wilcox, LLC in exchange for environmental clean-up services totaled \$132 million as of September 30, 2015, and \$152 million as of September 30, 2014. On December 6. 2014, the President signed into law the FY 2015 Consolidated and Further Appropriations Act which provided the Environmental Management (EM) program with \$463 million for the D&D fund. As a result, \$463 million was transferred from the Defense Environmental Cleanup account via an expenditure transfer to the D&D Fund. The D&D Fund earned revenues were adjusted to reflect that \$463 million was eliminated at the consolidated level.

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 FY 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 \$3.5 billion as of September 30, 2015, and \$3.4 billion as of September 30, 2014.

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 its administrative program costs as an annual charge to each regulated entity (see Note 23).

23. Other Programs

(\$ IN MILLIONS)	FY 2015		FY 2014
Federal Energy Regulatory Commission			
Program costs	\$	315	\$ 307
Less earned revenues (Note 22)		(315)	(307)
Subtotal	\$	-	\$ -
Other programs			
Program costs	\$	141	\$ 99
Less earned revenues (Note 22)		(8)	(10)
Subtotal	\$	133	\$ 89
Total net cost for other programs	\$	133	\$ 89

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 environmental liabilities estimate since the expenses have been accrued.

25. Costs Not Assigned

(\$ IN MILLIONS)	ļ	FY 2015	FY 2014
Spent nuclear fuel contingency (Note 18)			
Judgment Fund payments (Notes 20 and 26)	\$	832	\$ 800
Change in estimates (Note 26)		1,066	1,269
Current year spent nuclear fuel contingency costs	\$	1,898	\$ 2,069
Change in environmental liabilities estimates (Note 26)	\$	46,806	\$ 25,983
Changes in contractor pension and PRB estimates (Note 26)		3,385	2,910
Change in unfunded safety and health liabilities (Notes 11, 14 and 26)		(28)	(74)
Change in occupational illness program (Notes 20 and 26)		(128)	1,012
Other Judgment Fund payments (Notes 20 and 26)		71	8
Other		1,324	263
Total costs not assigned	\$	53,328	\$ 32,171

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.

26. Reconciliation of Net Cost of Operations to Budget

(\$ IN MILLIONS)	FY 2015				FY 2	2014	1	
RESOURCES USED TO FINANCE ACTIVITIES								
Obligations incurred (Note 27)	\$	40,138			\$	44,231		
Less spending authority from offsetting collections and recoveries	Ф	(13,186)			φ	(11,671)		
Less offsetting receipts (Note 27)		(3,026)				(3,556)		
Net obligations		(3,020)	\$	23,926		(3,330)	\$	29,004
Imputed financing from costs absorbed by others			Ψ	25,720			Ψ	22,004
Increase in occupational illnesses liability (Notes 20 and 25)	\$	(128)			\$	1,012		
OPM imputed costs (Note 20)	Ψ	91			Ψ	102		
Payments made from Treasury's Judgment Fund (Notes 20 and 25)		903				808		
Total imputed costs absorbed by others		, , ,	\$	866		000	\$	1,922
Transfers-in/(out) without reimbursement			Ф	(120)			Ф	4,852
Nuclear Waste Fund offsetting receipts, deferred				1,890				2,650
Other				26				20
Total resources used to finance activities			\$	26,588			\$	38,448
RESOURCES USED TO FINANCE ACTIVITIES NOT PART OF NET COST OF								
OPERATIONS								
Change in budgetary resources obligated for orders but not yet provided	\$	2,856			\$	(4,087)		
Resources that finance the acquisition of assets		(7,206)				(6,507)		
Credit program collection and receipts that increase liabilities		1,341				1,749		
Resources that fund expenses recognized in prior periods		(5,288)				(5,059)		
Other resources and adjustments		95				(4,762)		
Total resources used to finance items not part of Net Cost of Operations			\$	(8,202)			\$	(18,666)
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)	\$	3,385			\$	2,910		
Current year pension and PRB service costs (Note 16)		1,157				1,067		
Current year pension and PRB employer contributions (Note 16)		(1,675)				(1,869)		
Total pension and PRB plans	\$	2,867			\$	2,108		
Change in environmental liability estimates (Note 25)		46,806				25,983		
Change in spent nuclear fuel contingency (Note 25)		1,066				1,269		
Change in unfunded ESPC and similar unfunded contracts		(5)				554		
Change in unfunded safety and health liabilities (Notes 11, 14 and 25)		(28)				(74)		
Upward/Downward re-estimates of credit subsidy expense		(312)				(306)		
Change in other unfunded liabilities		1,493				448		
Depreciation of property, plant and equipment		1,827				1,856		
Amortization of premiums and discounts on Treasury investments		(659)				(597)		
Revaluation of assets and liabilities for loans		33				(3)		
Other amortization Gain on sale of SPRO oil		180				213 (340)		
Other		(269)				642		
Total net cost of items that do not require or generate resources in current		(20))	\$	52,999		0.12	\$	31,753
NET COST OF OPERATIONS				71,385				51,535

NUCLEAR WASTE FUND OFFSETTING RECEIPTS, DEFERRED

The Department defers the recognition of revenues related to the fees paid by owners and generators of SNF, 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 SNF 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)	1	FY 2015	J	FY 2014
Direct				
Category A (by quarter)	\$	14,603	\$	13,668
Category B (by project)		16,933		21,589
Sub-total direct obligations incurred	\$	31,536	\$	35,257
Exempt from apportionment		3,787		4,195
Reimbursable				
Category A (by quarter)		14		36
Category B (by project)		4,801		4,743
Sub-total reimbursable obligations incurred	\$	4,815	\$	4,779
Total obligations incurred (Note 26)	\$	40,138	\$	44,231

UNO BLIGATED BALANCES NOT AVAILABLE (\$ IN MILLIONS)	FY 2015	FY 2014
Loan funds reserved for future defaults	\$ 1,509	\$ 1,621
Unexpired appropriations that did not receive apportionments	15	11
Prior year deobligations in excess of apportioned amount	111	49
Reimbursable work/collections in excess of amount apportioned	- '	19
Expired appropriations	45	546
Other amounts not apportioned	3	8
Total unobligated balances not available (Note 3)	\$ 1,683	\$ 2,254

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

DETAILS OF UNPAID OBLIGATIONS (\$ IN MILLIONS)	FY	2015	F	Y 2014
Undelivered orders	\$	23,000	\$	25,982
Accounts payable and other liabilities		7,969		7,731
Total unpaid obligations (Note 3)	\$	30,969	\$	33,713

RECONCILIATION TO APPROPRIATIONS RECEIVED ON THE CONSOLIDATED STATEMENTS OF CHANGES IN NET POSITION (\$ IN MILLIONS)]	FY 2015	FY 2014
Appropriations on the Combined Statements of Budgetary Resources:			
Definite appropriations	\$	27,943	\$ 24,994
Permanent indefinite appropriations		60	107
Total appropriations on the Combined Statements of Budgetary Resources	\$	28,003	\$ 25,101
Adjustments to take the SBR from net appropriations to appropriations received:			
Rescissions, sequesters, and other amounts precluded from obligation	\$	230	\$ 2,823
Appropriation transfers		36	42
Other adjustments:			
Special and trust fund appropriated receipts		(737)	(702)
Appropriated capital owed, net		(11)	(12)
Other		6	5
Appropriations received on the Consolidated Statements of Changes in Net Position	\$	27,527	\$ 27,257

PERMANENT INDEFINITE APPROPRIATIONS

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

RECONCILIATION TO THE BUDGET (FY 2014) (\$ IN MILLIONS)	Z 2014) BUDGET RESOUR		OB LIGATIONS INCURRED		RECEIPTS		OUTLAYS
Combined Statements of Budgetary Resources as published	\$	53,895	\$ 44,231	\$	(3,556)	\$	24,589
OMB adjustments made to exclude:							
U.S. Enrichment Corporation Fund		-	-		-		4
Non-budgetary Credit Reform Financing Accounts		(8,670)	(6,985)	-		(899)
Expired accounts		(546)	-		-		-
Budgetary prior year adjustments immaterial to the SBR		(6)	(6)	-		(61)
Other		(4)	(2)	6		(2)
Budget of the United States Government	\$	44,669	\$ 37,238	\$	(3,550)	\$	23,631

The FY 2014 Combined Statements of Budgetary Resources are reconciled to the President's Budget that was published in February 2015. The President's Budget containing actual FY 2015 balances is expected to be published and available on the OMB web site in February 2016. 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 FY's obligations, which may or may not have been converted to cash. The borrowing authority available at September 30, 2015 and September 30, 2014 is \$5.3 billion and \$5.9 billion for the Department's loan program, \$3.1 billion and \$3.5 billion for BPA, and \$3.2 billion and \$3.2 billion for WAPA, respectively. The amounts available are authority that has not been converted to cash.

28. Custodial Activities

POWER MARKETING ADMINISTRATIONS

The SEPA, SWPA, and WAPA are responsible for collecting and remitting to Treasury and the DOI revenues attributable to the hydroelectric power projects owned and operated by the DoD, USACE; DOI, BOR; and the DOS, International Boundary and Water Commission. These revenues are reported as custodial activities of the Department.

A Memorandum of Understanding between DOI and DOE transferred the financial reporting for two receipt accounts in the Reclamation Fund from DOI to DOE as of September 30, 2014 (See Notes 12 and 19). As a result, the amounts related to the transferred receipt account previously reported as custodial activity with BOR in FY 2014 is now being reflected as budgetary financing sources on the Statements of Changes in Net Position in FY 2015.

FEDERAL ENERGY REGULATORY COMMISSION

FERC is responsible for billing regulated companies annual charges as a custodian for certain federal agencies. These include: 1) the USACE 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) the BOR 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, 2015 and 2014

(See independent auditors' report)

(\$ IN MILLIONS)	ET REG	DERAL NERGY ULATORY IMISSION	AD	POWER MARKETING MINISTRATIONS		LL O THER DO E O GRAMS	ELI	MINATIONS	CO) NS O LIDATED
				FY 2015						
ASSETS:										
Intragovernmental Assets:										
Fund Balance with Treasury	\$	96	\$	3,274	\$	26,854	\$	-	\$	30,224
Investments and Related Interest, Net		-		697		39,211		-		39,908
Accounts Receivable, Net		-		163		1,024		(650)		537
Other Assets		-		-		86		(57)		29
Total Intragovernmental Assets	\$	96	\$	4,134	\$	67,175	\$	(707)	\$	70,698
Investments and Related Interest, Net		-		-		254		-		254
Accounts Receivable, Net		14		498		3,184		-		3,696
Direct Loans and Loan Guarantees, Net		-		1		14,513		-		14,514
Inventory, Net:		-		142		43,745		-		43,887
General Property, Plant, and Equipment, Net		11		9,627		23,903		-		33,541
Regulatory Assets		-		11,466		-		-		11,466
Other Non-Intragovernmental Assets		-		4,409		311		-		4,720
Total Assets	\$	121	\$	30,277	\$	153,085	\$	(707)	\$	182,776
LIABILITIES:										
Intragovernmental Liabilities:										
Accounts Payable	\$	3	\$	58	\$	207	\$	(125)	\$	143
Debt		-		10,063		15,744		-		25,807
Deferred Revenues and Other Credits		-		4		136		(58)		82
Other Liabilities		34		25		1,068		(524)		603
Total Intragovernmental Liabilities	\$	37	\$	10,150	\$	17,155	\$	(707)	\$	26,635
Accounts Payable		13		453		3,237	-	-	Ť	3,703
Loan Guarantee Liability		-		-		154		-		154
Debt Held by the Public		-		5,955		-		-		5,955
Deferred Revenues and Other Credits		-		1,442		37,852		-		39,294
Environmental Cleanup and Disposal Liabilities		-		12		339,807		-		339,819
Pension and Other Actuarial Liabilities		2		52		26,338		-		26,392
Obligations Under Capital Leases		-		1,649		33		-		1,682
Other Non-Intragovernmental Liabilities		10		3,273		3,197		-		6,480
Contingencies and Commitments		-		43		25,048		-		25,091
Total Liabilities	\$	62	\$	23,029	\$	452,821	\$	(707)	\$	475,205
NET POSITION:										
Unexpended Appropriations										
Unexpended Appropriations- Dedicated Collections	\$	_	\$	-	\$	15	\$	-	\$	15
Unexpended Appropriations- Other Funds		-		-		19,912		-		19,912
Cumulative Results of Operations										
Cumulative Results of Operations - Dedicated Collections		-		7,248		(17,658)		-		(10,410)
Cumulative Results of Operations - Other Funds		59		-		(302,005)		-		(301,946)
Total Net Position	\$	59	\$	7,248	\$	(299,736)	\$	-	\$	(292,429)
Total Liabilities and Net Position	\$	121	\$	30,277	\$	153,085	\$	(707)	\$	182,776

ENE	ERAL ERGY LATORY	Y POWER		AI	LLOTHER DOE				
	-	ADMINIST		PR		ELIN	MINATIONS	COI	NSOLIDATED
			FY 2014						
\$	91	\$	3,148	\$	29,576	\$	-	\$	32,815
	-		597		37,987		-		38,584
	-		169		949		(629)		489
	-		-		93		(69)		24
\$	91	\$	3,914	\$	68,605	\$	(698)	\$	71,912
	- 9		474		254 3,151		-		254 3,634
	9		4/4		13,402		-		13,403
	-		138		42,658		_		42,796
	13		9,042		23,926		-		32,981
	-		11,661		-		-		11,661
	-		4,168		289		-		4,457
\$	113	\$	29,398	\$	152,285	\$	(698)	\$	181,098
\$	_	\$	72	\$	157	\$	(122)	\$	107
	-		9,777		14,648		-		24,425
	-		5		147		(69)		83
	14		30		1,099		(507)		636
\$	14	\$	9,884	\$	16,051	\$	(698)	\$	25,251
	13		486		3,116		-		3,615
	-		-		208		-		208
	-		5,828		-		-		5,828
	-		1,380 14		36,474 299,814		-		37,854 299,828
	4		57		299,814		-		299,828
	-		1,453		81		_		1,534
	40		3,446		3,176		-		6,662
	-		98		22,661		-		22,759
\$	71	\$	22,646	\$	405,074	\$	(698)	\$	427,093
			ĺ		,				,
\$	_	\$	_	\$	21	\$	_	\$	21
-	-		-		22,564	-	-	,	22,564
					,				
	-		6,752		(14,713)		-		(7,961)
	42		-		(260,661)		-		(260,619)
\$	42	\$	6,752	\$	(252,789)	\$	-	\$	(245,995)
\$	113	\$	29,398	\$	152,285	\$	(698)	\$	181,098

