DOE/CF-0052
Volume 6

Department of Energy
FY 2011 Congressional Budget Request

Power Marketing Administrations

Southeastern Power Administration
Southwestern Power Administration
Western Area Power Administration
Bonneville Power Administration

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February 2010 Office of Chief Financial Officer Volume 6

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The Department of Energy's Congressional Budget justification is available on the Office of Chief Financial Officer, Office of Budget homepage at http://www.cfo.doe.gov/crorg/cf30.htm.

For the latest details on the Department of Energy's implementation of the Recovery Act, please visit: http://www.energy.gov/recovery

Department of Energy
Appropriation Account Summary
(dollars in thousands - OMB Scoring)

	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Current Approp.	FY 2011 Congressional Request	FY 2011 vs. FY 2010	
					$	%
Discretionary Summary By Appropriation						
Energy And Water Development, And Related Agencies						
Appropriation Summary:						
Energy Programs						
Energy Efficiency and Renewable Energy	2,156,865	16,771,907	2,242,500	2,355,473	+112,973	+5.0%
Electricity Delivery and Energy Reliability	134,629	4,495,712	171,982	185,930	+13,948	+8.1%
Nuclear energy	791,444	0	786,637	824,052	+37,415	+4.8%
Fossil Energy Programs						
Clean Coal Technology	0	0	0	0	——	——
Fossil Energy Research and Development	863,104	3,398,607	672,383	586,583	-85,800	-12.8%
Naval Petroleum and Oil Shale Reserves	19,099	0	23,627	23,614	-13	-0.1%
Strategic Petroleum Reserve	226,586	0	243,823	138,861	-104,962	-43.0%
Strategic Petroleum Account	-21,586	0	0	0	——	——
Northeast Home Heating Oil Reserve	9,800	0	11,300	11,300	——	——
Total, Fossil Energy Programs	1,097,003	3,398,607	951,133	760,358	-190,775	-20.1%
Uranium Enrichment D&D Fund[1]	535,503	390,000	573,850	730,498	+156,648	+27.3%
Energy Information Administration	110,595	0	110,595	128,833	+18,238	+16.5%
Non-Defense Environmental Cleanup	261,819	483,000	254,673	225,163	-29,510	-11.6%
Science	4,813,470	1,632,918	4,903,710	5,121,437	+217,727	+4.4%
Energy Transformation Acceleration Fund	8,700	388,856	0	299,966	+299,966	N/A
Nuclear Waste Disposal	145,390	0	98,400	0	-98,400	-100.0%
Departmental Administration	155,326	42,000	168,944	169,132	+188	+0.1%
Inspector General	51,927	15,000	51,927	42,850	-9,077	-17.5%
Advanced Technology Vehicles Manufacturing Loan Program	7,510,000	10,000	20,000	9,998	-10,002	-50.0%
Innovative Technology Loan Guarantee Program	0	0	0	500,000	+500,000	N/A
Section 1705 Temporary Loan Guarantee Program	0	3,960,000	0	0	——	——
Total, Energy Programs	17,772,671	31,588,000	10,334,351	11,353,690	+1,019,339	+9.9%
Atomic Energy Defense Activities						
National Nuclear Security Administration:						
Weapons Activities	6,410,000	0	6,384,431	7,008,835	+624,404	+9.8%
Defense Nuclear Nonproliferation	1,545,071	0	2,136,709	2,687,167	+550,458	+25.8%
Naval Reactors	828,054	0	945,133	1,070,486	+125,353	+13.3%
Office of the Administrator	439,190	0	410,754	448,267	+37,513	+9.1%
Total, National Nuclear Security Administration	9,222,315	0	9,877,027	11,214,755	+1,337,728	+13.5%
Environmental and Other Defense Activities:						
Defense Environmental Cleanup[1]	5,656,345	5,127,000	5,642,331	5,588,039	-54,292	-1.0%
Other Defense Activities						
Health, Safety and Security	446,471	0	441,882	464,211	+22,329	+5.1%
Legacy Management	185,981	0	189,802	188,626	-1,176	-0.6%
Nuclear Energy	565,819	0	83,358	88,200	+4,842	+5.8%
Defense Related Administrative Support	108,190	0	122,982	130,728	+7,746	+6.3%
Office of Hearings and Appeals	6,603	0	6,444	6,444	——	——
Congressionally Directed Projects	999	0	3,000	0	-3,000	-100.0%
Total, Other Defense Activities	1,314,063	0	847,468	878,209	+30,741	+3.6%
Defense Nuclear Waste Disposal	143,000	0	98,400	0	-98,400	-100.0%
Total, Environmental & Other Defense Activities	7,113,408	5,127,000	6,588,199	6,466,248	-121,951	-1.9%
Total, Atomic Energy Defense Activities	16,335,723	5,127,000	16,465,226	17,681,003	+1,215,777	+7.4%
Power Marketing Administrations:						
Southeastern Power Administration	7,420	0	7,638	0	-7,638	-100.0%
Southwestern Power Administration	28,414	0	44,944	12,699	-32,245	-71.7%
Western area Power Administration	218,346	10,000	256,711	105,558	-151,153	-58.9%
Falcon & Amistad Operating & Maintenance Fund	2,959	0	2,568	220	-2,348	-91.4%
Colorado River Basins	-23,000	0	-23,000	-23,000	——	——
Total, Power Marketing Administrations	234,139	10,000	288,861	95,477	-193,384	-66.9%
Federal Energy Regulatory Commission	0	0	0	0	——	——
Subtotal, Energy And Water Development and Related Agencies	34,342,533	36,725,000	27,088,438	29,130,170	+2,041,732	+7.5%
Uranium Enrichment D&D Fund Discretionary Payments	-463,000	0	-463,000	-696,700	-233,700	-50.5%
Excess Fees and Recoveries, FERC	-23,080	0	-28,886	-29,111	-225	-0.8%
Total, Discretionary Funding	**33,856,453**	**36,725,000**	**26,596,552**	**28,404,359**	**+1,807,807**	**+6.8%**

[1] The Defense Environmental Cleanup/Uranium Enrichment Decontamination and Decommissioning Fund accounts reflect correctly the Administration's policy for the Department's FY 2011 request. These accounts include $47 million that was inadvertently omitted from the official Budget request. A budget amendment is expected to be forthcoming to formally correct for this error.

Southeastern Power Administration

Southeastern Power Administration

Southeastern Power Administration

Proposed Appropriation Language

For necessary expenses of operation and maintenance of power transmission facilities and of marketing electric power and energy, including transmission wheeling and ancillary services pursuant to section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), as applied to the southeastern power area, [$7,638,000]*$8,034,000*, to remain available until expended: Provided, That notwithstanding 31 U.S.C. 3302 and section 5 of the Flood Control Act of 1944, up to [$7,638,000]*$8,034,000* collected by the Southeastern Power Administration from the sale of power and related services shall be credited to this account as discretionary offsetting collections, to remain available until expended for the sole purpose of funding the annual expenses of the Southeastern Power Administration: Provided further, That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year [2010]*2011* appropriation estimated at not more than $0: Provided further, That notwithstanding 31 U.S.C. 3302, up to [$70,806,000]*$74,157,000* collected by the Southeastern Power Administration pursuant to the Flood Control Act of 1944 to recover purchase power and wheeling expenses shall be credited to this account as offsetting collections, to remain available until expended for the sole purpose of making purchase power and wheeling expenditures[:] [Provided further, That notwithstanding the provisions of 31 U.S.C. 3302 and section 5 of the Flood Control Act of 1944, all funds collected by the Southeastern Power Administration that are applicable to the repayment of the annual expenses of this account in this and subsequent fiscal years shall he credited to this account as discretionary offsetting collections for the sole purpose of funding such expenses, with such funds remaining available until expended] : Provided further, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred (excluding purchase power and wheeling expenses). (Energy and Water Development and Related Agencies Appropriations Act, 2010.)

Southeastern Power Administration

Overview

Appropriation Summary by Program

	(dollars in thousands)		
	FY 2009 Current Appropriation	FY 2010 Current Appropriation	FY 2011 Request
Southeastern Power Administration			
Program Direction, (PD)	7,420	7,638	8,034
Purchase Power and Wheeling (PPW)	63,522	85,228	88,615
Subtotal, Southeastern Program Level	70,942	92,866	96,649
Offsetting Collections, Annual Expenses	0	-7,638	-8,034
Offsetting Collections, PPW	-49,520	-70,806	-74,157
Alternative financing, PPW	-14,002	-14,422	-14,458
Total, Southeastern Power Administration	7,420	0	0
Reclassification of Mandatory Receipts to Discretionary Offsetting Collections	0	7,638	0

Preface

As the Nation moves forward to strengthen its national and economic security, the Department of Energy (DOE or the Department) leads a critical effort promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy. Southeastern Power Administration (Southeastern or SEPA) exists to carry out the functions assigned by the Flood Control Act of 1944: to market the electric power and energy generated by the Federal reservoir projects, encourage widespread use of the power at the lowest cost to consumers and repay the Federal investment consistent with sound business principles.