U.S. Department of Energy Consolidating Schedules of Net Cost For the Years Ended September 30, 2015 and 2014

(See independent auditors' report)

	FEDERAL ENERGY REGULATORY	PO WER MARKEIING	ALL OTHER DOE		
(\$ IN MILLIO NS)	COMMISSION	ADMINISTRATIONS	PRO GRAMS	ELIMINATIONS	CONSOLIDATED
		FY 2015			
STRATEGIC GOALS:					
Science and Energy					
Program Costs	\$ -	\$ 3,531	\$ 9,762	\$ (72)	\$ 13,221
Less: Earned Revenues	-	(4,488)	(546)	72	(4,962)
Net Cost of Transform Our Energy Systems	-	(957)	9,216	-	8,259
Nuclear Security					
Program Costs	-	-	9,267	-	9,267
Less: Earned Revenues	-	=	(24)	-	(24)
Net Cost of Science and Engineering Enterprise	-	-	9,243	-	9,243
Management and Performance					
Program Costs	-	-	6,253	(463)	5,790
Less: Earned Revenues	-	-	(696)	463	(233)
Net Cost of Secure Our Nation	-	-	5,557	-	5,557
Net Cost of Strategic Goals	-	(957)	24,016	-	23,059
OTHER PROGRAMS:					
Reimbursable Programs					
Program Costs	-	217	4,055	(21)	4,251
Less: Earned Revenues	-	(188)	(3,911)	21	(4,078)
Net Cost of Reimbursable Programs	-	29	144	-	173
Other Programs:					
Program Costs	315	-	433	(292)	456
Less: Earned Revenues	(315)	-	(300)	292	(323)
Net Cost of Other Programs	-	-	133	-	133
Costs Applied to Reduction of Legacy Environmental Liabilities	-	(2)	(5,306)	-	(5,308)
Costs Not Assigned	-	(1)	53,329	-	53,328
Net Cost of Operations	\$ -	\$ (931)	\$ 72,316	\$ -	\$ 71,385

FEDERAL ENERGY REGULATORY	PO WER MARKEIING	ALL OTHER DOE		
		-	ELIMINATIO NS	CONSOLIDATED
	FY 2014			
Ф	ф 2.070	Φ 10.665	d (51)	ф 14.504
\$ -	\$ 3,970	\$ 10,665	\$ (51)	\$ 14,584
-	(4,483)	(1,000)	51	(5,432)
-	(513)	9,665	-	9,152
		9,883		9,883
-	-	(22)	-	(22)
-	-	9,861	-	9,861
-	-	9,001	-	9,001
-	-	5,371	-	5,371
_	-	(233)	_	(233)
-	-	5,138	-	5,138
-	(513)	24,664	-	24,151
				, .
_	251	4,098	(19)	4,330
-	(295)	(3,863)	19	(4,139)
-	(44)	235	-	191
	(1.1)	200		1,71
307	-	351	(252)	406
(307)	_	(262)	252	(317)
(301)	-	89	-	89
-	-	(5,067)	-	(5,067)
-	-	32,171	-	32,171
\$ -	\$ (557)	\$ 52,092	\$ -	\$ 51,535

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

For the Years Ended September 30, 2015 and 2014

(See independent auditors' report)

(# IN AUT LONG)	REC	FEDERAL ENERGY GULATO RY	4.70	POWER MARKEIING		LL OTHER DOE	ET IN GINA THANG	60	NGO LIDATED
(\$ IN MILLIONS)	CO.	MIMISSION	AD	OMINISTRATIO NS FY 2015	PK	OGRAMS	ELIMINATIONS	CO	NSOLIDATED
CUMULATIVE RESULTS OF OPERATIONS:				11 2012					
Beginning Balances	\$	42	\$	6,752	\$	(275,374)	\$ -	\$	(268,580)
Budget ary Financing Sources:				,		, , ,			
Appropriations Used	\$	_	\$	7	\$	27,435	\$ -	\$	27,442
Non-Exchange Revenue		-		-		3	-		3
Donations and Forfeitures of Cash		-		-		5	-		5
Transfers - In/(Out) Without Reimbursement		-		(394)		(2)	-		(396)
Other Budgetary Financing Sources		-		35		-	-		35
Other Financing Sources (Non-Exchange):									
Donations and Forfeitures of Cash		-		15		4	-		19
Transfers - In/(Out) Without Reimbursement		(1)		(119)		-	-		(120)
Imputed Financing from Costs Absorbed by Others		12		8		846	-		866
Other		6		13		(264)	-		(245)
Total Financing Sources	\$	17	\$	(435)	\$	28,027	\$ -	\$	27,609
Net Cost of Operations		-		931		(72,316)	-		(71,385)
Net Change	\$	17	\$	496	\$	(44,289)	\$ -	\$	(43,776)
Total Cumulative Results of Operations	\$	59	\$	7,248	\$	(319,663)	\$ -	\$	(312,356)
UNEXPENDED APPROPRIATIONS:									
Beginning Balances	\$	-	\$	-	\$	22,585	\$ -	\$	22,585
Budgetary Financing Sources:									
Appropriations Received	\$	-	\$	7	\$	27,520	\$ -	\$	27,527
Appropriations Transferred - In/(Out)		-		-		(31)	-		(31)
Other Adjustments		-		-		(2,712)	-		(2,712)
Appropriations Used		-		(7)		(27,435)	-		(27,442)
Total Budgetary Financing Sources	\$	-	\$	-	\$	(2,658)	\$ -	\$	(2,658)
Total Unexpended Appropriations	\$	•	\$	-	\$	19,927	\$ -	\$	19,927
Net Position	\$	59	\$	7,248	\$	(299,736)	\$ -	\$	(292,429)

REG				LL OTHER DOE OGRAMS	ELIMINATIO NS			ONSOLIDATED	
			FY 2014						
\$	43	\$	1,572	\$	(250,784)	\$	-	\$	(249,169)
\$	-	\$	5	\$	26,358	\$	-	\$	26,363
	-		-		53		-		53
	-		-		5		-		5
	-		(271)		(3)		-		(274)
	-		-		-		-		-
			29		20				49
	-				-		-		
	-		4,856		(4)		-		4,852
	15		1		1,906		-		1,922
Φ.	(16)		3	Φ.	(833)	Φ.	-	_	(846)
\$	(1)	\$	4,623	\$	27,502	\$	-	\$	32,124
ф	- (1)	\$	557	\$	(52,092)	\$	-	\$	(51,535)
\$	(1)	\$	5,180 6,752	\$	(24,590)	\$	-	\$	(19,411)
Ф	42	Þ	0,/52	Ф	(275,374)	Þ	-	Þ	(268,580)
\$	-	\$	-	\$	24,557	\$	-	\$	24,557
\$	-	\$	5	\$	27,252	\$	-	\$	27,257
	-		-		(42)		-		(42)
	-		-		(2,824)		-		(2,824)
¢	-	ф	(5)	ø	(26,358)	\$	-	ф	(26,363)
\$	-	\$	-	\$	(1,972) 22,585	\$	-	\$ \$	(1,972) 22,585
\$	42	\$	6,752	\$	(252,789)	\$	-	\$	(245,995)
3	42	Ф	0,752	Þ	(454,789)	Þ		Ф	(243,995)

U.S. Department of Energy Combining Schedules of Budgetary Resources For the Years Ended September 30, 2015 and 2014

(See independent auditors' report)

	FEDERAL			
	ENERGY	POWER	ALL OTHER	
(¢ IN MILLIANG)	REGULATORY	MARKETING ADMINISTRATIONS	DOE	COMBINED
(\$ IN MILLIONS)	COMMISSION	FY 2015	r KO GKAMS	COMBINED
BUDGETARY RESOURCES:		11 2013		
Unobligated Balance Brought Forward, October 1	\$ 28	\$ 797	\$ 8,839	\$ 9,664
Recoveries of Prior Year Unpaid Obligations	1	ψ 171 -	2,503	2,504
Other Changes in Unobligated Balance (+ or -)	_	_	(3,249)	(3,249)
Unobligated Balance from Prior Year Budget Authority, Net	\$ 29	\$ 797	\$ 8,093	\$ 8,919
Appropriations	4	109	27,890	28,003
Borrowing Authority	-	619	2,019	2,638
Contract Authority	_	1,946	2,017	1,946
Spending Authority from Offsetting Collections	304	2,213	5,252	7,769
Total Budgetary Resources	\$ 337	\$ 5,684	\$ 43,254	\$ 49,275
STATUS OF BUDGETARY RESOURCES:	Ψ	ψ 2,001	Ψ 13,231	Ψ 13,272
Obligations Incurred	\$ 320	\$ 4,784	\$ 35,034	\$ 40,138
Unobligated Balance, End of Year:	\$ 320	Ψ 4,704	φ 55,054	\$ 40,138
Apportioned	\$ 17	\$ 706	\$ 6,704	\$ 7,427
Exempt from Apportionment	Ψ 17	13	14	27
Unapportioned		181	1,502	1,683
Total Unobligated Balance, End of Year	\$ 17	\$ 900	\$ 8,220	\$ 9,137
Total Budgetary Resources	\$ 337	\$ 5,684	\$ 43,254	\$ 49,275
CHANGE IN OBLIGATED BALANCE:	Ψ σσ.	ψ 2,001	Ψ 10,201	Ψ 13,270
Unpaid Obligations:				
Unpaid Obligations, Brought Forward, October 1	\$ 42	\$ 3,694	\$ 29,977	\$ 33,713
Obligations Incurred	320	4,784	35,034	40,138
Outlays (Gross) (-)	(304)	(4,716)	(35,358)	(40,378)
Recoveries of Prior Year Unpaid Obligations (-)	(1)	(1,710)	(2,503)	(2,504)
Unpaid Obligations, End of Year	\$ 57	\$ 3,762	\$ 27,150	\$ 30,969
Uncollected Payments:	.	÷ 5,702	Ψ 2.,120	Ψ 20,505
Uncollected Pymts, Fed Sources, Brought Forward, October 1 (-)	\$ -	\$ (347)	\$ (3,938)	\$ (4,285)
Change in Uncollected Pymts, Fed Sources (+ or -)	_	(28)	60	32
Uncollected Pymts, Fed Sources, End of Year (-)	\$ -	\$ (375)	\$ (3,878)	\$ (4,253)
Memorandum (non-add) Entries:	Ψ -	ψ (373)	ψ (3,070)	Ψ (4,233)
Obligated Balance, Start of Year (+ or -)	\$ 42	\$ 3,347	\$ 26,039	\$ 29,428
Obligated Balance, End of Year (+ or -)	\$ 57	\$ 3,387	\$ 23,272	\$ 26,716
BUDGET AUTHORITY AND OUTLAYS, NET:	Ψ	ψ 0,00.	+ 20,2.2	,
Budget Authority, Gross	\$ 308	\$ 4,887	\$ 35,161	\$ 40,356
Actual Offsetting Collections (-)	(305)	(4,333)	(6,076)	(10,714)
Change in Uncollected Pymts, Fed Sources (+ or -)	(303)	(28)	60	32
Budget Authority, Net	\$ 3	\$ 526	\$ 29,145	\$ 29,674
Outlays, Gross	\$ 304	\$ 4,716	\$ 35,358	\$ 40,378
Actual Offsetting Collections (-)	(305)	(4,333)	(6,076)	(10,714)
Outlays, Net	\$ (1)	\$ 383	\$ 29,282	\$ 29,664
Distributed Offsetting Receipts (-)	(20)	(776)	(2,230)	(3,026)
Agency Outlays, Net	\$ (21)			\$ 26,638
regard of days, the	Ψ (21)	(3)3)	Ψ 21,032	Ψ 20,030

_							
	EDERAL NERGY		DO WED	AT	LOTHED		
	ULATORY		PO WER MARKETING	AL	L OTHER DOE		
_	MMISSION	AD	MINISTRATIONS	PRO	OGRAMS	C	OMBINED
			FY 2014				
\$	21	\$	716	\$	11,408	\$	12,145
Ψ	2	Ψ	-	Ψ	764	Ψ	766
	_		_		(930)		(930)
\$	23	\$	716	\$	11,242	\$	11,981
	4		108		24,989	ľ	25,101
	_		603		6,474		7,077
	_		1,826		_		1,826
	305		2,825		4,780		7,910
\$	332	\$	6,078	\$	47,485	\$	53,895
			<u> </u>		,		· ·
\$	304	\$	5,281	\$	38,646	\$	44,231
		·	- , -	Ċ	, .	Ċ	, -
\$	28	\$	770	\$	6,593	\$	7,391
-	-	-	8	7	11	-	19
	_		19		2,235		2,254
\$	28	\$	797	\$	8,839	\$	9,664
\$	332	\$	6,078	\$	47,485	\$	53,895
			<u> </u>		,		,
\$	34	\$	3,352	\$	26,290	\$	29,676
	304		5,281		38,646		44,231
	(294)		(4,939)		(34,195)		(39,428)
	(2)		-		(764)		(766)
\$	42	\$	3,694	\$	29,977	\$	33,713
		·	- ,			Ċ	
\$	-	\$	(321)	\$	(4,342)	\$	(4,663)
	-		(26)		404	Ċ	378
\$		\$	(347)	\$	(3,938)	\$	(4,285)
		·			(-),,	Ċ	() /
\$	34	\$	3,031	\$	21,948	\$	25,013
\$	42	\$	3,347	\$	26,039	\$	29,428
					,		
\$	309	\$	5,362	\$	36,243	\$	41,914
	(305)		(4,605)		(6,373)		(11,283)
	_		(26)		404		378
\$	4	\$	731	\$	30,274	\$	31,009
\$	294	\$	4,939	\$	34,195	\$	39,428
	(305)		(4,605)		(6,373)		(11,283)
\$	(11)	\$	334	\$	27,822	\$	28,145
	(32)		(651)		(2,873)		(3,556)
\$	(43)	\$	(317)	\$	24,949	\$	24,589
	(- /		(= 11)		, ,	•	,

U.S. Department of Energy Consolidating Schedules of Custodial Activities For the Years Ended September 30, 2015 and 2014

(See independent auditors' report)

(\$ IN MILLIONS)	FEDERAL ENERGY REGULATORY COMMISSION	PO WER MARKEIING ADMINIS TRATIO NS	ALL OTHER DOE PROGRAMS	ELIMINATIO NS	CONSOLIDATED
		FY 2015			
SOURCES OF COLLECTIONS:					
Cash Collections:					
Power Marketing Administrations	\$ -	\$ 725	\$ -	\$ -	\$ 725
Federal Energy Regulatory Commission	36	-	-	-	36
Total Cash Collections	\$ 36	\$ 725	\$ -	\$ -	\$ 761
Accrual Adjustment	3	(5)	-	-	(2)
Total Custodial Revenue	\$ 39	\$ 720	\$ -	\$ -	\$ 759
DISPOSITION OF REVENUE:					
Transferred to Others:					
Bureau of Reclamation	\$ (9)	\$ (275)	\$ -	\$ -	\$ (284)
Department of the Treasury	(14)	(220)	-	-	(234)
Army Corps of Engineers	(9)	(229)	-	-	(238)
Others	(5)	-	-	-	(5)
Decrease/(Increase) in Amounts to be Transferred	(2)	4	-	-	2
Net Custodial Activity	\$ -	\$ -	\$ -	\$ -	\$ -

EN REGU	DERAL IERGY JLATORY MISSION	MAI	O WER RKETING ISTRATIONS	D	OTHER OE RAMS	ELIMIN	ATIONS	CON	SOLIDATED
			FY 2014						
\$	-	\$	872	\$	-	\$	-	\$	872
	43		-		-		-		43
\$	43	\$	872	\$	-	\$	-	\$	915
	(15)		(3)		-		-		(18)
\$	28	\$	869	\$	-	\$	-	\$	897
\$	(8)	\$	(448)	\$	-	\$	-	\$	(456)
	(27)		(233)		-		-		(260)
	(8)		(191)		-		-		(199)
	-		-		-		-		-
	15		3		-		-		18
\$	-	\$	-	\$	-	\$	-	\$	-

Required Supplementary Stewardship Information (RSSI)

Supplementary Stewardship Reporting on Research and Development Costs for FY 2015 through 2011

UNAUDITED - See accompanying Auditors' Report.

		FY 2015			FY2014			FY2013			FY2012			FY2011		
(\$ IN MILLIONS)	Program Office	DIRECT & SUPPORT COSTS *	DEPREC- IATION & OTHER	TO TAL	DIRECT COST	DEPREC- IATION & OTHER	TO TAL	DIRECT COST	DEPREC- IATION & OTHER	TOTAL	DIRECT COST	DEPREC- IATION & OTHER	TOTAL	DIRECT COST	DEPREC- IATION & OTHER	TO TAL
BASIC	Efficiency and Renewable Energy	\$ -	\$ -	S -	S -	\$ -	\$ -	S -	\$ -	\$ -	\$ 9	\$ 1	\$ 10	\$ 4	\$ 1	\$ 5
	Fossil Energy	6	-	6	7	-	7	4	1	5	5	1	6	6	2	8
	National Nuclear Security Administration	89	3	92	48	1	49	45	3	48	53	2	55	42	2	44
	Nuclear Energy	34	-	34	-	-	-	-	-	-	-	-	-	-	-	-
	Electricity Delivery and Energy Reliability	6	-	6	3	-	3	4	-	4	6	1	7	4	1	5
	Science	4,361	445	4,806	3,969	434	4,403	3,941	561	4,502	3,962	766	4,728	3,873	787	4,660
	Bonneville Power Administration	4	-	4	5	-	5	9	-	9	9	-	9	8	-	8
TO TAL BASIC		\$ 4,500	\$ 448	\$ 4,948	\$ 4,032	\$ 435	\$ 4,467	\$ 4,003	\$ 565	\$ 4,568	\$ 4,044	\$ 771	\$ 4,815	\$ 3,937	\$ 793	\$ 4,730
APPLIED	Advanced Research Projects Agency - Energy	\$ 140	\$ -	\$ 140	\$ 112	\$ -	\$ 112	\$ 94	\$ 1	\$ 95	\$ 92	\$ -	\$ 92	\$ 64	\$ -	\$ 64
	Efficiency and Renewable Energy	481	10	491	437	7	444	365	46	411	454	47	501	516	63	579
	Environmental Management	4	-	4	4	-	4	4	-	4	11	-	11	145	3	148
	Fossil Energy	216	2	218	247	4	251	158	48	206	219	53	272	264	78	342
	National Nuclear Security Administration	2,679	71	2,750	1,871	95	1,966	1,898	139	2,037	2,044	193	2,237	1,491	178	1,669
	Nuclear Energy	621	22	643	292	6	298	258	40	298	284	41	325	194	28	222
	Electricity Delivery and Energy Reliability	59	-	59	45	-	45	42	5	47	46	5	51	35	5	40
	Science	61	-	61	56	-	56	46	1	47	-	-	-	-	-	-
	Bonneville Power Administration	2	-	2	2	-	2	5	-	5	5	-	5	4	-	4
TO TAL APPLIED		\$ 4,263	\$ 105	\$ 4,368	\$ 3,066	\$ 112	\$ 3,178	\$ 2,870	\$ 280	\$ 3,150	\$ 3,155	\$ 339	\$ 3,494	\$ 2,713	\$ 355	\$ 3,068
DEVELOPMENT	Advanced Research Projects Agency - Energy	\$ 103	\$ -	\$ 103	\$ 83	\$ -	\$ 83	\$ 77	\$ 1	\$ 78	\$ 39	\$ -	\$ 39	\$ 59	\$ -	\$ 59
	Efficiency and Renewable Energy	552	11	563	295	5	300	320	43	363	801	72	873	484	60	544
	Environmental Management	8	-	8	8	-	8	8	-	8	22	-	22	295	6	301
	Fossil Energy	363	3	366	414	7	421	197	60	257	274	66	340	330	97	427
	National Nuclear Security Administration	1,928	133	2,061	1,563	116	1,679	1,471	163	1,634	1,464	244	1,708	1,357	281	1,638
	Nuclear Energy	78	3	81	11	-	11	31	14	45	36	10	46	28	5	33
	Electricity Delivery and Energy Reliability	44	-	44	29	-	29	26	3	29	24	2	26	15	2	17
	Bonneville Power Administration	7	-	7	9	-	9	1	-	1	1	-	1	1	-	1
TO TAL DEVELO PMENT		\$ 3,083	\$ 150	\$ 3,233	\$ 2,412	\$ 128	\$ 2,540	\$ 2,131	\$ 284	\$ 2,415	\$ 2,661	\$ 394	\$ 3,055	\$ 2,569	\$ 451	\$ 3,020
TO TAL R&D		\$ 11,846	\$ 703	\$ 12,549	\$ 9,510	\$ 675	\$ 10,185	\$ 9,004	\$ 1,129	\$ 10,133	\$ 9,860	\$ 1,504	\$ 11,364	\$ 9,219	\$ 1,599	\$ 10,818

^{* -} FY 2015 includes Program Direction, Safeguards & Security, and Infrastructure costs that support R&D activities.

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 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: Science and Energy

(Basic, Applied, and Development)

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 foundational science for alternative fuels, advanced climate predictions, terrestrial carbon sequestration, subsurface bio-geoprocesses, 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.

The Office of Energy Efficiency and Renewable Energy

(EERE) invests in high-value research and development, as well as demonstration and deployment support 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 advancement of clean energy technologies and practices. In the area of energy efficiency, EERE supports mechanisms such as appliance efficiency standards, model building codes, federal fleet initiatives, energy education activities, and financial assistance grants. Program activities include:

Hydrogen & Fuel Cell Technologies, Biomass & Biorefinery Systems R&D, Solar Energy, Wind Energy, Geothermal Technologies, 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 by bringing together industry, the national laboratories, and academia to: transition scientific innovations into manufacturing capabilities, develop cutting-edge foundational manufacturing technologies relevant to industry, advance broadly applicable manufacturing processes that use energy efficiently, and drive a corporate culture of continuous improvement to reduce energy use in the manufacturing sector. 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) is a catalyst for innovation. ARPA-E invests in highpotential, high-impact energy technologies that could radically transform the U.S. energy landscape and create new options for the nation's energy future. ARPA-E awardees are unique because they are creating entirely new ways to generate, store, and use energy. ARPA-E seeks multiple approaches to energy challenges and selects projects for both focused program areas and through open funding opportunities. The streamlined awards process allows for agility, focus, and impact. ARPA-E focuses only on innovative projects that can make a big impact over a finite period of time. Term-limited program directors and technology-to-market advisors provide projects with hands-on support to help them meet specific technical and market milestones. ARPA-E's goal is to develop a funded project to the point where private or public partners commit to advancing it to the next step.

The Office of Fossil Energy (FE) enhances 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 and storage. 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 the capture and storage of carbon dioxide (a greenhouse gas) including improving overall economics where possible by utilizing carbon dioxide in applications such as enhanced oil recovery. Past FE research in hydraulic fracturing and horizontal drilling aided development of technologies that are facilitating the current shale gas boom that is benefiting the nation. Building off the early technological successes for producing shale gas, the program is now focusing on evaluating and mitigating environmental concerns with the production of shale gas resources.

The primary mission of the Office of Nuclear Energy (NE) is to support nuclear power as a resource capable of making contributions in meeting our nation's energy supply, environmental, and energy security needs. NE seeks to resolve technical, cost, safety, security, and regulatory issues through research and development. By focusing on the research and development (R&D) of advanced nuclear technologies, NE supports the Administration's goals of providing domestic sources of secure energy, reducing greenhouse gases, and enhancing national security. 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) research alternative 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 realtime 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. Cyber security 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: Nuclear Security

(Basic, Applied, and Development)

The nation has not deployed a new nuclear weapon in over 20 years, nor conducted an underground nuclear test since 1992. Scientists at the National Nuclear Security Administration (NNSA) maintain the warheads in the stockpile 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 Defense Nuclear Nonproliferation, Research and Development (DNN R&D) program drives the innovation of unilateral and multi-lateral technical capabilities to detect, identify, and characterize foreign: 1) nuclear weapons programs, 2) movement and diversion of special nuclear materials, and 3) nuclear detonations. To meet national and departmental nuclear security requirements, DNN R&D leverages the unique facilities and scientific skills of the NNSA Nuclear Security Enterprise, other DOE national laboratories, academia, and industry to improve U.S. and international detection and characterization of foreign nuclear weapons program activities and to develop capabilities to meet U.S. nuclear treaty verification and detonation detection requirements and other U.S. Government nuclear security requirements.

The NNSA <u>Naval Reactors</u> 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.

Goal 3: Management and Performance

(Applied)

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

his 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 and repairs information is a requirement under Statements of Federal Financial Accounting Standards (SFFAS) No. 42, Deferred Maintenance and Repairs (DM&R), which requires deferred maintenance disclosures as of the end of each fiscal year. Deferred maintenance is defined in SFFAS No. 42 as "maintenance and repairs that were not performed when they should have been or were scheduled to be and which are put off or delayed for a future period." DM&R reporting enables the Government to be accountable to citizens for the proper administration and stewardship of its assets. Specifically, DM&R reporting assists users by providing an entity's realistic estimate of DM&R amounts and the effectiveness of asset maintenance practices the entities employ in fulfilling their missions.

Estimates were developed for:

Deferred Maintenance and Repairs -Buildings and Other Structures and Facilities

The Department of Energy has custody of nearly 21 thousand real property assets with an estimated 134 million gross square feet of building area, buildings, real property trailers and structures with a \$117 billion replacement value, and a total of 2.8 million acres of land in 41 different states. The Department's portfolio of property, plant and equipment (PP&E) supports preeminent federal research laboratory campuses; user facilities; production, special purpose, and legacy clean-up activities; and facilities used predominantly for office space and warehousing. It is Departmental policy to maintain real property assets in a manner that promotes operational safety, worker health, environmental protection and compliance, property preservation, and cost-effectiveness while meeting the program missions. Estimates reported herein include DM&R for buildings, structures, and heritage assets owned by the Department. The Department does not accrue deferred maintenance and repairs on general or stewardship land parcels.

Estimates do not include DM&R for inactive assets not yet screened as excess to the Department's needs. Pursuant to the cost/benefit considerations provided in SFFAS No. 6, the Department has determined that the requirements for deferred maintenance and repair reporting on personal property (capital equipment) are not applicable to assets 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.

Defining and Implementing M&R Policies in Practice

The Department visually assesses the condition of each building and structure at least once every five years to identify all deficiencies, except for some structures where a physical barrier prevents visual assessments (e.g., underground pipe systems). In such cases, sites may employ other methods to identify deficiencies. The requirements to conduct a condition assessment on each asset at least once within a five-year period applies to both active and inactive and excess assets; however, Department guidance gives its component programs and sites the flexibility to apply industry standard methods commensurate with each asset's status, usage, and hazards; or more thorough procedures when mandated by Federal, state, or local codes. Inactive assets must remain in a state safe enough to allow such inspections to occur and so as not to endanger the mission responsibilities borne by other assets.