Within the Southeastern appropriation, there is one program, Operation and Maintenance, which includes two subprograms: Program Direction and Purchase Power and Wheeling. Program Direction supports day-to-day agency operation and Purchase Power and Wheeling supports acquisition of contractually-required transmission services and power purchases. Consistent with the authority provided in the 2010 Energy and Water Appropriations, the FY 2011 Budget provides funding for annual expenses (program direction) through discretionary offsetting collections derived from power receipts collected to recover those expenses.

Mission

The mission of Southeastern is to market and deliver Federal hydroelectric power at the lowest possible cost to public bodies and cooperatives in the southeastern United States in a professional, innovative, customer-oriented manner, while continuing to meet the challenges of an ever-changing electric utility environment through continuous improvements.

Benefits

Southeastern supports the Department's Energy Security Goal by promoting energy efficiency and renewable energy and managing the dispatch and distribution of Federal hydroelectric power resources in the southeastern United States in a safe, affordable, and environmentally sound manner, while meeting national utility performance standards and balancing the diverse interests of other water resource users. This budget submission ensures effective management of Federal hydroelectric power resources and provides for: a diverse supply of generating resources that enhance regional power system reliability; power revenues that repay taxpayers' investment in the Federal power system; and regional economic benefits from delivery of Federal power primarily to rural electric cooperatives, municipal utilities, and other public entities. Southeastern has implemented rates that repay emergency power purchases within the fiscal year that they are incurred and is on track to repay the Federal investment in hydroelectric resources within required time periods.

This budget submission enables Southeastern to support the Energy Security Goal by promoting strategies that enhance energy efficiency and renewable energy technologies. Effective management of hydroelectric resources, combined with promotion of energy efficiency and renewable technologies, contributes to the long-term solution of economic and environmental challenges associated with electricity demand.

Performance

Southeastern contributes to Secretarial Goal 2, Energy: Southeastern generates clean zero carbon emissions hydroelectric power. Southeastern accomplishes Goal 2 through two subprograms (Purchased Power and Wheeling, and Program Direction) supported by, appropriations offset by receipts, Federal power receipts, and alternative financing arrangements, including net billing, bill crediting. With this Goal, Southeastern performs its mission in a manner that promotes maintaining and upgrading its energy infrastructure to ensure reliable and efficient delivery of Federal power, which is an integral part of the Nation's electrical grid.

Southeastern Power Administration

Funding by Site by Program

	(dollars in thousands)		
	FY 2009 Current Appropriation	FY 2010 Current Appropriation	FY 2011 Request
Southeastern Power Administration	70,942	92,866	96,649
Total, Southeastern Power Administration	70,942	92,866	96,649

Major Changes or Shifts by Site

Purchase Power and Wheeling

- Additional Dam Safety issues have been discovered at several projects in the Cumberland System. It is likely that the interim operating plan, which fundamentally alters the operation of the Cumberland System, will continue through 2014.

Site Description

Southeastern is one of four Power Marketing Administrations within the Department of Energy. Southeastern was created in 1950 to market power and energy produced at Corps hydroelectric power projects. Southeastern markets power at wholesale rates to 293 publicly owned utilities, 199 rural electric cooperatives, and one investor-owned utility in the 11 States of Florida, Georgia, South Carolina, North Carolina, Tennessee, Alabama, Mississippi, Virginia, West Virginia, Kentucky, and Illinois. Southeastern is located in Elberton, Georgia, and has no field offices.

Southeastern Power Administration

Funding Profile by Subprogram

	(dollars in thousands)		
	FY 2009 Current Appropriation	FY 2010 Current Appropriation	FY 2011 Request
Southeastern Power Administration			
Program Direction (PD)	7,420	7,638	8,034
Purchase Power and Wheeling (PPW)	63,522	85,228	88,615
Subtotal, Southeastern Program Level	70,942	92,866	96,649
Offsetting collections, Annual Expenses	0	-7,638	-8,034
Offsetting collections, PPW	-49,520	-70,806	-74,157
Alternative financing, PPW	-14,002	-14,422	-14,458
Total, Southeastern Power Administration	7,420	0	0

Public Law Authorizations:
Public Law 78-534, Flood Control Act of 1944
Public Law 95-91, DOE Organization Act of 1977, Section 302
Public Law 101-1-1, Title III, Continuing Fund (amended 1989)
Public Law 102-486, Energy Policy Act of 1992

Mission

Southeastern's power marketing and wheeling activities fulfill the requirements of Section 5 of the Flood Control Act of 1944 and reflect Southeastern's goals and objectives to market and deliver cost-based power in a safe and reliable manner, and repay the Federal investment with interest, while providing environmental and economic benefits to the region. Southeastern focuses on its repayment goal, which assures timely repayment of the Federal hydropower investment.

Benefits

Southeastern's appropriation supports the Energy Strategic Goal of the Department's mission by providing delivery of reliable, affordable, and environmentally sound energy. Southeastern, in conjunction with the U. S. Army Corps of Engineers (Corps), participates in this effort by managing the power delivery from multiple-purpose hydropower projects through effective marketing, and delivery of clean, safe, reliable, cost-based electric power. This Federal program provides reliable energy to the Nation, which can "cold-start" other power generation sources during energy emergencies.

Southeastern's program provides numerous benefits to the Nation. The significant benefits are:

- Operating a reliable Federal power system in the most effective, cost-efficient, and environmentally sound manner, while meeting national utility performance standards and balancing the diverse interests of other water resource users.

- Repaying taxpayers' investments in the Federal power system.
- Providing reliable delivery of power to customers.
- Providing low-cost power and increased competition in the region.
- Promoting regional economic growth.

Climate Change Technology Program Benefits

Southeastern contributes program benefits in support of Climate Change activities by reducing carbon emissions through generation of hydroelectric power, which has zero carbon emissions. Southeastern's stream-flow generation of 5,483 GWH in FY 2009 offset fossil fuel resources and reduced overall CO2 emissions by 3.9 million metric tons. Southeastern supports the Climate Change and Technology Program by promoting residential, commercial, and industrial energy efficiency, as well as development of wind, solar, and biomass technologies when they are economically feasible. Southeastern works closely with DOE's Energy Efficiency and Renewable Energy programs to ensure that municipal and cooperative utilities in the southeast benefit from Federal services and technologies.

Contribution to the Secretary's Goals

Southeastern contributes to the Secretary's Goal 2: Energy: by delivering over 3,000 mega-watts of carbon free hydroelectric capacity to municipal and cooperative customers in its marketing area. Southeastern is actively engaged with its customers to improve existing hydroelectric project efficiency through operations and rehabilitation in order to extend their economic life and generate power more efficiently. Project rehabilitation improves the generating infrastructure and promotes economic prosperity by putting skilled labor to work. Project-by-project rehabilitation will continue to offset fossil generation and reduce emissions into the foreseeable future. Southeastern's Energy Efficiency and Renewable Energy Program helps reduce end-use energy demand by providing training opportunities to its customers to assist with their energy auditing, weatherization, ventilation, controls and lighting technology activities. Southeastern also provides educational opportunities to help its customers deploy renewable energy technologies as they develop renewable energy portfolios. All of Southeastern's efforts help enhance the green workforce by putting people to work directly through project rehabilitation or by providing energy efficiency and renewable energy education opportunities.

Contribution to GPRA Unit Program Goal 1.3.23.00, Energy Infrastructure

Southeastern contributes to the Energy Infrastructure Goal by performing its power marketing mission through two subprogram activities: Program Direction and Purchase Power and Wheeling. Southeastern contributes to Strategic Theme 1, Energy Security, by marketing and delivering all available hydroelectric power from Corps dams, while balancing power needs with the diverse interests of other water resource users; and markets and delivers Federal power in a cost-efficient manner to assure reliability of the power system and maximize the use of Federal assets to repay the investment (principal and interest).

Means and Strategies

Southeastern will use various means and strategies to achieve its GPRA Unit Program goals. However, various external factors may impact the ability to achieve these goals. The program also performs collaborative activities to help meet its goals.

Southeastern will implement the following means:

- Operate the Federal power system effectively and efficiently by providing training and certification to update workforce skills and by updating power system operation technologies to maintain required industry standard compliance.
- Assure power rates are adequate to repay the Federal investment by conducting annual power repayment studies.
- Conduct business process reviews to maximize efficiency and eliminate redundancy.
- Provide economic benefits to the region by marketing and delivering all available hydropower.

Southeastern will implement the following strategies:
- Market and deliver power using appropriations, net billing, bill crediting, and offsetting collections.
- Maintain a diverse and knowledgeable workforce by providing employee training, leadership development, retention programs, and recruitment activities.
- Market all available hydropower by working with the Corps, other Federal entities, States, cooperative and municipal utilities to meet the expectations of our customers, while balancing the interest of other water users.
- Maintain the security of the Federal power system, facilities, and information technology (IT) systems.
- Address industry restructuring changes, when needed, by reclassifying positions as opportunities arise.
- Maximize the capabilities of business systems to improve processes and provide greater efficiency.
- Promote adoption of energy efficiency and renewable energy among Federal power customers.

These strategies will result in a well-maintained Federal power system that is in compliance with the Federal Energy Regulatory Commission (FERC), Electric Reliability Organization (ERO) operating regulations and an expert workforce to operate the system in the most effective and cost-efficient manner possible.

The following external factors could affect Southeastern's ability to achieve its program goals:
- Achieving and maintaining system reliability can be affected by weather, natural disasters, changes in the North American Electric Reliability Corporation (NERC) operating standards, new load patterns, deregulation of the electricity market, changing electric industry organizational structures, and additions to other transmission systems interconnected to the Federal system.
- Achieving full repayment of the Federal power investment and enhancing economic growth to the region can be affected by weather, power markets, natural disasters, and other external costs and revenue factors.
- Statutory or administrative reallocation of water storage from hydropower to water supply.

In carrying out its mission to market and deliver hydroelectric power, Southeastern performs the following collaborative activities:
- Southeastern coordinates operational activities with NERC, other regional electric reliability councils, the Corps, customers and other stakeholders to provide the most efficient use of Federal assets.

Validation and Verification

To validate and verify program performance, Southeastern conducts internal and external reviews. Southeastern’s programmatic activities are subject to continuing review by internal and external entities such as Congress, the Government Accountability Office , the Department of Energy, the Department of Energy’s Inspector General, FERC, the U.S. Environmental Protection Agency, the Office of Personnel

Management, Southeastern, and National and Regional Reliability Corporations. Southeastern's annual financial statements are audit by an independent accounting firm.

Southeastern also complies with Cyber Security requirements, as directed by the Department of Energy and NERC. Southeastern is audited by DOE and NERC, as well as internal audits and reviews by the other Power Marketing Administrations and independent auditors every three years for recertification. Compliance with NERC standards is filed each year through regional reliability organizations. The Department of Energy also requires Southeastern to follow the National Institute of Standards (NIST) and the Federal Information Processing Standards (FIPS).

Annual Performance Targets and Results

Secretarial Goal 2: Energy: Build a competitive, low-carbon economy and secure America's energy future

GPRA Unit Program Goal: Southeastern Power Administration, Operation and Maintenance - Provide the benefits of Federal power to customers by selling and reliably delivering power from Federal multipurpose hydroelectric dams at the lowest cost-based rates possible that produce revenues sufficient to repay all power costs to the American taxpayers.

FY PY-3	FY PY-2	FY PY-1	FY PY	FY CY	FY BY	FY BY+1	FY BY+2	FY BY+3	FY BY+4
FY 2006	**FY 2007**	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**	**FY 2014**	**FY 2015**
Performance Measure: Meet NERC Control Performance Standards (CPS) of CPS1>100 and CPS2>90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.									
CPS1									
T: >100 A: 201	T: >100 A: 186	T: >100 A: 207	T: >100 A: 225	T: >100 A:	T: >100 A:	T: >100 A:	T: >100 A:	T: >100 A:	T: >100 A:
CPS2									
T: >90 A: 100	T: >90 A: 100	T: >90 A: 100	T: >90 A: 100	T: >90 A:	T: >90 A:	T: >90 A:	T: >90 A:	T: >90 A:	T: >90 A:
Performance Measure: Provide power at the lowest possible cost by keeping total operation and maintenance expense per kilowatt-hour generated below the National median for public power.*									
				T: <$0.062/kWh A:	T: <$0.062/kWh A:	T: <$0.062/kWh A:	T: <$0.062/kWh A:	T: <$0.062/kWh A:	T: <$0.062/kWh A:
*Performance Measure was added in FY 2010. Future year targets will be adjusted based on the actual national median for public power.									
Performance Measure: Ensure timely repayment of Federal investment in accordance with DOE Order RA 6120.2 by maintaining unpaid investment (UI) equal to or less than the allowable unpaid investment (AUI) **(Definition Revised in 2010).**									
T: UI/AUI<=1 A: UI/AUI<=1	T: UI/AUI<=1 A: UI/AUI<=1	T: UI/AUI<=1 A: UI/AUI<=1	T: UI/AUI<=1 A: UI/AUI<=1	T: UI/AUI<=1 A:	T: A:	T: A:	T: A:	T: A:	T: A:

Purchase Power and Wheeling

Funding Schedule by Activity

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Purchase Power and Wheeling			
Purchase Power	28,349	49,000	50,947
Wheeling	35,173	36,228	37,668
Subtotal, Purchase Power and Wheeling	63,522	85,228	88,615
Alternative Financing			
Net Billing	-14,002	-14,422	-14,458
Subtotal, Purchase Power and Wheeling	49,520	70,806	74,157
Offsetting Collections Realized	-49,520	-70,806	-74,157
Total, Purchase Power and Wheeling Budget Authority	0	0	0

Description

The mission of Purchase Power and Wheeling (PPW) is to provide funding for acquisition of transmission services, ancillary services for the system, and pumping energy for the Richard B. Russell and Carters Pumped Storage units and support of the Jim Woodruff Project. Purchase power and transmission expenses are based on contracts Southeastern maintains with area transmission providers that agree to deliver specified amounts of Federal power from the hydropower projects to Federal power customers. Southeastern has access to a continuing fund for emergency power purchases. Southeastern has a plan implemented to repay Purchase Power and Wheeling expenditures made through the Continuing Fund within one year.

The FY 2011 request uses customer receipts and net billing to pay for purchase power and wheeling expenses. Southeastern's Federal appropriation allows customers to fund purchase power and wheeling expenses in FY 2011 and subsequent years at no cost to the Federal Treasury. Some customers, acting independently or in partnerships, acquire replacement power and transmission services directly from suppliers. Southeastern will continue to assist its customers by arranging funding for these activities through alternative financing instruments, as needed.

Benefits

The PPW subprogram supports Southeastern's mission to market and deliver reliable, cost-based hydroelectric power and related services. Southeastern's priority to maintain acceptable power system operation for control area performance, as measured using NERC CPS 1 & 2, provides assurance that projects within Southeastern's control area operate as reliable and efficient grid resources. PPW enables Southeastern to wheel Federal power to preference customers, purchase replacement power, and acquire pumping energy to maximize the efficiency and benefits of Southeastern's hydropower resources. Power and services are marketed at rates designed to provide recovery of expenses and Federal investment, as established by law. The recovery of the Federal investment, or repayment, is a key performance goal for Southeastern. The Department of Energy's Strategic Plan reinforces the importance of domestic, renewable hydroelectric energy by emphasizing its ongoing significant

contribution to the Nation's past and future energy supply and Southeastern's role as a power resource by supplying hydroelectric power to its customers.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Purchase Power	**28,349**	**49,000**	**50,947**
▪ Pumping: Russell Project Purchase off-peak energy to pump water into the Richard B. Russell Project for on peak generation	15,228	31,100	19,000
▪ Pumping: Carters Project Purchase off-peak energy to pump water into the Carters Project for on peak generation	12,221	16,900	16,647
▪ Replacement Energy	0	0	12,100
▪ Support Jim Woodruff Project Purchase of energy during periods of adverse water conditions including floods (loss of head) and drought	900	1,000	3,200
Wheeling	**35,173**	**36,228**	**37,668**
▪ Wheeling service charges Wheeling service charges for delivery of power over non-Federal systems	30,469	31,524	32,904
▪ Ancillary Services Payment for ancillary services	4,704	4,704	4,764
Total, Purchase Power and Wheeling	**63,522**	**85,228**	**88,615**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Purchase Power and Wheeling	
Expected pumping energy costs are the result of increased fuel and fuel transportation expenses incurred by utilities that provide pumping energy. Transmission cost increases also added to higher PPW expenses.	+3,387
Total, Purchase Power and Wheeling	+3,387

Program Direction

Funding Profile by Category

	(dollars in thousands/whole FTEs)		
	FY 2009	FY 2010	FY 2011
Southeastern Power Administration			
Salaries and Benefits	4,976	5,199	5,433
Travel	467	476	586
Support Services	60	61	62
Other Related Expenses	1,917	1,902	1,953
Subtotal, Program Direction	7,420	7,638	8,034
Offsetting Collections, Annual Expenses	0	-7,638	-8,034
Total Program Direction Budget Authority	7,420	0	0
Total, Full Time Equivalents	44	44	44

Mission

Program direction makes available the Federal staffing resources and associated funding necessary to provide overall direction and execution of Southeastern's program. All of Southeastern's annual expenditures are repaid within one year. Southeastern's de minimis capital expenditures are also repaid within one year, and for budget purposes, deemed annual expenses. Southeastern coordinates and cooperates with its partners to operate projects in a manner that enhances the value and reliability of hydropower. Priority is given to integrating environmental concerns and determinations into program actions. Emerging energy efficiency and renewable energy technologies are integrated with marketing strategies and programs.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Salaries and Benefits	**4,976**	**5,199**	**5,433**