The recordation of deficiencies as deferred maintenance depends on programmatic and site policies. Sites estimate the cost to address deferred maintenance deficiencies using unit construction, maintenance and repair cost data available from R. S. Means ("CostWorks"), or other providers of unit cost data. For years in between updates, sites apply inflators derived from annual budget preparation guidance published by the Department's Chief Financial Officer to deferred maintenance estimates to approximate current dollars. After resolving a deferred maintenance item, sites remove that item from their backlog.

Ranking and Prioritizing M&R Activities

The Department does not rank or prioritize maintenance and repair activities for its component programs and sites. Instead, it relies on the site manager to execute the maintenance budget based on the role each asset has in supporting the site's various missions. Ranking factors may include mission dependency, status, use, ownership, and risks presented by any noted deficiencies among potentially other considerations.

Factors Considered in Setting Acceptable Condition

The Department directive DOE Order 430.1B, *Real Property Asset Management*, defines Asset Condition Index (ACI) and identifies it as a real property portfolio performance measure. ACI equals one less the sum of the deferred maintenance of a portfolio of assets divided (normalized) by the replacement value of that same portfolio of assets. This directive assigns qualitative labels to ACI ranges and considers assets with an ACI equal to or greater than 0.95 in at least adequate condition. For this purpose, the Department equates the terms "adequate" and "acceptable". As of September 30, 2015, the percentage of active buildings in a condition at or above "acceptable" based on ACI is approximately 57 percent.

Significant Changes from Prior Year and Related Events

As of September 30, 2015, an amount of \$5,480 million of deferred maintenance was estimated to be required to return active real property assets to acceptable operating condition. This is an overall increase of \$129 million.

The Department adopted a year-to-year variance threshold of ten percent and considers a greater increase or decrease as significant. The Department recorded significant increases in estimated deferred maintenance and repair for Inactive and Excess Buildings and Structures. The significant increase in estimated DM&R for Inactive and Excess Buildings and Structures resulted from continuing efforts to reduce the quantity and inactive and excess assets awaiting the excess screening process. Completion of the screening process realigns uncategorized (inactive but not yet screened as excess) deferred maintenance into the Inactive and Excess

category. FY 2015 deferred maintenance estimates do not include estimates for assets held at WAPA, SEPA, or SWPA. Deferred maintenance estimates for BPA are for assets at the Ross Complex only. The deferred maintenance estimates for active buildings and structures may be higher if these assets from these sites were included.

Capital Equipment

Pursuant to the cost/benefit considerations provided in SFFAS No. 6 and SFFAS No. 42, 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 \$138 million of deferred maintenance was estimated to be needed as of September 30, 2015, to return capital equipment assets to acceptable operating condition.

Deferred Maintenance and Repair Costs

Estimates of the beginning and ending balances of DM&R for each major category of PP&E for which maintenance and repairs have been deferred include:

	2015 Ending Balance DM&R	2015 Beginning Balance DM&R
(\$ IN MILLIO NS)	DW&K	DM&K
ACTIVE:		
General PP&E:		
Buildings & Trailers	\$ 3,611	\$ 3,418
Structures	1,862	1,926
Land	-	-
Subtotal - General PP&E Active	\$ 5,473	\$ 5,344
Stewardship Land	\$ -	\$ -
Heritage Assets	7	7
Subtotal - All Active	\$ 5,480	\$ 5,351
INACTIVE AND EXCESS:		
General PP&E:		
Buildings & Trailers	\$ 585	\$ 501
Structures	52	32
Land	-	-
Subtotal - General PP&E Inactive and Excess	\$ 637	\$ 533
Total Deferred Maintenance and Repair Cost	\$ 6,117	\$ 5,884

106

Budgetary Resources by Major Account For September 30, 2015

For September 30, 2015	•			•	
	Weapons Activities 019 05 0240	Science 019 20 0222	Defense Environmental Cleanup 019 10 0251	Advanced Technology Vehicles Manufacturing Loan Program Account 019 20 0322	Bonneville Power Administration Fund 019 50 4045
BUDGETARY RESOURCES:					
Unobligated Balance Brought Forward, October 1	\$ 147	\$ 29	\$ 64	\$ 4,313	\$ 8
Recoveries of Prior Year Unpaid Obligations	54	14	7	-	-
Other Changes in Unobligated Balance (+ or -)	-	(2)	(8)	-	-
Budget Authority, Gross	9,668	5,650	5,454	18	3,791
Total Budgetary Resources	\$ 9,869	\$ 5,691	\$ 5,517	\$ 4,331	\$ 3,799
STATUS OF BUDGETARY RESOURCES:					
Obligations Incurred	\$ 9,655	\$ 5,650	\$ 5,468	\$ 37	\$ 3,786
Unobligated Balances Available	213	39	48	4,294	13
Unobligated Balances not Available Total Budgetary Resources	\$ 9,869	\$ 5,691	\$ 5,517	\$ 4,331	\$ 3,799
CHANGE IN OBLIGATED BALANCE:	\$ 9,809	3,091	3,317	\$ 4,331	\$ 3,199
	\$ 3,521	\$ 3,790	\$ 2,022	\$ 28	\$ 2.886
Obligated Balance, Start of Year (+ or -) Obligations Incurred	\$ 3,521 9,655	5,650	5,468	37	\$ 2,886 3,786
Outlays (Gross) (-)	(9,962)	(5,469)	(5,499)	(19)	(3,728)
Recoveries of Prior Year Unpaid Obligations (-)	(54)	(14)	(3,499)	(19)	(3,728)
Change in Uncollected Pymts, Fed Sources (+ or -)	922	18	(7)		(23)
Obligated Balance, End of Year (+ or -)	\$ 4,082	\$ 3,975	\$ 1,984	\$ 46	\$ 2,921
_			,		
Agency Outlays, Net	\$ 7,553	\$ 4,932	\$ 5,499	\$ 19	\$ 383
BUING MATA DA DEN OLIDO DE	Energy Efficiency and Renewable Energy 019 20 0321	Other Defense Activities 019 10 0243	Defense Nuclear Nonproliferation 019 05 0309	Construction, Rehabilitation, Operation and Maintenance, Western Area Power Administration 019 50 5068	Other Budgetary Accounts
BUDGETARY RESOURCES:	¢ (51	¢ 25	\$ 40	\$ 555	e 2.147
Unobligated Balance Brought Forward, October 1	\$ 651	\$ 25 2		\$ 555	\$ 2,147
Recoveries of Prior Year Unpaid Obligations Other Changes in Unphicated Palance (Lorg)	697 (810)	2	108	-	1,466
Other Changes in Unobligated Balance (+ or -) Budget Authority, Gross	1,996	2,222	1,613	791	(1,650) 6,112
Total Budgetary Resources	\$ 2,534	\$ 2,249	\$ 1,761	\$ 1,346	\$ 8,075
STATUS OF BUDGETARY RESOURCES:	Ψ 2,334	Ψ 2,24)	Ψ 1,701	ψ 1,540	Φ 0,073
Obligations Incurred	\$ 1,877	\$ 2,217	\$ 1,691	\$ 706	\$ 6,470
Unobligated Balances Available	593	26	65	640	1,510
Unobligated Balances not Available	64	6	5	0+0	95
Total Budgetary Resources	\$ 2,534	\$ 2,249	\$ 1,761	\$ 1,346	\$ 8,075
CHANGE IN OBLIGATED BALANCE:	,	, .	, , , , ,	,	, ,,,,,,,
Obligated Balance, Start of Year (+ or -)	\$ 2,859	\$ 368	\$ 1,913	\$ 265	\$ 6,010
Obligations Incurred	1,877	2,217	1,691	706	6,470
Outlays (Gross) (-)	(2,061)	(1,363)	(1,854)	(678)	(6,701)
Recoveries of Prior Year Unpaid Obligations (-)	(697)	(2)	(108)	-	(1,466)
Change in Uncollected Pymts, Fed Sources (+ or -)	28	(937)	-	(4)	(15)
Obligated Balance, End of Year (+ or -)	\$ 2,006	\$ 283	\$ 1,642	\$ 289	\$ 4,298
Agency Outlays, Net	\$ 1,878	\$ 832	\$ 1,849	\$ (16)	\$ 2,493
DIDOKTADY DECOMBASS.	Subtotal of Budgetary Accounts	Title 17 Innovative Technology Direct Loan Financing Account 019 20 4455	Title 17 Innovative Loan Guaranteed Loan Financing Account 019 20 4577	Advanced Technology Vehicles Manufacturing Direct Loan Financing Account 019 20 4579	Combined Statement of Budgetary Resources Total
BUDGETARY RESOURCES:	\$ 7,979	0 1.250	9 255	¢ 170	\$ 0.001
Unobligated Balance Brought Forward, October 1 Recoveries of Prior Year Unpaid Obligations	\$ 7,979 2,348	\$ 1,250 156	\$ 256	\$ 179	\$ 9,664 2,504
Other Changes in Unobligated Balance (+ or -)	(2,470)		-	(129)	(3,249)
Budget Authority, Gross	37,315	2,501	2	538	40,356
Total Budgetary Resources	\$ 45,172		\$ 258		\$ 49,275
STATUS OF BUDGETARY RESOURCES:	13,172	3,237	236	230	17,273
Obligations Incurred	\$ 37,557	\$ 2,150	\$ 24	\$ 407	\$ 40,138
Unobligated Balances Available	7,441	2,130	13		7,454
Unobligated Balances not Available	174	1,107	221	181	1,683
Total Budgetary Resources	\$ 45,172	\$ 3,257	\$ 258	\$ 588	\$ 49,275
CHANGE IN OBLIGATED BALANCE:					
Obligated Balance, Start of Year (+ or -)	\$ 23,662	\$ 5,037	\$ (27)	\$ 756	\$ 29,428
Obligations Incurred	37,557	2,150	24	407	40,138
Outlays (Gross) (-)	(37,334)		(24)	(147)	(40,378)
Recoveries of Prior Year Unpaid Obligations (-)	(2,348)		-	-	(2,504)
Change in Uncollected Pymts, Fed Sources (+ or -)	(11)	44	18	(19)	32
Obligated Balance, End of Year (+ or -)	\$ 21,526	\$ 4,202	\$ (9)		\$ 26,716
Agency Outlays, Net	\$ 25,422	\$ 1,843	\$ 4	\$ (631)	\$ 26,638
Agency Outlays, Net	25,422	φ 1,843	φ 4	φ (631)	20,038

Auditors' Report

Memorandum from the Inspector General



MEMORANDUM

DATE: November 16, 2015

REPLYTO

ATTN OF: IG-37 (A15FN005)

SUBJECT: Audit Report: "Department of Energy's Fiscal Year 2015 Consolidated Financial

Statements"

TO: Chief Financial Officer, CF-1

The attached report presents the results of the independent certified public accountants' audit of the Department of Energy (Department) consolidated financial statements as of September 30, 2015 and 2014, and the related consolidated statements of net costs, changes in net position and custodial activity, and combined statements of budgetary resources for the years then ended.

The Office of Inspector General (OIG) engaged the independent public accounting firm of KPMG LLP (KPMG) to conduct the audit, subject to our review. KPMG is responsible for expressing an opinion on the Department's financial statements and reporting on applicable internal controls and compliance with laws and regulations. The OIG monitored audit progress and reviewed the audit report and related documentation. This review disclosed no instances where KPMG did not comply, in all material respects, with generally accepted Government auditing standards. The OIG did not express an independent opinion on the Department's financial statements.

KPMG concluded that the consolidated financial statements present fairly, in all material respects, the financial position of the Department as of and for the years ended September 30, 2015 and 2014, and its related consolidated statements of net cost, changes in net position, budgetary resources, and custodial activities for the years then ended, in conformity with United States generally accepted accounting principles.

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 a certain deficiency in internal control related to the manual calculation of imputed costs. The following significant deficiency in the Department's system of internal control is not considered a material weakness:

Manual Calculation of Imputed Costs: The Department had not implemented effective controls to properly calculate the imputed cost and imputed financing for the Energy Employees Occupational Illness Compensation Program Act. Due to an improperly designed spreadsheet and the lack of an effective review process, the Department initially recorded an overstatement of this liability of \$2.28 billion. Although management agreed with the weakness, it did not concur that the issue warranted a significant deficiency.

2

The audit also identified one instance of noncompliance that is required to be reported herein under Government Auditing Standards, issued by the Comptroller General of the United States, and Office of Management and Budget Bulletin 15-02, Audit Requirements for Federal Financial Statements. During fiscal year 2015, the Department reported an Antideficiency Act violation in which appropriated funds were used for the payment of services to an individual carrying out the responsibilities of a position that required Senate advice and consent in an acting or temporary capacity after the second submission of a nomination for that individual to the position had been withdrawn or returned to the President.

The OIG issued numerous notices of finding and recommendation to management during the course of the audit. In the vast majority of instances, management concurred with the findings and recommendations. However, responses to three information technology—related findings indicated either a partial concurrence or a nonconcurrence. All findings will be detailed in forthcoming management letters, and a management decision will be requested, as appropriate.

We appreciate the cooperation of your staff during the audit.

Rickey R. Hass Acting Inspector General

Attachment

cc: Director, Office of Finance and Accounting, CF-10 Acting Assistant Director, Office of Financial Policy and Internal Controls, CF-12 Division Director, Office of Financial Policy and Internal Controls, CF-12 Acting Team Leader, Office of Financial Policy and Internal Controls, CF-12 Audit Resolution Specialist, Office of Financial Policy and Internal Controls, CF-12

Independent Auditors' Report



U.S. Department of Energy
Office of Inspector General
Office of Audits and Inspections

AUDIT REPORT

Department of Energy's Fiscal Year 2015 Consolidated Financial Statements

Consistent with standing Office of Inspector General (OIG) policy, the attached report is provided for your action/information prior to being released publicly. As such, the report should not be discussed or distributed outside the Department prior to public release. Generally, the report will be released to the public by posting it on the OIG Web site 2 to 3 days after it is provided to management. Please refer to the OIG Web site (http://www.energy.gov/ig/calendar-year-reports) to ensure that the report has been posted prior to discussing/distributing the report outside the Department.