Funding supports salaries and benefits for 44 Federal employees who market Federal hydropower, promote energy efficiency and renewable energy, and provide administrative support. The salary estimate is derived from the current year budgeted salaries, plus cost-of-living adjustments, promotions, within-grade increases, DOE-cascading performance awards, retirement payouts for unused leave (annual retirements of five FTEs are anticipated over the planning horizon), and overtime. Benefits are calculated as a percentage of prior years actual. The funding provides for negotiation, preparation, execution, and administration of all contracts for the disposition of electric power, and ensures continuity of electric service to customers. Funding also covers operators who coordinate and schedule pumping energy among providers of pumping energy and the projects and account for all transactions relative to pumping operations of the Carters and Richard B. Russell Projects. Personnel perform Balancing Authority services for Hartwell, Russell, and Thurmond Projects. Southeastern coordinates power operations of projects with all parties, making determinations of capacity and energy availability weekly. Efficiency Performance is measured by two Efficiency Performance Indicators that provide Balancing Area compliance ratings. Funding provides for accounts receivable and payable functions for approximately 300 contracts that benefit more than 500 preference customers. Southeastern executes budget, accounting, and financial management activities, prepares repayment analyses of each system to determine rates, and organizes rate forums, as needed. Repayment performance is measured by comparing required to actual repayment of principal on power investment. In support of the Energy Policy Act of 2005 and the Department's Strategic Goal 1.3, Southeastern vigorously promotes energy efficiency and development of renewable energy among its customers. Funding also covers continuing engineering studies, review of project operations, and evaluation of impacts of proposed or actual changes to project operations. Funding also supports IM and Homeland Security initiatives.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Travel	**467**	**476**	**586**

Travel supports transportation and per diem expenses incurred for participation in and development of regional transmission organizations; training expenses for power operator certification; relocation expenses for new FTEs; contract negotiations; preference customer meetings; rate forums; hearings and meetings; Congressional hearings; site visits of existing and new projects; promotion of energy efficiency and renewable energy via Competitive Resource Strategy workshops and meetings; operations meetings with industry self-regulating groups. Self-regulating groups include: SERC Reliability Corporation , Virginia Carolina Electric Reliability Group, NERC; ERO; hydropower task force and project rehabilitation meetings with the Corps, Customer, and SEPA Working Group; National Environmental Policy Act activities; training; Power Marketing Policy Forums; national and state customer meetings with the National Rural Electric Cooperative Association , the American Public Power Association ; Southeastern Federal Power Customers O&M Subcommittee meetings; Interagency Task Force on Finance; Technical Advisory Group meetings; FERC pre-filings and hearings; PJM RTO; and headquarters responsibilities.

Support Services	**60**	**61**	**62**

The Energy Efficiency and Renewable Energy Program supports preference customer efforts to address energy efficiency issues, and promote development of renewable resources in support of the Department's Strategic Plan Goal 1.3 and the Energy Policy Act of 2005. Develop specifications for training programs, prepare program plans, conduct training, and review and evaluate contractors.

Other Related Expenses	**1,917**	**1,902**	**1,953**

Provide administrative support for the office, rent, communications, maintenance, contract services (library services, support for DOE Power Marketing Liaison Office, independent audit of the Southeastern Federal Power Program financial statements), E-GOV, supplies, materials, and equipment and support for cyber and physical security initiatives associated with Homeland Security[a]. Support installation of electronic hardware and software for the operations center and provide maintenance to integrate real-time data from the control area and provide the data to other transmission operators and NERC. This equipment supports additional NERC compliance requirements and system reliability. This system is a resource-intensive application that requires maintenance of interconnected fiber optic communication lines for the Supervisory Control and Data

[a] Southeastern is required to meet the Common Identification Standard for Federal Employees and Contractors, as required by HSPD-12, FIPS Publication 201, Personal Identification Verification for Federal Employees and Contractors, NIST 800-73, Integrated Circuit Card for Personal Identity and Verification for Federal Employees and Contractors, NIST 800-76, Biometric Data Specification for Personal Identity Verification and all other DOE requirements.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

Acquisition system. Also reflects expenses associated with infrastructure support: telecommunications equipment; accounting system maintenance; building and computer security equipment; computer hardware and software; and office equipment and financial management system (Oracle). This funding allows the agency to fulfill its obligations under Strategic Theme 1, Energy Security and Goal 1.3, Energy Infrastructure.

Total, Program Direction	**7,420**	**7,638**	**8,034**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Salaries and Benefits	
Fiscal Year 2011 salaries are derived from budgeted FY 2010 salaries and benefits, plus cost-of-living adjustments, promotions, within-grade increases, DOE-cascading performance awards, retirement payouts for unused leave, and overtime.	+234
Travel	
Derived from permanent change of station (PCS) expenses and increased travel and training for Operators, IT and security purposes.	+110
Support Services	
Increase in funding for co-sponsored energy efficiency and renewable energy support programs for municipal and cooperative utilities.	+1
Other Related Expenses	
▪ Communication expenses primarily reflect NERC operating requirements.	+12
▪ Rent expense increase due to normal inflation.	+6
▪ Maintenance expenses reflect increases in Operations Center Frame Relay and Data acquisition system maintenance.	+6
▪ Equipment expense increases reflect normal inflation and include operation center equipment upgrades required to maintain NERC reliability compliance.	+4
▪ Contract services reflect normal increases in contracting services including Oracle. FY11 and 13 include added expense for IT Security Assessment FY11 reflects IT security assessment additional expense.	+18
▪ Audit of financial statements reflect normal inflation.	+5
Subtotal, Other Related Expenses	+51
Total Funding Change, Program Direction	**+396**

Support Services by Category

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Management and Professional Support Services			
Co-sponsored energy efficiency services and renewable energy acquisition support for municipal and cooperative utilities	60	61	62
Total, Management and Professional Support Services	60	61	62

Other Related Expenses by Category

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Other Related Expenses			
Rent to GSA	355	364	370
Rent to Others	9	9	9
Audit of Financial Statements	250	256	261
Communications, Utilities, Misc.	306	323	335
Printing and Reproduction	4	4	4
Tuition	16	16	16
Maintenance Agreements	127	134	140
Supplies and Materials	114	116	116
Contract Services	416	439	457
Equipment	288	208	212
Working Capital Fund	32	33	33
Total, Other Related Expenses	1,917	1,902	1,953

Service Area Map

Revenue and Receipts

	(dollars in thousands)						
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Southeastern Power Administration Gross Revenues	236,064	240,720	298,268	300,543	305,809	307,175	309,960
Net Billing (Credited as an Offsetting Receipt)	-14,002	-14,422	-14,458	-14,708	-14,954	-15,212	-15,483
Total Cash Receipts	222,062	226,298	283,810	285,835	290,855	291,963	294,477
Continuing Fund							
Use of Offsetting Collections to fund PPW	-49,520	-70,806	-74,157	-76,381	-78,673	-81,033	-83,464
Use of Offsetting Collections to fund Annual Expenses	0	-7,638	-8,034	-8,226	-8,532	-8,848	-9,024
Total Receipts, net use of Offsetting Collections	172,542	147,854	201,619	201,228	203,650	202,082	201,989
Cumberland Rehabilitation	-20,000	-20,000	-20,000	-20,000	-20,000	-20,000	-20,000
GA-AL-SC Rehabilitation	-15,000	-15,000	-15,000	-15,000	-15,000	-15,000	-15,000
Kerr-Philpott Rehabilitation	-600	-600	-600	-600	-600	-600	-600
Jim Woodruff	0	-1,000	-1,000	-1,000	-1,000	-1,000	-1,000
Total Proprietary Receipts	136,942	111,254	165,019	164,628	167,050	165,482	165,389
Percent of Sales to Preference Customers	99%	99%	99%	99%	99%	99%	99%
Energy Sales and Power Marketed (megawatt-hours)	7,886,000	7,886,000	7,886,000	7,886,000	7,886,000	7,886,000	7,886,000

System Statistics

	FY 2009 Actual	FY 2009 Estimate	FY 2010 Estimate
Generating Capacity:			
Nameplate Capacity (KW)	3,392,375	3,392,375	3,392,375
Peak Capacity (KW) [a]	3,710,000	3,710,000	3,710,000
Generating Stations			
Generating Projects (Number)	22	22	22
Available Energy			
Energy from Stream-flow (MWH)	7,459,272	7,459,272	7,459,272
Energy generated from Pumping (MWH)	427,128	427,128	427,128
Energy Purchased for Replacement (MWH)	75,000	75,000	75,000
Total, Energy available for marketing [b] (MWH)	7,961,400	7,961,400	7,961,400

[a] Southeastern markets capacity based on nameplate plus an overload factor. NERC requires that Southeastern keep a portion of the capacity in reserve for emergency purposes and to cover losses.
[b] Gross amount. Transmission losses are deducted from this amount to estimate the amount of energy marketed.

Power Marketed, Wheeled, or Exchanged by Project

Project	State	Plants	Installed Capacity (KW)	FY 2009 Estimated Power (GWH)	FY 2010 Estimated Power (GWH)	FY 2011 Estimated Power (GWH)
Kerr-Philpott System				463 *	463 *	463 *
John H. Kerr	VA-NC	1	204,000			
Philpott	VA	1	14,000			
Georgia-Alabama-South Carolina System				4,059 *	4,059 *	4,059 *
Allatoona	GA	1	74,000			
Buford	GA	1	86,000			
Carters	GA	1	500,000			
J. Strom Thurmond	GA-SC	1	280,000			
Walter F. George	GA-AL	1	130,000			
Hartwell	GA-SC	1	344,000			
R. F. Henry	AL	1	68,000			
Millers Ferry	AL	1	75,000			
West Point	GA-AL	1	73,375			
Richard B. Russell	GA-SC	1	600,000			
Jim Woodruff Project	FL-GA	1	30,000	237	237	237
Cumberland System				3,127 *	3,127 *	3,127 *
Barkley	KY	1	130,000			
Center Hill	TN	1	135,000			
Cheatham	TN	1	36,000			
Cordell Hull	TN	1	100,000			
Dale Hollow	TN	1	54,000			
Old Hickory	TN	1	100,000			
J. Percy Priest	TN	1	28,000			
Wolf Creek	TN	1	270,000			
Laurel	TN	1	61,000			
Total Power Marketed		22	3,392,375	7,886	7,886	7,886

Alternative Financing

2009	Transmission	Purchase Power	Offsetting Collections	Net Billing	Appropriated Funds
Jim Woodruff System	0	900	-700	-200	0
Kerr-Philpott System	4,704	0	-4,704	0	0
GA-AL-SC System	20,402	27,449	-43,941	-3,910	0
Cumberland System	9,762	0	-175	-9,587	0
	34,868	28,349	-49,520	-13,697	0

2010	Transmission	Purchase Power	Offsetting Collections	Net Billing	Appropriated Funds
Jim Woodruff System	0	1,000	-800	-200	0
Kerr-Philpott System	4,704	0	-4,704	0	0
GA-AL-SC System	21,757	48,000	-65,302	-4,455	0
Cumberland System	9,767	0	0	-9,767	0
	36,228	49,000	-70,806	-14,422	0

2011	Transmission	Purchase Power	Offsetting Collections	Net Billing	Appropriated Funds
Jim Woodruff System	0	3,200	-3,000	-200	0
Kerr-Philpott System	9,517	0	-9,517	0	0
GA-AL-SC System	18,378	47,747	-61,454	-4,671	0
Cumberland System	9,773	0	-186	-9,587	0
	37,668	50,947	-74,157	-14,458	0

Southwestern Power Administration

Southwestern Power Administration

Southwestern Power Administration

Proposed Appropriation Language

For necessary expenses of operation and maintenance of power transmission facilities and of marketing electric power and energy, for construction and acquisition of transmission lines, substations and appurtenant facilities, and for administrative expenses, including official reception and representation expenses in an amount not to exceed $1,500 in carrying out section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), as applied to the southwestern power area, [$44,944,000] *$46,312,000*, to remain available until expended: *Provided*, That notwithstanding 31 U.S.C. 3302 and section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), up to [$31,868,000] *$33,613,000* collected by the Southwestern Power Administration from the sale of power and related services shall be credited to this account as discretionary offsetting collections, to remain available until expended, for the sole purpose of funding the annual expenses of the Southwestern Power Administration: *Provided further*, That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year [2010] *2011* appropriation estimated at not more than [$13,676,000] *$12,699,000*: *Provided further*, That, notwithstanding 31 U.S.C. 3302, up to [$38,000,000] *$39,000,000* collected by the Southwestern Power Administration pursuant to the Flood Control Act of 1944 to recover purchase power and wheeling expenses shall be credited to this account as offsetting collections, to remain available until expended for the sole purpose of making purchase power and wheeling expenditures[:] [*Provided further*, That notwithstanding 31 U.S.C. 3302 and section 5 of the Flood Control Act of 1944, all funds collected by the Southwestern Power Administration that are applicable to the repayment of the annual expenses of this account in this and subsequent fiscal years shall be credited to this account as discretionary offsetting collections for the sole purpose of funding such expenses, with such funds remaining available until expended]: *Provided further*, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred (excluding purchase power and wheeling expenses). (Energy and Water Development and Related Agencies Appropriations Act, 2010.)

Southwestern Power Administration

Overview

Appropriation Summary by Program

	(dollars in thousands)		
	FY 2009 Current Appropriation	FY 2010 Current Appropriation	FY 2011 Request
Southwestern Power Administration			
Operation and Maintenance	89,186	94,944	99,130
Subtotal, Southwestern Power Administration	89,186	94,944	99,130
Offsetting Collections, Annual Expenses	0	-31,868	-33,613
Offsetting Collections, Purchased Power and Wheeling (PPW) [a]	-35,000	-38,000	-39,000
Alternative Financing	-25,772	-12,000	-13,818
Total, Southwestern Power Administration	28,414	13,076	12,699
Reclassification of Mandatory Receipts to Discretionary Offsetting Collections	0	31,868	0

Preface

The U.S. Department of Energy (DOE) is leading the Nation forward to strengthen its national energy and economic security by promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy. Southwestern Power Administration (Southwestern) exists to meet its public responsibilities consistent with the Flood Control Act of 1944: to market and reliably deliver Federal power, recover power costs, and repay the Federal investment consistent with sound business principles, giving preference to public bodies and cooperatives while encouraging the most widespread use of power and implementing public policy.

Within the Southwestern appropriation, there is one program: Operation and Maintenance, with four subprograms: Operations and Maintenance, Construction, Purchased Power and Wheeling, and Program Direction. Consistent with the authority provided in the 2010 Energy and Water Appropriations, the FY 2011 Budget provides funding for annual expenses (operations and maintenance and program direction) through discretionary offsetting collections derived from power receipts collected to recover those expenses.

[a] Southwestern's budget request for the Purchased Power and Wheeling subprogram reflects anticipated needs to ensure adequate funding to fulfill its 1200-hour peaking power contractual obligations based on volatile market prices, limited availability of energy banks, and all but the most severe hydrological conditions.

Mission

The mission of Southwestern is to market and reliably deliver Federal hydroelectric power, with preference to public bodies and cooperatives. This is accomplished by maximizing the use of Federal assets to repay the Federal investment and participating with other water resource users in an effort to balance their diverse interests with power needs within broad parameters set by the U. S. Army Corps of Engineers (Corps), and implementing public policy.

Benefits

Southwestern's appropriation supports DOE's Energy Strategic Theme 1, Energy Security, by enabling the delivery of reliable, affordable, and environmentally sound energy, and operating a reliable transmission system which is an integral part of the Nation's transmission grid. Southwestern, in conjunction with the Corps, participates in this effort by strategically managing the multipurpose operation of the Federal hydropower system. This enables effective marketing, generation, and delivery of clean, reliable, cost-based electric power.

Southwestern's program provides the Nation numerous benefits, which include:

- Operating a reliable Federal power system in an effective, cost-efficient, and environmentally sound manner while meeting national utility performance standards and balancing the diverse interests of other water resource users,
- Producing power at the lowest cost-based rates possible, consistent with sound business practices,
- Repaying the American taxpayers' investments in the Federal power system,
- Delivering reliable power to its customers,
- Providing economic benefits to the region,
- Providing regional power restoration assistance to other non-hydropower generation sources during power grid emergencies,
- Repaying the costs of operation of the Federal hydropower system with revenues from power customers,
- Complying with the North American Electric Reliability Corporation (NERC) requirements, and
- Complying with the Federal Energy Regulatory Commission (FERC) requirements consistent with Federal statute.

Performance

Southwestern contributes to the Department's Strategic Theme 1, Energy Security; Strategic Goal 3, Energy Infrastructure; and Secretarial Goal 2, Energy through four subprograms (Operations and Maintenance, Construction, Purchased Power and Wheeling, and Program Direction) supported by appropriations, appropriations offset by receipts, Federal power receipts, and alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances). Southwestern accomplishes this by performing its mission in a manner that promotes maintaining and upgrading its energy infrastructure to ensure reliable and efficient delivery of Federal power, which is an

integral part of the Nation's electrical grid. Southwestern is modernizing its energy infrastructure; incrementally improving facilities, increasing transmission capacity where feasible, and enhancing transmission grid reliability to support the rapid changing utility industry, interconnection requests, evolving regional needs, and interest in renewable resources.

Southwestern Power Administration

Funding by Site by Program

(dollars in thousands)

	FY 2009	FY 2010	FY 2011
Southwestern Power Administration	89,186	94,944	99,130
Total, Southwestern Power Administration	89,186	94,944	99,130

Site Description

An Agency of the Department of Energy, Southwestern Power Administration (Southwestern) was created in 1943 to market and deliver power and energy produced at U.S. Army Corps of Engineers (Corps) hydroelectric power projects. Southwestern markets and delivers power at wholesale rates to 78 municipal utilities, 22 rural electric cooperatives, and 3 government entities in the 6 states of Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas. In order to integrate the operation of the Federal hydroelectric generating plants and to transmit power from 24 multi-purpose Corps dams to customers, Southwestern operates and maintains 1,380 miles of high-voltage transmission lines, 25 substations/switchyards, and 51 microwave and very high frequency radio sites. Southwestern operates from its Headquarters in Tulsa, Oklahoma; a Dispatch Center in Springfield, Missouri; and maintenance facilities in Jonesboro, Arkansas; Gore, Oklahoma; and Springfield, Missouri.