OAI-FS-16-01

November 2015



Department of Energy

Washington, DC 20585

November 16, 2015

MEMORANDUM FOR THE SECRETARY

FROM: Rickey R. Hass

Acting Inspector General

SUBJECT: <u>INFORMATION</u>: Audit Report: "Department of Energy's Fiscal Year

2015 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 Fiscal Year 2015 Consolidated Financial Statements.

KPMG audited the consolidated financial statements of the Department as of September 30, 2015 and 2014, 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, in conformity with United States generally accepted accounting principles and has issued an unmodified opinion based on its audits and the reports of other auditors for the years ended September 30, 2015 and 2014.

As part of this audit, auditors also considered the Department's internal controls over financial reporting and tested for compliance with certain provisions of laws, regulations, contracts, and grant agreements that could have a direct and material effect on the consolidated financial statements. The audit revealed a certain deficiency in internal control related to the manual calculation of imputed costs. The following significant deficiency in the Department's system of internal control is not considered a material weakness:

Manual Calculation of Imputed Costs: The Department had not implemented effective controls to properly calculate the imputed cost and imputed financing for the *Energy Employees Occupational Illness Compensation Program Act*. Due to an improperly designed spreadsheet and the lack of an effective review process, the Department initially recorded an overstatement of this liability of \$2.28 billion. Although management agreed with the weakness, it did not concur that the issue warranted a significant deficiency.

The audit also identified one instance of noncompliance that is required to be reported under applicable audit standards and requirements. During fiscal year 2015, the Department reported an *Antideficiency Act* violation in which appropriated funds were used for the payment of

services to an individual carrying out the responsibilities of a position that required Senate advice and consent in an acting or temporary capacity after the second submission of a nomination for that individual to the position had been withdrawn or returned to the President.

The OIG issued numerous notices of finding and recommendation to management during the course of the audit. In the vast majority of instances, management concurred with the findings and recommendations. However, responses to three information technology—related findings indicated either a partial concurrence or a nonconcurrence. All findings will be detailed in forthcoming management letters, and a management decision will be requested, as appropriate.

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 Departmental elements for their courtesy and cooperation during the review.

Attachment

cc: Deputy Secretary of Energy
Administrator for the National Nuclear Security Administration
Under Secretary for Science and Energy
Deputy Under Secretary for Management and Performance
Chief of Staff
Chief Financial Officer

Department financial reports are available for download on the Office of the Chief Financial Officer Web site: http://www.energy.gov//cfo/reports/agency-financial-reports.



Attachment

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:

Report on the Financial Statements

We have audited the accompanying consolidated financial statements of the United States Department of Energy (Department), which comprise the consolidated balance sheets as of September 30, 2015 and 2014, and the related consolidated statements of net cost, changes in net position, and custodial activity, and combined statements of budgetary resources for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. 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 Office of Management and Budget (OMB) Bulletin No. 15-02, *Audit Requirements for Federal Financial Statements*. Those standards and OMB Bulletin No. 15-02 require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

KPMG LLP is a Delaware limited liability partnership, the U.S. member firm of KPMG international Cooperative ("KPMG international"), a Swiss entity.

113



Attachment

Opinion on the Financial Statements

In our opinion, 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, 2015 and 2014, and its net costs, changes in net position, budgetary resources, and custodial activity for the years then ended in accordance with U.S. generally accepted accounting principles.

Emphasis of Matters

As discussed in Note 7 to the consolidated financial statements, the Department has total direct loans and loan guarantees, net, of \$17 billion and \$16 billion as of September 30, 2015 and 2014, 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 reestimate is performed annually at September 30. Any adjustment resulting from the re-estimate is recognized as subsidy expense. Our opinion is not modified with respect to this matter.

As discussed in Note 15 to the consolidated financial statements, the cost estimates supporting the Department's environmental cleanup and disposal liabilities of \$340 billion and \$300 billion as of September 30, 2015 and 2014, respectively, are based upon assumptions regarding funding and other future actions and decisions, many of which are beyond the Department's control. Our opinion is not modified with respect to this matter.

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 \$24 billion and \$23 billion as of September 30, 2015 and 2014, respectively. Our opinion is not modified with respect to this matter.

Other Matters

Management has elected to reference to information on websites or other forms of interactive data outside the *Agency Financial Report* to provide additional information for the users of its financial statements. Such information is not a required part of the basic consolidated financial statements or supplementary information required by the Federal Accounting Standards Advisory Board. The information on these websites or the other interactive data has not been subjected to any of our auditing procedures, and accordingly, we do not express an opinion or provide any assurance on it.

Required Supplementary Information

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



Attachment

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.

Supplementary and Other Information

Our audits were conducted for the purpose of forming an opinion on the basic consolidated financial statements as a whole. The consolidating information in the Consolidating Schedules section, the Message from the Secretary, the Message from the Chief Financial Officer, and Other Information section of the Department's Fiscal Year 2015 Agency Financial Report are presented for purposes of additional analysis and are not a required part of the basic consolidated financial statements.

The consolidating 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. Such 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 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 Secretary, the Message from the Chief Financial Officer, and Other Information section of the Department's Fiscal Year 2015 Agency Financial Report 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 it.

Other Reporting Required by Government Auditing Standards

Internal Control Over Financial Reporting

In planning and performing our audit of the consolidated financial statements as of and for the year ended September 30, 2015, we considered the Department's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances 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. Accordingly, we do not express an opinion on the effectiveness of the Department's internal control. We did not test all internal controls relevant to operating objectives as broadly defined by the Federal Managers' Financial Integrity Act of 1982.

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. 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.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material



Attachment

weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify a deficiency in internal control, described below and in more detail in Exhibit I, that we consider to be a significant deficiency.

Manual Calculation of Imputed Costs. The Department had not implemented effective controls to
properly calculate the imputed cost and imputed financing for the Energy Employees Occupational
Illness Compensation Program Act (EEOICPA).

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Department's consolidated financial statements are free from material misstatement, we performed tests of its 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 financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed an instance of noncompliance that is required to be reported herein under *Government Auditing Standards* or OMB Bulletin No. 15-02.

Antideficiency Act – During our fiscal year 2015 audit, the Department informed us that it had reached
a conclusion that a violation of section 1341 of Title 31, United States Code, occurred in the
Departmental Administration account in the amount of \$29,880.67. The violation resulted from the use
of appropriated funding for the payment of services to an individual carrying out the responsibilities of
a position requiring Senate advice and consent in an acting or temporary capacity after the second
submission of a nomination for that individual to the position had been withdrawn or returned to the
President. Accordingly, the Department has reported this violation of the Antideficiency Act, as
required by Section 1351 of Title 31, United States Code.

We also performed tests of its compliance with certain provisions referred to in Section 803(a) of the Federal Financial Management Improvement Act of 1996 (FFMIA). Providing an opinion on compliance with FFMIA was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests of FFMIA disclosed no instances in which 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.

The Department's Response to Findings

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



Attachment

Purpose of the Other Reporting Required by Government Auditing Standards

The purpose of the communication described in the Other Reporting Required by *Government Auditing Standards* section is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the Department's internal control or compliance. Accordingly, this communication is not suitable for any other purpose.



November 16, 2015

Attachment

Independent Auditors' Report Exhibit I – Significant Deficiency

Manual Calculation of Imputed Costs

Office of Management and Budget Circular No. A-123, Management's Responsibility for Internal Control, indicates that management should have control activities in place to help ensure that agency objectives are met. The Department had not implemented effective controls to properly calculate the imputed cost and imputed financing for the EEOICPA. Due to an improperly designed spreadsheet and lack of an effective review process, the Department initially recorded the amount approximately \$2.3 billion higher than the correct amount. As a result of our testwork, the amount was corrected prior to the issuance of the Agency Financial Report.

Recommendation

We recommend that the Department update the process to support the calculation of the EEOICPA imputed costs and imputed financing source and train both the preparer of the calculation and the reviewer of the journal entry in the proper calculation.

Management's Response

We agree with the recommendation, however, we do not concur that the EEOICPA error is a significant deficiency for the following reasons:

- The Federal Audit Manual Section 230.11 states that the auditor should set planning materiality at 3
 percent. The Gross Costs on the fiscal year 2015 Statement of Net Cost is \$81 billion. The EEOICPA
 calculation error was \$2.28 billion or 2.8 percent of Gross Costs (GC). The error was .2 percentage
 points below the level of materiality for the Statement of Net Cost, and therefore, the amount alone is
 not sufficient to drive a significant deficiency.
- The Government Accountability Office (GAO) Financial Audit Manual states that consideration should be given to whether the information that was misstated was something that someone would have used for management decision-making purposes. The Department's imputed cost amount for the EEOICPA is not used for decision-making or management purposes.
- The amount of the error could not have been significantly higher without triggering additional review
 activity. KPMG has agreed that the look back process employed by the Department would have
 triggered additional analysis if the amount had been significantly different from previous years.
- The calculation error resulted from a single transaction and was not systemic.
- Procedures and internal controls are and were in place. We agree that the process used in the posting of
 the imputed costs needs to be strengthened. We do not agree that the internal controls were
 significantly deficient.
 - American Institute of Certified Public Accountants AU-C 265.A06 states the factors that affect the magnitude of a misstatement that might result from a deficiency in internal controls include:

Attachment

- The financial statement amounts or total of transactions exposed to the deficiency. The Department's error was one transaction for \$2.28 billion, which is significantly below materiality of GC.
- The volume of activity (in the current period or expected in future periods) in the account or class of transactions exposed to the deficiency. This single Department transaction occurs once a year and is posted to imputed cost and imputed financing.
- The finding on the EEOICPA posting does not rise to the materiality factors in AU-C312.04 on internal control deficiencies:
 - The auditor's consideration of materiality is influenced by the auditor's perception of the needs of users of financial statements. The perceived needs of users are recognized in the discussion of materiality in Financial Accounting Standards Board (FASB) Statement of Financial Accounting Concepts No. 2, Qualitative Characteristics of Accounting Information, which defines materiality as "the magnitude of an omission or misstatement of accounting information that, in the light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement."
 - Given that no one relies on the Department's imputed cost amounts for the EEOICPA for any purpose, the error does not meet this materiality test.
- The EEOICPA liability is on the Department of Labor's (DOL) books and the amount is an "imputed
 cost and financing" entry on Department books. It is not a cost entry for which the Department makes
 payments nor is it subject to fraud. This is a critical fact that must be considered. A reader who
 understands Federal Government financial statements would not be concerned by this incorrect
 imputed entry because DOL, not the Department, is responsible for EEOICPA payments.

For the above reasons, this was an error of no consequence below what we understand to be the materiality threshold, and therefore, a significant deficiency is unjustified.

Auditor Comments

Management agreed with our recommendation. If fully implemented, management's corrective actions will improve the Department's internal controls over the manual calculation of imputed costs. GAO's Financial Audit Manual identifies a significant deficiency to include a misstatement of the entity's financial statements that is more than inconsequential. We maintain our position that a \$2.3 billion error, representing 4.5 percent of the Department's 5-year average of net costs, although not material, is significant.

FEEDBACK

The Office of Inspector General has a continuing interest in improving the usefulness of its products. We aim to make our reports as responsive as possible and ask you to consider sharing your thoughts with us.

Please send your comments, suggestions, and feedback to OIG.Reports@hq.doe.gov and include your name, contact information, and the report number. You may also mail comments to us:

Office of Inspector General (IG-12) Department of Energy Washington, DC 20585

If you want to discuss this report or your comments with a member of the Office of Inspector General staff, please contact our office at (202) 253-2162.

Other Information

(Unaudited)



Scientists are working to create fusion - the energy source of the sun and stars - on Earth. One of the world's largest fusion research facilities just received a massive upgrade to its flagship machine. The upgrade doubles its heating power and the strength of its magnetic field, improvements that will allow researchers to answer important questions on the quest to develop fusion energy as a clean, safe, virtually limitless fuel for generating electricity. Photo courtesy of the Princeton Plasma Physics Laboratory.