Operation and Maintenance

Funding Profile by Subprogram

(dollars in thousands)

	FY 2009 Current Appropriation	FY 2010 Current Appropriation	FY 2011 Request
Operation and Maintenance			
Program Direction (PD)	24,330	27,153	28,381
Operations and Maintenance (O&M)	12,865	13,775	13,676
Construction (CN)	5,991	6,016	8,073
Purchased Power and Wheeling (PPW)	46,000	48,000	49,000
Subtotal, Operation and Maintenance	89,186	94,944	99,130
Offsetting Collections, PPW [a]	-35,000	-38,000	-39,000
Offsetting Collections, PD (annual expenses)	0	-26,247	-26,880
Offsetting Collections, O&M (annual expenses)	0	-5,621	-6,733
Alternative Financing, PD	-2,200	0	-281
Alternative Financing, O&M	-9,381	0	-1,537
Alternative Financing, CN	-3,191	-2,000	-2,000
Alternative Financing, PPW	-11,000	-10,000	-10,000
Total, Operation and Maintenance	28,414	13,076	12,699

Public Law Authorizations:

Public Law No. 78-534, Section 5, Flood Control Act of 1944
Public Law No. 95-91, Section 302, DOE Organization Act of 1977
Public Law No. 100-71, Supplemental Appropriations Act, 1987
Public Law No. 101-101, Title III, Continuing Fund (amended 1989)
Public Law No. 102-486, Section 721, Energy Policy Act of 1992
Public Law No. 108-137, Appropriations Act, FY 2004
Public Law No. 111-85, Appropriation Act, FY 2010

[a] Southwestern's budget request for the Purchased Power and Wheeling subprogram reflects anticipated needs to ensure adequate funding to fulfill its 1200-hour peaking power contractual obligations based on volatile market prices, limited availability of energy banks, and all but the most severe hydrological conditions.

Mission

The mission of the Operation and Maintenance program is to market and reliably deliver Federal hydroelectric power with preference to public bodies and cooperatives. This is accomplished by maximizing the use of Federal assets to repay the Federal investment and participating with other water resource users in an effort to balance their diverse interests with power needs within broad parameters set by the U.S. Army Corps of Engineers (Corps), and implementing public policy.

Benefits

Southwestern's appropriation supports DOE's Energy Strategic Theme 1, Energy Security by enabling the delivery of reliable, affordable, and environmentally sound energy, and operating a reliable transmission system which is an integral part of the Nation's transmission grid. Southwestern, in conjunction with the Corps, participates in this effort by strategically managing the multipurpose operation of the Federal hydropower system. This enables effective marketing, generation, and delivery of clean, reliable, cost-based electric power.

Southwestern's program provides the Nation numerous benefits, which include:

- Operating a reliable Federal power system in an effective, cost-efficient, and environmentally sound manner while meeting National utility performance standards and balancing the diverse interests of other water resource users,
- Producing power at the lowest cost-based rates possible, consistent with sound business practices,
- Repaying the American taxpayers' investments in the Federal power system,
- Delivering reliable power to its customers,
- Providing economic benefits to the region,
- Providing regional power restoration assistance to other non-hydropower generation sources during power grid emergencies,
- Repaying the costs of operation of the Federal hydropower system with revenues from power customers,
- Complying with the North American Electric Reliability Corporation (NERC) requirements, and
- Complying with the Federal Energy Regulatory Commission requirements consistent with Federal statute.

Annual Performance Results and Targets

Southwestern contributes to the Department's Strategic Theme 1, Energy Security; Strategic Goal 3, Energy Infrastructure; and Secretarial Goal 2, Energy through four subprograms (Operations and Maintenance, Construction, Purchased Power and Wheeling, and Program Direction) supported by appropriations, appropriations offset by receipts, Federal power receipts, and alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances). Southwestern accomplishes this by performing its mission in a manner that promotes maintaining and upgrading its energy infrastructure to ensure reliable and efficient delivery of Federal power, which is an integral part of the Nation's electrical grid. Southwestern is modernizing its energy infrastructure; incrementally improving facilities, increasing transmission capacity where feasible, and enhancing transmission grid reliability to support the rapid changing utility industry, interconnection requests, evolving regional needs, and interest in renewable resources.

Annual Performance Targets and Results

Secretarial Goal 2: Energy: Build a competitive, low-carbon economy and secure America's energy future

GPRA Unit Program Goal: Southwestern Power Administration, Operation and Maintenance - Provide the benefits of Federal power to customers by selling and reliably delivering power from Federal multipurpose hydroelectric dams at the lowest cost-based rates possible that produce revenues sufficient to repay all power costs to the American taxpayers.

FY PY-3	FY PY-2	FY PY-1	FY PY	FY CY	FY BY	FY BY+1	FY BY+2	FY BY+3	FY BY+4
FY 2006	**FY 2007**	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**	**FY 2014**	**FY 2015**
Performance Measure: Meet NERC Control Performance Standards (CPS) of CPS1>100 and CPS2>90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.									
CPS1									
T: 161.8 A: 180.23	T: 161.81 A: 199.26	T: >100 A: 199.49	T: >100 A: 199.98	T: >100 A:	T: >100 A:	T: >100 A:	T: >100 A:	T: >100 A:	T: >100 A:
CPS2									
T: 97.2 A: 99.18	T: 97.21 A: 99.61	T: >90 A: 99.82	T: >90 A: 99.82	T: >90 A:	T: >90 A:	T: >90 A:	T: >90 A:	T: >90 A:	T: >90 A:
Performance Measure: Provide power at the lowest possible cost by keeping total operation and maintenance expense per kilowatt-hour generated below the National median for public power. *									
T: $0.0136 A: $0.0116	T: $0.0137 A: $0.0126	T: $0.0153 A: $0.0130	T: $0.0620 A: $0.0126	T: < $0.0620 A:	T: <$0.0620 A:	T: <$0.0620 A:	T: <$0.0620 A:	T: <$0.0620 A:	T: <$0.0620 A:
*Future year targets will be adjusted based on the actual national median for public power.									
Performance Measure: Ensure timely repayment of Federal investment in accordance with DOE Order RA 6120.2 by maintaining unpaid investment (UI) equal to or less than the allowable unpaid investment (AUI) **(Definition Revised in 2010).**									
T: $1,047,467 A: $28,553,300	T: $1,010,039 A: $31,359,961	T: $990,334 A: $65,492,927	T: $6,223 A: $60,282,026	T: UI<=$1,023M A:	T: UI<=$1,306M A:	T: UI<=$1,428M A:	T: UI<=$1,541M A:	T: UI<=$1,542M A:	T: UI<=$1,532M A:
Performance Measure: Effectively operate the transmission system to limit the number of accountable outages to no more than 3 annually.									
T: =< 3 A: 1	T: =< 3 A: 0	T: =< 3 A: 0	T: =< 3 A: 0	T: =< 3 A:	T: =< 3 A:	T: =< 3 A:	T: =< 3 A:	T: =< 3 A:	T: =< 3 A:

Means and Strategies

Southwestern will use various means and strategies to achieve its GPRA Unit Program goal. However, various external factors may impact the ability to achieve this goal. Southwestern also collaborates with others to meet its goal.

Southwestern will implement the following means:

- Achieve and maintain financial integrity.
- Maintain power system reliability.
- Operate the Federal power system effectively and efficiently.
- Provide power at the lowest possible cost.

Southwestern will implement the following strategies:

- Market all available hydropower generated at the Corps multipurpose projects and work with the Corps, states, cooperatives, and municipalities to meet statutory requirements while balancing the interests of other water users.
- Ensure power rates are sufficient to repay all annual operating costs and the Federal investment with interest by conducting annual power repayment studies and submitting rate adjustments to DOE and FERC for approval.
- Meet Southwestern's limited 1200-hour peaking power contractual obligations with necessary purchased power and wheeling through the use of Federal power receipts; alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances); and the Continuing Fund as necessary in years of below-average hydropower generation.
- Utilize the following funding mechanisms: appropriations; appropriations offset by receipts; use of Federal power receipts; and alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances).
- Maintain a diverse and knowledgeable workforce through employee training, skills gap analyses, leadership development, retention programs, and aggressive recruitment activities.
- Meet NERC requirements by documenting Southwestern's compliance with the latest NERC standards and performing certification and annual emergency operations training for power system dispatchers.
- Maintain the security of the Federal power system, facilities, and information technology (IT) systems.
- Address changes in the electric utility industry, technology, and workload by moving administrative and indirect positions to direct ("front line") positions as opportunities arise.
- Maximize the capabilities of business systems to improve processes and provide greater efficiency.

These strategies will result in a well-maintained, reliable Federal power system, and an exemplary workforce to operate and maintain the system in the most effective and cost-efficient manner possible.

The following external factors could impact Southwestern's ability to achieve its program goal:

- Southwestern's program goal could be impacted by weather, natural disasters, transmission line constraints, new load patterns, deregulation of the electricity market, changing electric industry organizational structures, equipment failure, Congressional requirements, power markets, revenue factors, additions to other utilities' transmission systems interconnected with the Federal system, and other unforeseen requirements.

Successful collaboration of the Federal hydropower partners is necessary for Southwestern to achieve its program goal. Southwestern coordinates its operational activities with the Corps, customers, competing resources interests, the Southwest Power Pool/Regional Transmission Organization (SPP/RTO), and Congress to provide the most efficient and effective use of Federal assets and to ensure NERC and regional reliability council standards are met.