Combining Schedules of Spending For the Years Ended September 30, 2015 and 2014

For the Years Ended September	FEDERAL ENERGY	lu 2014			FEDERAL ENERGY			I
	REGULATORY COMMISSION	POWER MARKETING	ALL OTHER DOE	COMPANY	REGULATORY COMMISSION	POWER MARKETING	ALL OTHER DOE	
(\$ IN MILLIONS)	COMMISSION	ADMINISTRATIONS FY 2015	PRO GRAMS	COMBINED	COMMISSION	ADMINISTRATIONS FY 2014	PROGRAMS	COMBINED
WHAT MONEY IS AVAILABLE TO SPEND?		F1 2015				F1 2014		
Total Resources	\$ 337	\$ 5,684	\$ 43,254	\$ 49,275	\$ 332	\$ 6,078	\$ 47,485	\$ 53,895
Less Amount Available but Not Agreed to be Spent	(17)	(719)	(6,718)	(7,454)	(28)	(778)	(6,604)	(7,410)
Less Amount Not Available to be Spent	-	(181)	(1,502)	(1,683)	-	(19)	(2,235)	(2,254)
Total Amounts Agreed to be Spent	\$ 320	\$ 4,784	\$ 35,034	\$ 40,138	\$ 304	\$ 5,281	\$ 38,646	\$ 44,231
HOW WAS THE MONEY SPENT/ISSUED?								
Personnel Compensation	0	•	6 10	* 10	0	0		
Contracts	\$ - 171	\$ - 585	\$ 10 1,046	\$ 10 1,802	\$ - 167	\$ - 587	\$ 3 1,050	\$ 3 1,804
Non-Financial Assistance Direct Payments Total Personnel Compensation	\$ 171	\$ 585	\$ 1,056	\$ 1,812	\$ 167	\$ 587	\$ 1,053	\$ 1,807
Total Telsonnel Compensation	ф 171	\$ 363	\$ 1,030	φ 1,612	\$ 107	307	\$ 1,033	\$ 1,607
Personnel Benefits								
Contracts	\$ -	s -	\$ 5	\$ 5	\$ -	\$ -	\$ 2	\$ 2
Non-Financial Assistance Direct Payments	53	188	319	560	47	178	305	530
Total Personnel Benefits	\$ 53	\$ 188	\$ 324	\$ 565	\$ 47	\$ 178	\$ 307	\$ 532
Travel and Transportation of Persons								
Contracts	\$ -	\$ -	\$ 2	\$ 2	\$ -	\$ -	\$ 2	\$ 2
Non-Financial Assistance Direct Payments	3	37	51	91	3	35	46	84
Total Travel and Transportation of Persons	\$ 3	\$ 37	\$ 53	\$ 93	\$ 3	\$ 35	\$ 48	\$ 86
n . a								
Rent, Communications and Utilities								
Contracts Non-Financial Assistance Direct Payments	\$ 27	\$ 66	\$ 390	\$ 483	\$ 24	\$ 65	\$ 333 4	\$ 422 5
Other Payment Types	_	_	2	2	_		3	3
Total Rent, Communications and Utilities	\$ 27	\$ 66	\$ 392	\$ 485	\$ 24	\$ 66	\$ 340	\$ 430
						-	7	
Other Contractual Services								
Contracts	\$ 61	\$ 2,702	\$ 24,560	\$ 27,323	\$ 51	\$ 3,390	\$ 23,983	\$ 27,424
Financial Assistance Direct Payments	-	-	914	914	-	-	1,086	1,086
Grants	-	-	35	35	-	-	32	32
Non-Financial Assistance Direct Payments	-	51	12	63	-	32	16	48
Other Payment Types	-	-	-	-	-	-	13	13
Total Other Contractual Services	\$ 61	\$ 2,753	\$ 25,521	\$ 28,335	\$ 51	\$ 3,422	\$ 25,130	\$ 28,603
Supplies and Materials								
Contracts	\$ 2	\$ 77	\$ 260	\$ 339	\$ 2	\$ 77	\$ 140	
Other Payment Types	_	-	-	-	_	_	9	9
Total Supplies and Materials	\$ 2	\$ 77	\$ 260	\$ 339	\$ 2	\$ 77	\$ 149	\$ 228
T								
Equipment	\$ 1	\$ 257	\$ 568	\$ 826	\$ 4	\$ 203	\$ 477	\$ 684
Contracts Financial Assistance Direct Payments	φ 1 -	\$ 231 -	\$ 506	\$ 620	\$ 4	\$ 203	1	1
Other Payment Types	_	_	_	-	_	-	9	9
Total Equipment	\$ 1	\$ 257	\$ 568	\$ 826	\$ 4	\$ 203	\$ 487	\$ 694
Land and Structures								
Contracts	\$ -	\$ 513	\$ 2,403	\$ 2,916	\$ -	\$ 402	\$ 2,327	\$ 2,729
Financial Assistance Direct Payments	-	-	90	90	-	-	55	55
Other Payment Types	-	6 512	6 2.402	e 2,006	-	6 402	6 2.292	f 2.795
Total Land and Structures	\$ -	\$ 513	\$ 2,493	\$ 3,006	\$ -	\$ 402	\$ 2,383	\$ 2,785
Loans								
Loans	\$ -	s -	\$ 1,990	\$ 1,990	\$ -	\$ -	\$ 6,443	\$ 6,443
	<u> </u>	¥	1,390	1,990	-	_	0,443	0,443
Grants, Subsidies and Contributions								
Contracts	s -	s -	\$ 19	\$ 19	\$ -	s -	\$ 21	\$ 21
Financial Assistance Direct Payments	-	-	268	268	-	-	393	393
Grants	-	46	1,408	1,454	-	47	1,217	1,264
Non-Financial Assistance Direct Payments	-	-	2	2	4	-	7	11
Reestimate	-	-	211	211	-	-	198	198
Other Payment Types	-	-	-		-	-	6	6
Total Grants, Subsidies and Contributions	\$ -	\$ 46	\$ 1,908	\$ 1,954	\$ 4	\$ 47	\$ 1,842	\$ 1,893
-								
Interest					0	0		
Interest and Dividends	\$ -	\$ 259	\$ 459	\$ 718	\$ -	\$ 260	\$ 451	\$ 711
All Od				\$ 8	\$ 2	\$ 4	6 2	• ~
All Other	e -	e -			1.5 2.	\$ 4	\$ 3	\$ 9
Contracts	\$ 2	\$ 3			_			
Contracts Non-Financial Assistance Direct Payments	\$ 2	\$ 3	3 3	3 4		-	4	
Contracts	\$ 2 - - \$ 2	\$ 3 - - \$ 3	3 4	3	\$ 2	-	4	6
Contracts Non-Financial Assistance Direct Payments Other Payment Types	-	-	3 4	3 4	-	-	4 6	6
Contracts Non-Financial Assistance Direct Payments Other Payment Types	-	\$ 3	\$ 10	3 4	-	\$ 4	4 6	\$ 19

The *Combining Schedules of Spending* present an overview of how and where the Department spent its funding. The budgetary information in these schedules 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. How Was the Money Spent/Issued summarizes the Department's obligations for the fiscal year, categorized by the OMB Budget Object Class definitions found in OMB Circular No. A-11, "Preparation, Submission and Execution of the Budget" and by payment types.

The total amount agreed to be spent in both sections is equivalent to the obligations incurred shown on the *Combined Statements of Budgetary Resources*. Similar data are also submitted to USAspending.gov; however the amounts will differ because USAspending.gov excludes certain types of obligations such as reimbursable work, classified amounts, and individual transactions below \$25,000



Inspector General's Management Challenges

he Office of Inspector General (OIG) annually identifies what it considers to be the most significant management challenges facing the Department. 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. 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.

While the FY 2016 challenge areas remain largely consistent with those in previous years, based on the results of our work over the last year, a few notable changes in emphasis have been made. Specifically, because of the substantial impact that facilities and infrastructure can have on laboratory research and operations, we are elevating Infrastructure Modernization to a management challenge. Furthermore, as a result of the winding down of the American Recovery and Reinvestment Act of 2009 and the corresponding decreased activity in financial assistance awards, we are removing Financial Assistance Management from the management challenges. As a result, the FY 2016 management challenges include the following:

- Contract Management
- Cybersecurity
- Environmental Cleanup
- Nuclear Waste Disposal
- Safeguards and Security
- Stockpile Stewardship
- Infrastructure Modernization

In addition to the management challenges, our watch list consists of other issues that do not meet the threshold of a management challenge, yet in our view, warrant special attention by Department officials. For FY 2016, the watch list includes Human Capital Management, Loan Guarantee Program, and Worker and Community Safety.

Contract Management

The Department is the most contractor-dependent civilian agency in the Federal Government. Approximately 90 percent of the Department's budget is spent on contracts and large capital asset projects. The challenges associated with managing the Department's sizeable contracting portfolio have been recognized internally by the agency, as well as externally by the Government Accountability Office (GAO), which has included inadequate contract and project oversight on its High Risk List since 1990. Acknowledging the Department's progress in this area, as of February

2013, GAO had narrowed the focus of the high risk designation to the Office of Environmental Management (EM) and National Nuclear Security Administration's (NNSA's) major contracts and projects with an estimated cost of \$750 million or more. Together, these two programs accounted for almost 63 percent of the Department's FY 2015 discretionary funding of more than \$26 billion. In 2015, GAO found continuing cost and schedule problems with EM and NNSA major projects but noted that the Department's top leadership continued to be engaged and take action to address this high-risk area. Our reviews continue to find issues with the Department's acquisition planning and contract administration. Given the number of contracts handled by the Department and the complexity and importance of the Department's numerous multimillion dollar projects, the area of Contract 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 is a crucial aspect of the Department's overall security posture. According to the OMB, Federal agencies reported nearly 70,000 information security incidents in FY 2014, up 15 percent from FY 2013. Although the Department has implemented numerous countermeasures in recent years, security challenges and threats to the Department's information systems continue and are constantly evolving. Recent intrusions of the Department's information technology systems have highlighted the importance of protecting such systems as well as the difficulty and diligence required to guard against such intrusions. Specifically, the Department reported that its computer systems were subjected to 388 successful cybersecurity incidents in FY 2015, including such incidents as malicious code, root or user compromise, and Web defacements. The OIG's annual evaluation of the Department's information technology systems highlighted specific weaknesses and offered recommendations to aid in correcting recognized deficiencies. Further, the OMB concluded that the Department failed to reach several Cybersecurity Cross-Agency Priority Goals in the areas of Information Security Continuous Monitoring, Strong Authentication, and Trusted Internet Connection (TIC) Consolidation, and TIC Capabilities. As a result of these inherent risks, identification of continuing cybersecurity weaknesses, and the sensitivity of much of the Department's work, we have identified Cybersecurity as a continuing and significant management challenge.

Environmental Cleanup

The Department is responsible for one of the most complex nuclear remediation efforts in the world. To meet this challenge, the Department is faced with developing

unique solutions to address often unknown obstacles. This includes disposing of multiple waste streams generated during more than 50 years of nuclear defense and energy research work. For example, the Department has approximately 88 million gallons of liquid waste stored in underground tanks and approximately 4,000 cubic meters of solid waste derived from the liquids stored in bins. The majority of this waste is contained in 177 large underground tanks at the Hanford Site in southeastern Washington. Of these, more than one-third have already leaked, contaminating the subsurface and threatening the nearby Columbia River. The Hanford Tank Waste Treatment and Immobilization Plant (WTP) is currently being constructed to process and stabilize 56 million gallons of radioactive and chemical waste stored at the site. However, the Department faces significant technical challenges in successfully constructing and operating the WTP and the estimated cost of the project has tripled, while the scheduled completion date has slipped by nearly a decade. In its annual memorandum on Assurances of Internal Control, EM continues to recognize tank waste and WTP as issues requiring management's attention. Furthermore, the Department's Environmental Cleanup efforts are projected to cost at least \$300 billion and will continue well into the foreseeable future. As such, this remains a management challenge that warrants attention on the part of Department management.

Nuclear Waste Disposal

The Department is responsible for the management and safe disposal of nuclear waste. To accomplish this, the Department operates several waste processing and storage facilities. One such facility is the Waste Isolation Pilot Plant (WIPP) located near Carlsbad, New Mexico. WIPP is the nation's sole repository for the disposal of defense transuranic (TRU) waste. TRU waste generated by atomic energy defense activities is a by-product of nuclear weapons research and production and the cleanup of legacy sites and facilities that supported the nuclear weapons mission. Legacy TRU waste inventory is located at 4 large-quantity sites and more than 20 small-quantity sites across the United States. In February 2014, as a result of an accidental radiological release, the Department suspended operations at WIPP, and this has affected TRU waste operations across the nation. According to the Department's Recovery Plan, WIPP was slated to resume operations in the first quarter of calendar year 2016. However, in July 2015, the Department announced the target date of March 2016 was no longer viable and a new target date in 2016 must be established. In addition, the Department continues to evaluate the path forward for long-term storage of defense and commercial high-level radioactive waste and spent nuclear fuel. In March 2015, the Department published the Report on Separate Disposal of Defense High-Level Radioactive Waste that concluded that a strong basis exists to find that a separate defense high-level waste repository is required. 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 is

developed, the area of Nuclear Waste Disposal remains a significant challenge facing the Department.

Safeguards and Security

Safeguards and Security programs are an integral part of the Department. These programs are implemented to ensure that the Department effectively meets its obligations to protect special nuclear material, other nuclear materials, classified matter, sensitive information, Government property, and the safety and security of employees, contractors, and the general public. To faithfully execute its mission, the Department employs numerous security personnel and develops policies designed to safely execute its mission. Although the Department has recently made progress in implementing updated security controls, our reviews continue to find challenges facing the Department in this area. For example, while Y-12 spent more than \$50 million to upgrade its physical security system, it had not met the NNSA's mandate to develop and implement a comprehensive method for managing and integrating the site's security and access control systems. Additionally, the Department's management continues to identify this area as high risk in its annual memorandums on Assurances of Internal Control. Given the Department's unique mission, managing the safety and security of its operations remains a challenge.

Stockpile Stewardship

The Department is responsible for maintaining the safety, security, and effectiveness of the Nation's nuclear deterrent without nuclear testing. In this vein, the Administration has pledged that as long as nuclear weapons exist, the United States will maintain a nuclear arsenal to both deter potential adversaries and protect U.S. allies. To accomplish this mission, NNSA manages programs aimed at providing research, development, test, and evaluation capabilities to assess, maintain, and extend the life of the nuclear weapons stockpile. These programs are conducted primarily at 8 sites by a contractor workforce of approximately 30,000 people and are managed by a Federal workforce comprised of civilian and military personnel. For FY 2016, NNSA has increased the budget request for Weapons Activities by \$891 million. Much of this increase will be devoted to stockpile life extension programs (LEPs) and recapitalization of critical plutonium and uranium capabilities. One of the major efforts in this area is the B61 LEP. This LEP is nearing the end of the second year of full-scale engineering development and will enable the consolidation of four families of the B-61 bomb. This will improve both the safety and security of the oldest weapon system in the U.S. arsenal. The LEP is estimated to cost as much as \$9.7 billion and run through 2025. Our reviews in recent years have found issues with management of the stockpile stewardship program that suggest sustained efforts to improve operational efficiency are necessary. Stockpile Stewardship activities are extremely complex to execute

and will require attention of NNSA at all levels to ensure success.