Validation and Verification

Southwestern routinely conducts various internal reviews, studies, and audits to validate and verify program performance. Southwestern's program also is subject to continuing review by external entities such as Congress, the Government Accountability Office (GAO), the DOE's Inspector General, FERC, the U.S. Environmental Protection Agency, the Office of Personnel Management, the Office of Management and Budget (OMB), DOE, NERC, the regional electric reliability council, and Southwestern's Federal power customers.

Achievement of Southwestern's objectives is evaluated in the context of mission responsibilities and the continued impacts of external factors. Each objective has performance targets that are reported quarterly to DOE. Southwestern establishes a corrective plan of action to improve any performance below established quarterly standards. Measuring performance against these targets indicates whether Southwestern is achieving its objectives.

Operations and Maintenance

Funding Schedule by Activity

(dollars in thousands)

	FY 2009	FY 2010	FY 2011
Operations and Maintenance (O&M)			
Power Marketing	1,773	1,748	500
Operations	3,575	4,080	3,778
Maintenance	6,194	6,680	8,013
Capitalized Movable Equipment	1,323	1,267	1,385
Subtotal, Operations and Maintenance	12,865	13,775	13,676
Offsetting Collections	0	-5,621	-6,733
Alternative Financing	-9,381	0	-1,537
Total, Operations and Maintenance	3,484	8,154	5,406

Mission

The mission of the Operations and Maintenance subprogram is the cornerstone of Southwestern Power Administration's (Southwestern) total program. This subprogram ensures continued reliability of the Federal power system by replacing aging infrastructure and removing constraints that would impede power flows, thus meeting the expectations of the Energy Policy Act of 2005 (EPACT), the National Energy Policy (NEP), the Department of Energy's (DOE) Strategic Plan, and to comply with the North American Electric Reliability Corporation (NERC) standards. This subprogram fulfills the requirements of Section 5 of the Flood Control Act of 1944 and reflects Southwestern's program goal to provide the benefits of Federal power to its customers by selling and reliably delivering renewable energy from Federal multipurpose hydroelectric dams at the lowest cost-based rates possible that produce revenues sufficient to repay all power costs to the American taxpayers.

Benefits

The activities of the Operations and Maintenance subprogram are critical components in maintaining the reliability of the Federal power system, which are part of the Nation's interconnected generation and transmission system. Through the use of renewable hydroelectric energy, Southwestern makes a meaningful contribution of clean, safe, reliable, affordable, and secure energy to our Nation. EPACT, NEP, and DOE's Strategic Plan reinforce the importance of renewable hydroelectric energy by emphasizing its ongoing significant contribution to the Nation's past, current, and future energy supply and identifies Southwestern's important role meeting electricity demand by supplying cost-based hydroelectric power to its customers. All emphasize the need to repair, maintain, and improve the transmission and generation facilities to ensure reliability of the energy infrastructure.

Consistent with EPACT, Southwestern complies with NERC standards and participates with the Southwest Power Pool/Regional Transmission Organization (SPP/RTO), which reinforces Southwestern's role as part of the Nation's interconnected electric grid. In participation with the SPP/RTO, Southwestern works on regional initiatives to develop renewables in our region. During power grid emergencies, Southwestern also has the capability to provide reliable off-site power to help restore other power generation sources. As demand for the transmission of power increases, the investment in maintaining and improving the Nation's energy infrastructure is critical to the fulfillment of energy security to present and future generations.

Southwestern will use appropriations; appropriations offset by receipts; and alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances), with customers and others who provide services or funds to ensure a dependable and reliable Federal power system. Southwestern's authority to use net billing and bill crediting is inherent in the authority provided by the Flood Control Act of 1944, and has been affirmed by the Comptroller General.[a] All funding will be utilized to perform reliability-centered maintenance and upgrades which ensure Southwestern's transmission system is operated in the most reliable and cost-effective manner.

Southwestern's planned Operations and Maintenance projects are subject to change based on unanticipated equipment failure, customer needs, and weather conditions. The realities of maintaining a complex interconnected power system means unforeseen priority projects will arise periodically, causing a reprioritization of planned projects. All projects share the commonality of maintaining, repairing, and improving the aging and deteriorating infrastructure to ensure the reliability of the Federal power system.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Power Marketing	**1,773**	**1,748**	**500**

The Power Marketing activity funds technical and economic studies to support Southwestern's

[a] Honorable Secretary of the Interior B-125127 (February 14, 1956) available at WL 3064 (Comp. Gen.)

transmission planning, water resources, communications, and maintenance activities. Technical and economic studies provide data to analyze and evaluate the impacts of proposed operational changes and decision-making based on cost/benefit analysis. Funding is also required for Southwestern's participation in the SPP/RTO and to provide regional power restoration assistance to other non-hydropower generation sources during power grid emergencies. The National Electric Transmission Congestion Study identified constraints in the Nation's interconnected electrical grid which could impede power flows. Studies to identify any constraints on Southwestern's system will continue to be conducted. These studies show how the marketing and delivery of power is operationally impacted. The funding level for this activity is derived from Southwestern's engineering plan, negotiated architect/ engineering contracts, and the number of studies required per year. The decrease in funding reflects a reduction in studies being conducted.

Operations	**3,575**	**4,080**	**3,778**

The Operations activity funds communication activities associated with the dispatch and delivery of power; environmental, safety, and health activities; and other transmission activity costs such as physical security, cyber security, and day-to-day power dispatch functions.

▪ **Communications**	**2,349**	**2,942**	**2,615**

This subactivity funds telemetering improvements, technical support to protect cyber infrastructure, SCADA/EMS maintenance agreements, an e-tagging system that electronically schedules power for customers, load forecasting, digital test equipment, fee for spectrum, and supplies and materials. The telemetering improvements include replacement of obsolete power and energy accounting equipment and modification of existing remote terminal units that improve the reliability of the power system, specifically in the areas of monitoring and control. Funding is required for upgrades that enable Southwestern to meet the goals of the EPACT, NEP, NERC, and DOE's Strategic Plan by replacing deteriorating infrastructure while assuring reliability and continuing to actively participate in the SPP/RTO. The funding level for communications maintenance is derived from maintenance history, the age of equipment, expected life span, annual diagnostic maintenance testing, and historical pricing information. The decrease in funding for this subactivity reflects a reduction in the amount of telemetering upgrades for FY 2011.

▪ **Environmental, Safety, and Health**	**995**	**835**	**835**

This subactivity funds environmental activities including waste disposal/clean-up of oil and polychlorinated biphenyl contaminates from old circuit breakers and transformers, environmental assessments for threatened and endangered species, property transfers, wetland assessments, environmental library access, Toxic Substance Control Act and Resource Conservation Recovery Act compliance, contractor services, and requirements of the Environmental Protection Program as identified in DOE Order 450.1. The Safety and Health Program activities require funding for aviation safety, industrial hygiene, medical examinations, medical officer, wellness program, safety equipment, and first aid supplies.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
▪ **Other Transmission**	**231**	**303**	**328**

This subactivity funds physical security, field utility costs, and day-to-day power expenses of the dispatch center. The increase in funding for this subactivity reflects additional physical security requirements.

Maintenance	**6,194**	**6,680**	**8,013**

The Maintenance activity funds routine repair, maintenance, and improvement of Southwestern's 25 substations/switchyards and 1,380 miles of high-voltage transmission lines, and ensures delivery of reliable, efficient, and clean power to its customers. Southwestern's initial facilities, which were built approximately 60 years ago, are constantly evaluated. The funding level is derived from age of equipment, risk of failure, life cycle of equipment, and through field crew evaluation. Internal and external factors include obsolescence of technology and lack of replacement parts. This budget request reflects Southwestern's assessment of the funding required to ensure continued reliability of the Federal power system and to fulfill the NERC operational criteria. By replacing aging equipment and removing constraints that impede power flows, Southwestern is meeting the expectations of the National Transmission Grid Study, the Administration's initiative to provide energy efficiencies, and DOE's Secretarial priority to provide clean, secure energy.

▪ **Substation Maintenance**	**4,838**	**5,271**	**6,455**

This subactivity funds a transformer, power circuit breakers, disconnect switches, protective relays and related equipment, computer aided drafting and design, revenue meters, vehicle maintenance, fuel, and other equipment to reliably perform general maintenance projects while maintaining the Federal power system as required by Southwestern's participation in a regional electric reliability council and to comply with NERC requirements. The funding level for this subactivity is derived from an internal maintenance information system, which includes age and condition of the existing equipment. The request also funds the purchase and installation of a new power transformer. The transformer is required to maintain reliability of the power system while accommodating increased loads on the Federal power system resulting from interconnection and open access requests from other utilities. The increase in funding for this subactivity reflects additional relay and disconnect switch replacements.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
▪ **Transmission Line Maintenance**	**1,356**	**1,409**	**1,558**

This subactivity funds the purchase and maintenance of wood and steel structures, crossarms and braces, right-of-way (ROW) clearing, herbicide application, aerial patrol of the transmission system to identify maintenance needs, routine vehicle repair and maintenance, tractor-trailers, heavy equipment, and fuel. The number of steel or wood poles and crossarms and high-voltage insulators is derived from an internal maintenance information system. Emphasis continues to be placed on ROW clearing since NERC identified improper/insufficient ROW clearing as a major factor in potential blackouts. The funding level is appropriate for the number of structures and components to be replaced and the miles of ROW to be cleared as set forth by Southwestern's maintenance plans in meeting the goals of the EPACT, NEP, and NERC to maintain a reliable transmission system. The increase in funding reflects additional purchases of poles to restock pole inventory.