Infrastructure Modernization

The Department manages the Federal Government's fifth-largest inventory of real property with an annual operating cost of \$2.08 billion. This real property portfolio comprises diverse facilities, including unique fission reactors, accelerators, and high-performance lasers. However, much of the Department's property portfolio reflects an aging infrastructure originating in the 1940s as part of the Manhattan Project. Laboratory facilities and infrastructure in poor condition can pose numerous challenges, including inadequate functionality for mission performance; negative effects on environment, safety, and

health; higher maintenance costs; and problems with recruiting and retaining high-quality scientists and engineers. According to NNSA, the U.S. nuclear stockpile must be supported by a modern physical infrastructure to remain safe, secure, and effective. However, the Department is currently faced with continuing to execute the plutonium and uranium missions, at a level of acceptable risk to worker health and safety, in Manhattan Project—era buildings with deteriorating utility systems and structural components. Additionally, infrastructure was continually noted as a concern in the executive management's FY 2015 annual memorandums on Assurances of Internal Control. Given the challenges in this area, we are elevating this issue from the watch list to a management challenge.



Summary of Financial Statement Audit and Management Assurances

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

Tree of the second	Character 1 Control	n l n n P'		' CEMELA C		
Statement of Assurance	of Internal Cont	rol over Fin	ancial Report	ing (FMFIA Secti	on 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
	ness of Internal (Control ove	r Operations (FMFIA Section II	1)	
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
Conformance with Fe						
Conformance with Fe				uirements (FMF) t systems require		
						Ending Balance
Statement of Assurance	Systems conformal Beginning	rm to financi	al managemen	t systems require	ments	_
Non-Conformances No non-conformances reported	Systems conformal Beginning	rm to financi	al managemen	t systems require	ments	_
Statement of Assurance Non-Conformances	Systems conformal Beginning	rm to financi	al managemen	t systems require	ments	_
Non-Conformances No non-conformances reported Total non-conformance	Systems conformal Beginning Balance	new O	Resolved 0	Consolidated 0	Reassessed 0	Balance
Non-Conformances No non-conformances reported Total non-conformance	Systems conformal Beginning Balance	New O nancial Man	Resolved 0	Consolidated 0	Reassessed O FMIA)	Balance
Non-Conformances No non-conformances reported Total non-conformance Conformance	Beginning Balance 0 with Federal Fire	New O nancial Man Agency	Resolved O agement Imp	Consolidated O rovement Act (F)	Reassessed O FMIA) Auditor	Balance 0
Non-Conformances No non-conformances reported Total non-conformance	Systems conformal Beginning Balance	New O nancial Man Agency	Resolved O agement Imp	Consolidated O rovement Act (F)	Reassessed O FMIA)	Balance 0
Non-Conformances No non-conformances reported Total non-conformance Conformance	Beginning Balance 0 with Federal Fire	New O nancial Man Agency stantial comp	Resolved O agement Imp	Consolidated O rovement Act (Fl	Reassessed O FMIA) Auditor	Balance 0 iance noted

Financial Management Systems Plan

Corporate Business Systems

The Department's enterprise-wide corporate business systems consist of financial, budgetary, procurement and personnel systems. Information from these systems is supported by a data warehouse that links common data elements from each of the Department's business systems and supports both external and internal reporting. The major business systems are:

- Financial System: Standard Accounting and Reporting System (STARS)
- Personnel System: Corporate Human Resource Information System (CHRIS)
- Procurement System: Strategic Integrated
 Procurement Enterprise System (STRIPES)
- Data Warehouse (IDW)/iPortal
- Travel and payroll processing: Travel processing services are provided through the General Services Administration (GSA) eTravel Services contract using a system called Concur Government Edition. Payroll processing services are outsourced to the Defense Finance and Accounting Service.

Current Systems

Standard Accounting and Reporting System – STARS is the Department's financial management system that provides budget execution, financial accounting, financial reporting, and performance measurement. STARS integrates with procurement, funds distribution, travel, and human resources systems. In FY 2015, STARS implemented and stabilized the Oracle Release 12 upgrade and migrated functionality of several legacy systems. Future activities planned for STARS include upgrading the database to Oracle 12c during the second quarter of FY 2016.

Corporate Human Resource Information System – CHRIS is the Human Resources (HR) system. The primary objectives for CHRIS are to improve operational HR efficiency, reduce paperwork, and provide strategic information necessary to make informed human resource management decisions. FY 2015 accomplishments included a database upgrade to Oracle 12c and implementation and deployment of PeopleSoft 8.54. The focus in FY 2016 will be the implementation and deployment of the PeopleSoft HR Helpdesk as the Department moves towards consolidation of its HR functions into five service centers.

Strategic Integrated Procurement Enterprise System – STRIPES is the procurement and contracts management system that automates all procurement and contract activities associated with planning, awarding and administering various unclassified acquisition and

financial assistance instruments. The STRIPES application connects DOE with the Integrated Acquisition Environment which includes the System for Award Management (SAM), Federal Procurement Data System – Next Generation (FPDS-NG), and Federal Business Opportunities, as well as Grants.gov and FedConnect. In addition, STRIPES is integrated with STARS and IDW.

The STRIPES team completed various technical upgrades relating to Service Packs and Database and implemented the Office of Science Portfolio Analysis and Management System interfaces. STRIPES is preparing to upgrade to Compusearch PRISM v7.2 during the third quarter of FY 2016 to provide enhanced contracting capabilities.

Data Warehouse (IDW) – IDW is a central data warehouse linking common data elements from multiple DOE corporate business applications to provide reporting to DOE executives, managers, and staff, including access to business applications, personalized dashboards, messaging, discussion boards, collaboration capabilities, news, reporting, web conferencing, graphing and data exchange capabilities. Changes were made to the underlying Business Intelligence (BI) data structure and reports in support of the STARS upgrade. Future activities planned for IDW include the initial development of the M&O Subcontractor Reporting Capability, the migration to Oracle Data Integrator, development of BI reports in support of Funds Distribution 2.0 and STRIPES v7.2, and the migration of iBenefits into IDW.

Systems Underway

DOE will be making all required system changes to STARS, STRIPES, and IDW to comply with DATA Act reporting requirements by May of 2017.

DOE is integrating the front-end budget formulation and funds distribution functions into the STARS Oracle eBusiness Suite. The project has 2 phases. The first phase to be completed in the fourth quarter of FY 2016 is underway and will implement a corporate funds distribution system (FDS 2.0) that automates, standardizes, and streamlines the processes and procedures across the Department, retiring multiple legacy applications in use among the various site offices.

The second phase will implement a corporate budget formulation solution to replace the Excel spreadsheets and local systems in use today and will allow budgets to be formulated from the bottom up across the enterprise in a standard framework.

Improper Payments Information and Reporting

he 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 and the Improper Payments Elimination and Recovery Improvement Act (IPERIA) of 2012, 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. 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.

I. Risk Assessment

The Department evaluates the following 9 OMB risk factors in performing risk assessments: 1. Whether the program or activity is new; 2. The complexity of the program, particularly with respect to determining correct payment amounts; 3. The volume and dollar amount of payments by payment category (Vendors/Contracts; Payroll; Travel; Other; Grants and Cooperative Agreements; and Loans); 4. Whether payments or payment eligibility decisions are made outside of the agency; 5. Recent major changes in program funding, authorities, practices or procedures; 6. The level, experience and quality of training for personnel responsible for making payment eligibility determinations or certifying that payments are accurate; 7. Inherent risk of improper payments for each payment category; 8. Significant deficiencies in audit reports that might hinder accurate payment certification; and 9. Results of prior improper payment work, such as OMB Circular A-123 assessments and other internal reviews designed to prevent or detect improper payments. In addition, DOE included 2 additional risk factors to consider when performing risk assessment in FY 2015. These additional risk factors included evaluating oversight to monitor contractor payment processes and segregation of duties to ensure the integrity of the payment process.

In FY 2015, the Department conducted 54 risk assessments at 43 payment reporting sites. DOE is considered one program for improper payment reporting and assesses its program by payment types as identified in Table 4 below. The risk assessment process was significantly revised for FY 2015 to improve consistency among the sites and documentation supporting the risk ratings. DOE developed a risk assessment that calculates a risk rating (low, medium or high) by payment category

and an overall payment reporting site risk rating (low, medium or high). The new risk assessments included: expanded descriptions of the risk factors; specific rating criteria; and questions to consider during the evaluation to assist sites in determining the appropriate risk rating by payment category. Based on risk assessments conducted during FY 2015, the Department currently does not have any programs susceptible to significant improper payments and continues to maintain a <1% overall erroneous payment rate (.06%) and actual improper payments at a level below OMB's \$100 million threshold. The Departmental erroneous payment rate has remained below 1% since the inception of its program in FY 2002. For FY 2014 information reported in FY 2015, the Department's total payment outlays were \$ 36.94 billion, and the actual amount of improper payments identified were \$22.45 million (this includes overpayments and underpayments that cannot be recaptured).

II. Statistical Sampling

This section is not applicable to DOE.

III. Improper Payment Reporting

Table 1 – Improper Payment Reduction Outlook. This section and table are not applicable to DOE.

IV. Improper Payment Root Cause Categories

Table 2 – Improper Payment Root Cause Category Matrix. This section and table are not applicable to DOE.

V. Corrective Actions

This section is not applicable to DOE.

VI. Internal Control Over Payments

Table 3 – Example of the Status of Internal Controls. This section and table are not applicable to DOE.

VII. Accountability

This section is not applicable to DOE.

VIII. Agency Information Systems and Other Infrastructure

This section is not applicable to DOE.

IX. Barriers

This section is not applicable to DOE.

X. Payment Recapture Audit Reporting

In accordance with the expanded requirements of IPERA, the Department has established a policy for implementing payment recapture auditing requirements. The Department's low improper payment rate of .06% reported in FY 2015 for FY 2014 payments and high recapture rate of 97.26% reported for the same period, supports the Department's determination that it is not cost-effective to employ traditional payment recapture audit contracts and notified OMB of this fact in September 2015. The amount determined not collectible by the Department for FY 2015 reporting is \$.024 million and is deemed uncollectible due to amounts being below a minimal threshold established for pursuing recapture or due to lost prompt payment discounts.

However, the Department does conduct site specific reviews and analysis of accounting and financial records, supporting documentation, and other pertinent information supporting payments. These activities are detective and corrective in nature and are designed to identify and recapture overpayments. Activities include prepayment review and approval of invoices; performing quarterly prompt-payment reviews; post-payment reviews; contractor internal audits; leveraging the results of cost allowability audits of integrated contractors and interim and close-out reviews of contracts and grants: reviews of grant credits in ASAP and results from travel audits. The Department will continue to scrutinize improper payment activity and controls through its internal control program by emphasizing, evaluating and strengthening controls where needed to maintain our record of low payment errors and ensure the effective stewardship of public funds.

Table 4 - Overpayments Recaptured Outside of Payment Recapture Audits (\$ in millions) ¹					
PROGRAM/ PAYMENT TYPE	AMOUNTS IDENTIFIED FOR RECAPTURE ²	AMOUNTS RECAPTURED	FY 2015 RECAPTURE RATE	FY 2016 RECAPTURE RATE TARGET	FY 2017 RECAPTURE RATE TARGET
Contracts	\$10.46	\$10.22	97.69%	96.00%	96.00%
Benefits - Payroll	\$1.82	\$1.54	84.79%	96.00%	96.00%
Benefits - Travel	\$0.27	\$0.22	83.41%	96.00%	96.00%
Other	\$0.08	\$0.08	96.98%	96.00%	96.00%
Grants	\$8.14	\$8.14	100.00%	96.00%	96.00%
Loans	\$0.09	\$0.09	100.00%	96.00%	96.00%
Total	\$20.87	\$20.31	97.26%		

¹ Based on OMB approval received May 25, 2011, DOE reports prior year payment activity in its current year Agency Financial Report (AFR). All information in this table is associated with FY 2014 payments. In addition, DOE is considered one program for improper payment reporting and assesses the payment types included in Table 4 for its 43 payment reporting sites. OMB approval for this approach was received August 10, 2011.

Table 5 - Disposition of Recaptured Funds and Table 6 - Aging of Outstanding Overpayments are not applicable as DOE does not conduct payment recapture audits.

²Amounts include overpayments and excludes underpayments that cannot be recaptured.

Reduction of Improper Payments with the Do Not Pay Initiative

IPERIA requires OMB to submit to Congress an annual report which, in part, includes an evaluation of whether the Do Not Pay (DNP) Initiative has reduced improper payments. To support this requirement, DOE is providing a summary of information related to its efforts to implement use of DNP during FY 2015.

In FY 2015, the Department incorporated the IPERIA listed DNP databases into existing business processes and programs through implementation of Treasury's DNP adjudication process. As part of this initiative, through January of 2015, elements from records of DOE's payments as they appear in the Treasury Payments, Claims, and Enhanced Reconciliation file were matched to elements of the public version of the Social Security Administration's Death Master File (DMF-Public) and the GSA's System for

Award Management (SAM Exclusions Public). The resulting matching reports provided to the Department by its designated Treasury DNP Relationship Manager were then researched as part of the monthly DNP adjudication process to determine whether the payments were proper or improper. As of February 2015, DOE's adjudication process occurs in the DNP Portal. In all instances, it was found that the payments were proper and that the matches were false positives. Furthermore, a pre-award verification process through SAM is performed for every new award.

Additional efforts are underway during FY 2016 to perform pre-payment reviews using continuous monitoring and batch processing on a monthly basis, as well as online single searches, as necessary. IPERIA databases utilized to conduct these efforts will be the DMF and SAM.

Table 7 - Results of the Do Not Pay Initiative in Preventing Improper Payments (\$ in millions)						
		Octo	tember 2015	2015		
(\$ IN MILLIONS)	Number (#) of payments reviewed for possible improper payments	Dollars (\$) of payments reviewed for possible improper payments	Number (#) of payments stopped	Dollars (\$) of payments stopped	Number (#) of potential improper payments reviewed and determined accurate	Dollars (\$) of potential improper payments reviewed and determined accurate
Reviews with the IPERIA specified databases - Death Master File (Public) and the System for Award Management (Public for October 2014 and Restricted for November 2014 - August 2015)	328,296	\$10,427.68	0	0	613	\$2.70

[•] Payments reviewed for improper payments: all payments screened by Do Not Pay databases or other internal databases, as appropriate, that are disbursed by, or on behalf of, the agency (e.g., federally funded state administered programs).

[•] Payments Stopped: payments that were intercepted or were not disbursed due to the Do Not Pay Initiative.

[•] Payments requiring further review and determined to be accurate (false positives): payments that were reviewed by the agency as a result of Do Not Pay databases or other internal databases, and later identified as proper.

Freeze the Footprint

In FY 2015, OMB Circular A-136, Financial Reporting Requirements, requires the Department to report on progress made implementing the "Freeze the Footprint" policy in FY 2014. Specifically, all CFO Act departments and agencies shall not increase the total square footage of their domestic office and warehouse inventory compared to a FY 2012 baseline.

Between its initial FY 2012 baseline and its FY 2014 inventory of memorandum-subject assets, both

determined by GSA, the Department's memorandumsubject building area dispositions and reports of excess to GSA exceeded its acquisitions in FY 2014 by 498,406 square feet. Concurrently, operating costs associated with memorandum-subject assets fell by \$71.5 million. The Department plans to continue reporting excess assets to GSA as appropriate and disposing of its unneeded space.

Freeze the Footprint Baseline Comparison				
Change in Square				
FY 2012 Baseline	FY 2014 Square Footage	(Baseline - FY 2014)		
35,733,813 SF	35,235,409 SF	-498,406 SF		

DOE Owned and Leased Operating Costs (\$ in Millions)				
	FY 2012 Reported Cost	FY 2014 Reported Cost	Change in Reported Cost (Baseline - FY 2014)	
Operation & Maintenance Costs	\$468	\$397	(\$71.52)	

The above tables are based on final FY 2014 data, as year-end FY 2015 data is not yet available.



DOE Headquarters - James Forrestal Building, Washington, D.C.

Other Statutory Reporting – Management's Response to Audit Reports

ursuant 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 Inspector General that provides (1) information on audit reports issued during the period; (2) the status of management decisions made on previously issued IG audit reports; and (3) information on the disposition of funds put to better use and questioned costs. The IG report is available at http://www.ig.energy.gov.

This report also contains information on the resolution of Government Accountability Office (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 the efficiency and effectiveness of our operations and strengthen our standards of accountability.

During FY 2015, the Department received **69** IG reports, of which **44** contained recommendations requiring corrective actions and **25** had no recommendations. The Department took final action on **59** IG reports, of which **14** identified cost impacts, including both questioned costs and funds put to better use. At the end of the period, **132** IG 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.

Government Accountability Office Audit Reports

The GAO audits are also included in the Department's audit follow-up program. At the beginning of FY 2015 there were **41** GAO Audits awaiting final action. During FY 2015, the Department received **72** additional final GAO audit reports, of which **23** contained recommendations requiring corrective actions and **49** had no recommendations. The Department completed agreedupon corrective actions for **18** audits during FY 2015, leaving **46** GAO reports awaiting final action at year-end.

Status of Final Action on IG and GAO Audit Reports for FY 2015

The following chart provides a summary of closure actions for IG and GAO audit and inspection reports during FY 2015.

AUDIT REPORTS	NUMBER OF IG REPORTS	NUMBER OF GAO REPORTS
Reports Pending Final Action at the end of FY 2014*	147	41
Reports Issued in FY 2015 Requiring Corrective Actions	44	23
Total Reports Pending Final Action During FY 2015	191	64
Reports Closed During FY 2015	59	18
Total Reports Pending Final Action as of the End of FY 2015	132	46

^{*}Reflects adjustments to previously reported amounts.

Glossary of Acronyms

		,		
ACI		Asset Condition Index	DOS	Department of State
AFR	1	Agency Financial Report	DSA	Documented Safety Analysis
APR	t .	Annual Performance Report	ECGS	Enterprise Cyber Governance System
ARC	OS	Asset Retirement Obligations	EEOICPA	Energy Employees Occupational Illness Compensation Program Act
ARF	PA-E	Advanced Research Projects Agency-Energy	EERE	Office of Energy Efficiency and Renewable Energy
ARF	RA	American Recovery and Reinvestment Act	EGS	Enhanced Geothermal Systems
ASC	;	Accounting Standards Codification	EIA	Energy Information Administration
ATV	/M	Advanced Technology Vehicles Manufacturing	EM	Office of Environmental Management
BI		Business Intelligence	EPAct05	Energy Policy Act of 2005
BiOp	p	Biological Opinion	ERISA	Employee Retirement Income Security Act
BOF	2	Bureau of Reclamation	ES&H	Environment, Safety, and Health
BPA		Bonneville Power Administration	ESA	Endangered Species Act
C.F.	R.	Code of Federal Regulations	ESAAB	Energy Systems Acquisition Advisory Board
CAS	SL	Consortium for Advanced Simulation of Light-Water Reactors	ESCO	Energy Service Company
CCS		Carbon Capture and Storage	eSCRM	enterprise's Supply Chain Risk Management
CDM	Л	Continuous Diagnostics Mitigation	ESPCs	Energy Savings Performance Contracts
CFO)	Chief Financial Officer	ETPTS	East Trenches Plume Treatment System
CGS		Columbia Generating Station	FASB	Financial Accounting Standards Board
CHF)	Combined Heat and Power	FCRA	Federal Credit Reform Act of 1990
CHF	RIS	Corporate Human Resources Information System	FCRPS	Federal Columbia River Power System
Ci		Curie	FE	Office of Fossil Energy
CIO		Chief Information Officer	FERC	Federal Energy Regulatory Commission
CO ₂		Carbon Dioxide	FERS	Federal Employees Retirement System
COF	€C	U.S. Court of Federal Claims	FFB	Federal Financing Bank
COL	Js	Consumer Owned Utilities	FFMIA	Federal Financial Management Improvement Act
CR		Continuing Resolution	FIPP	Financial Institution Partnership Program
CSR	.S	Civil Service Retirement System	FISMA	Federal Information Security Management Act
CY		Calendar Year	FMFIA	Federal Managers' Financial Integrity Act
D&I	D	Deactivated, Decontaminated, Decommissioned, and Demolished	FORGE	Frontier Observatory for Research in Geothermal Energy
D&I	D Fund	Uranium Enrichment Decontamination and Decommissioning Fund	FPDs	Federal Project Directors
DAT	ΓA Act	Digital Accountability and Transparency Act of 2013	FSSI	Federal Strategic Sourcing Initiative
DHS	S	Department of Homeland Security	FY	Fiscal Year
DMa	&R	Deferred Maintenance and Repairs	GACC	General Administration of Customs of China
DMI	F	Death Master File	GAO	Government Accountability Office
DNF	FSB	Defense Nuclear Facilities Safety Board	GBD	Global Burst Detector
DNN	N	Defense Nuclear Nonproliferation	GDPs	Gaseous Diffusion Plants
DNF)	Do Not Pay Initiative	GENSETS	GENerators for Small Electrical and Thermal Systems
DoD)	Department of Defense	GPRA	Government Performance and Results Act of 1993
DOE	Ξ	Department of Energy	GSA	General Services Administration
DOI		Department of the Interior	GSP	Graded Security Protection

HEU	Highly Enriched Uranium	PAR	Performance and Accountability Report
HLW	High-Level Radioactive Waste	PDP	Prescription Drug Plan
HR	Human Resources	PMA	Power Marketing Administration
HRIT	Human Resources Information Technology	PMPM	Per Member Per Month
IAEA	International Atomic Energy Agency	PMRC	Project Management Risk Committee
ICAM	Identity Credentialing and Access Management program	PP&E	Property, Plant and Equipment
IDW	Integrated Data Warehouse	PRB	Postretirement Benefits Other Than Pensions
IG	Office of Inspector General	QER	Quadrennial Energy Review
IMGB	Information Management Governance Board	R&D	Research and Development
IN	Office of Intelligence and Counterintelligence	REP	Residential Exchange Program
INL	Idaho National Laboratory	RSI	Required Supplementary Information
IOUs	Investor Owned Utilities	RTG	Radioisotope Thermoelectric Generator
IPERA	Improper Payments Elimination and Recovery Act of 2010	SAM	System for Award Management
IPERIA	Improper Payments Elimination and Recovery Improvement Act of 2012	SBGS	State Border Guard Service of Ukraine
ISM	Integrated Safety Management	SCIP	Safety Culture Improvement Panel
IT	Information Technology	SCWE	Safety Conscious Work Environment
ITP	Insider Threat Program	SEPA	Southeastern Power Administration
JC3	Joint Cybersecurity Coordination Center	SES	Senior Executive Service
LED	Light-Emitting Diode	SFFAS	Statement of Federal Financial Accounting Standards
LEP	Life Extension Program	SNF	Spent Nuclear Fuel
LEU	Low Enriched Uranium	SNM	Special Nuclear Material
LNG	Liquefied Natural Gas	SPR	Strategic Petroleum Reserve
LOB	Laboratory Operations Board	SRS	Savannah River Site
MOX	Mixed Oxide	STARS	Standard Accounting and Reporting System
MTU	Metric Tons of Uranium	STRIPES	Strategic Integrated Procurement Enterprise System
MY	Model Year	SWPA	Southwestern Power Administration
NASA	National Aeronautics and Space Administration	TERRA	Transportation Energy Resources from Renewable Agriculture
NAV	Net Asset Value	TIC	Trusted Internet Connection
NCSAM	National Cyber Security Awareness Month	TPC	Total Project Cost
NE	Office of Nuclear Energy	Treasury	Department of the Treasury
NNSA	National Nuclear Security Administration	TRU	Transuranic Waste
NPR	Nuclear Posture Review	U.S.	United States
NRC	Nuclear Regulatory Commission	U.S.C.	United States Code
NWF	Nuclear Waste Fund	UF6	Uranium Hexafluoride
NWPA	Nuclear Waste Policy Act of 1982	UPF	Uranium Processing Facility
OCHCO	Office of the Chief Human Capital Officer	USACE	U.S. Army Corps of Engineers
OCIO	Office of the Chief Information Officer	USAF	U.S. Air Force
OLC	Online Learning Center	USEC	U.S. Enrichment Corporation Fund
OLEDs	Organic Light-Emitting Diodes	WAPA	Western Area Power Administration
OMB	Office of Management and Budget	WIPP	Waste Isolation Pilot Plant
OPM	Office of Personnel Management	WSHP	Worker Safety and Health Program
OSRP	Off-Site Source Recovery Project	WTP	Waste Treatment and Immobilization Plant
P.L.	Public Law	Y-12	Y-12 National Security Complex
PAMS	Portfolio Analysis and Management System		

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Front Cover:

<u>Top Photo:</u> Rows of turbines at sunset on the prairies at Ponnequin Wind Facility.

<u>Center Photo:</u> Power lines like these make up our nation's power grid -- a critical component of our national critical infrastructure.

<u>Center Left Photo</u>: The National Spherical Torus Experiment is a magnetic fusion device whose shape offers higher plasma pressure than similar, donut-shaped instruments. The lab researches nuclear fusion; theoretical and computational physics; astrophysics; plasma physics; medical isotopes and nanomaterials. Photo courtesy of Princeton Plasma Physics Laboratory.

<u>Center Upper Right Photo:</u> With help from the Department of Energy's SuperTruck Initiative, Class 8 trucks recently hit a record of 12 miles per gallon freight efficiency. This milestone is a 115% increase in freight efficiency (which includes both fuel used and weight hauled) over typical Class 8 trucks that average 5.8 miles to the gallon. Photo Courtesy of the Office of Energy Efficiency and Renewable Energy.

<u>Center Lower Right Photo</u>: Recent research from the Argonne National Laboratory has revealed that a novel form of superconductivity the researchers call "critical superconductivity" may be accessed in a special regime lying at the boundary between type I and type II superconductivity. Photo courtesy of Argonne National Laboratory.

<u>Bottom Left Photo</u>: Scientists at the Los Alamos National Laboratory developed satellite technology that watches for radiation around the globe, around the clock, an ability crucial to nuclear nonproliferation and to verifying the Limited Test Ban Treaty. Photo Courtesy of BBC.

<u>Bottom Right Photo:</u> Solar panels on the roof of the DOE Forrestal Building with the view of the Washington monument.

Back Cover:

<u>Top Photo:</u> In July 2015, the Ocean Renewable Power Company deployed its RivGen® turbine in the Kvichak River, located at the Igiugig village in Alaska. The RivGen® Power System demonstration project, is providing power to Igiugig, displacing power that would otherwise be generated by high-cost diesel fuel.

<u>Center Left Photo:</u> Wind turbines are soaring to record sizes. The average rotor diameter of turbines installed in 2014 grew to 99.4 meters, up 108 percent since 1998-1999. Photo Courtesy of National Renewable Energy Laboratory.

<u>Center Right Photo</u>: The Dual-Axis Radiographic Hydrodynamic Test Facility uses X-rays to simulate the events that trigger a nuclear detonation. The lab researches national security and weapons science; nuclear and particle physics; accelerators and electrodynamics; bioscience, biosecurity and health; chemical science; Earth and space sciences; engineering; high-energy-density plasmas and fluids; information science, computing and applied math; materials science; astrophysics and cosmology; and sensors and information systems. Photo courtesy of Los Alamos National Laboratory.

<u>Bottom Photo:</u> The Z machine is the world's most powerful and efficient laboratory radiation source and is used for high energy density science. The lab researches nuclear weapons; defense; nuclear reactor safety; radiation effects; nuclear fusion; materials science; homeland security; nonproliferation; supercomputing and cybersecurity; robotics; climate and infrastructure security; nanodevices and microsystems; geosciences and bioscience. Photo courtesy of Sandia National Laboratories.