Capitalized Moveable Equipment	**1,323**	**1,267**	**1,385**

The Capitalized Movable Equipment activity funds the replacement of vehicles, tractor-trailers, and heavy equipment used for maintenance and repair of the transmission system and facilities. The replacement criteria Southwestern utilizes for specialized equipment needed to maintain 1,380 miles of transmission line is derived from the General Services Administration (GSA) and DOE guidelines based on operation duration and age. These vehicles exceed their useful lives and require high levels of maintenance. The vehicle cost estimates are derived from GSA pricing schedules. The increase in funding for this activity reflects the number and/or type of vehicles being purchased.

Total, Operations and Maintenance	**12,865**	**13,775**	**13,676**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Power Marketing	
The reduction in funding reflects a fewer number of studies being performed.	-1,248
Operations	
▪ **Communications**	
The decrease in funding for this subactivity reflects a reduction in the amount of telemetering upgrades.	-327
▪ **Other Transmission**	
The increase in funding for this subactivity reflects physical security enhancements.	+25
Maintenance	

	FY 2011 vs. FY 2010 ($000)
▪ **Substation Maintenance** The increase in funding for this subactivity reflects the purchase of a transformer and the escalation of replacing relays and disconnect switches to ensure system reliability.	+1,184
▪ **Transmission Line Maintenance** The increase in funding reflects additional purchases of poles to restock pole inventory.	+149
Capitalized Movable Equipment	
Increase reflects the number and/or type of vehicles being purchased.	+118
Total Funding Change, Operations and Maintenance	**-99**

Construction

Funding Schedule by Activity

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Construction			
Transmission System	5,991	6,016	8,073
Subtotal, Construction	5,991	6,016	8,073
Alternative Financing	-3,191	-2,000	-2,000
Total, Construction	2,800	4,016	6,073

Mission

The mission of the Construction subprogram is to ensure continued reliability of the Federal power system by providing for additions, modifications, replacements, and interconnections to the transmission, substation, and communication facilities, thus meeting the expectations of the Energy Policy Act of 2005 (EPACT), the National Energy Policy (NEP), the Department of Energy's (DOE) Strategic Plan, and to comply with the North American Electric Reliability Corporation (NERC) standards. This subprogram fulfills the requirements of Section 5 of the Flood Control Act of 1944 and reflects Southwestern Power Administration's (Southwestern) program goal to provide the benefits of Federal power to its customers by selling and reliably delivering renewable energy from Federal multipurpose hydroelectric dams at the lowest cost-based rates possible that produce revenues sufficient to repay all power costs to the American taxpayers.

Benefits

The activities of the Construction subprogram enable Southwestern to market and deliver Federal hydropower in the most reliable, safe, efficient, and cost-effective manner to meet the operational criteria required by NERC and as a participant in the National electrical grid while avoiding transmission infrastructure deterioration. EPACT, NEP, and DOE's Strategic Plan reinforce the importance of renewable hydroelectric energy by emphasizing its ongoing significant contribution to the Nation's past, present, and future energy supply and Southwestern's important role meeting electricity demand by supplying cost-based hydroelectric power to its customers. Southwestern's participation in the Southwest Power Pool/Regional Transmission Organization (SPP/RTO), reinforces Southwestern's role as an integral part of the Nation's interconnected generation and transmission system. In participation with the SPP/RTO, Southwestern works on regional initiatives to develop renewables in our region. As the demand for the transmission of power increases, the investment in improving the Nation's energy infrastructure, by providing improvements, replacements, and interconnections, is critical in assuring reliable delivery of power, fulfilling energy security for the present as well as for future generations.

Southwestern will continue to use appropriations and alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances), with customers and others who provide services or funds to ensure a dependable and reliable Federal power system. Southwestern's authority to use net billing and bill crediting is inherent in the authority provided by the Flood Control Act of 1944, and has been affirmed by the Comptroller General.[a] All funding will be utilized to perform reliability-centered upgrades and additions which ensure Southwestern's transmission system is operated in the most reliable and cost-effective manner.

Southwestern's planned Construction projects are subject to change based on unanticipated equipment failure, customer needs, and weather conditions. The realities of maintaining a complex interconnected power system means unforeseen priority projects will arise periodically, causing a reprioritization of planned projects. All projects share the commonality of replacing aging and deteriorating infrastructure necessary to maintain the reliability of the Federal power system.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Transmission System	**5,991**	**6,016**	**8,073**

This activity funds all construction projects that require expansion of or additions to existing facilities. System reliability is ensured by replacing aging and deteriorating equipment, thereby removing constraints that limit power flows. The projects reflect Southwestern's efforts to reduce the risk of extended service outages, avoid more costly replacements in the future, and support the increased transmission system usage. The funding level for this activity is derived from internal and external management decisions and field crew observations regarding system age, risk of equipment failure, life cycles, obsolescence of technology, availability of spare parts, budget constraints, cost, and demand for more capacity. These variables are assessed and incorporated into Southwestern's ten-year construction plan.

▪ **Substation Upgrades**	**2,200**	**0**	**0**

This subactivity funds a high priority upgrade of the station bus and associated equipment at the Bull Shoals Dam switchyard that has been identified by the SPP/RTO as necessary to relieve a transmission constraint. The Bulls Shoals upgrade was completed in FY 2009 and no other projects have been identified for FY 2011.

▪ **Communication Equipment**	**3,791**	**5,840**	**3,575**

This subactivity funds all communication equipment and microwave radio and tower replacements that are planned to provide improved system reliability and reduce future maintenance and equipment costs. This subactivity also provides funding for microwave radios and microwave tower additions, replacements, and modifications that will allow Southwestern to complete an important communication ring within its network that will increase the reliability of communications with the generating plants and substations in the Oklahoma region. The communication system provides for the transfer of voice

[a] Honorable Secretary of the Interior B-125127 (February 14, 1956) available at WL 3064 (Comp. Gen.)

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

and data traffic to allow monitoring and control of power system generation and transmission assets. The reduction in funding reflects a fewer number of planned microwave radio and tower replacements.

In December 2004, the Congress passed and the President signed the Commercial Spectrum Enhancement Act (CSEA, Title II of P.L. 108-494), creating the Spectrum Relocation Fund (SRF) to streamline the relocation of Federal systems from existing spectrum bands to accommodate commercial use by facilitating reimbursement to affected agencies of relocation costs. Southwestern has received $25.8 million in spectrum relocation funds, as approved by the Office of Management and Budget, and as reported to the Congress. These funds are mandatory and will remain available until expended, and agencies will return to the SRF any amounts received in excess of actual relocation costs. Frequency spectrum activities were funded from spectrum auction proceeds; thus, no funding is provided in this subactivity.

▪ **Transmission Upgrades**	**0**	**176**	**4,498**

This subactivity funds transmission system upgrades. Southwestern's transmission lines are reaching the intended service life of 45 years and are in need of repair and upgrading. During the ice storm of 2009, an additional 30 miles of transmission line were identified as being in critical need of replacement. The additional stress to the transmission line, caused by the ice storm, has further deteriorated the line which is nearing its service life of 45 years. Southwestern will use this opportunity to increase the capacity of the line to provide more reliable service to the interconnected transmission system, thereby increasing energy efficiency. Funding will also be utilized to replace approximately 39 miles of severely corroded and worn shield wire on the transmission line to protect the current-carrying conductors from damage due to lightning strikes. The increase in funding reflects greater emphasis being placed on transmission line repair and upgrade.

Total, Construction	**5,991**	**6,016**	**8,073**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Transmission System	
▪ **Communication Equipment** The reduction in funding reflects a fewer number of planned microwave radio and tower replacements to accommodate needed transmission line repair and upgrade.	-2,265
▪ **Transmission Upgrades** The increase in funding reflects an emphasis on repairing and upgrading approximately 30 miles of transmission line and replacing worn shield wire.	+4,322
Total Funding Change, Construction	**+2,057**

Purchased Power and Wheeling

Funding Schedule by Activity

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Purchased Power and Wheeling (PPW) [a]			
System Support	42,500	44,500	45,500
Other Contractual Services	3,500	3,500	3,500
Total, PPW	46,000	48,000	49,000
Use of Alternative Financing – Reimbursable Authority (customer advances), Net Billing, Bill Crediting:			
Purchased Power	-7,725	-6,725	-6,725
Wheeling	-3,275	-3,275	-3,275
Total, Alternative Financing	-11,000	-10,000	-10,000
Subtotal, Purchased Power and Wheeling	35,000	38,000	39,000
Offsetting Collections	-35,000	-38,000	-39,000
Total, Purchased Power and Wheeling	0	0	0

Mission

The mission of the Purchased Power and Wheeling (PPW) subprogram is to provide for the purchase of energy to meet limited peaking power contractual obligations and the delivery of Federal power. Such purchases are blended with the available Federal hydroelectric power and energy to provide a more beneficial and reliable product while assuring repayment of the Federal investment plus interest, thus meeting the expectations of the Energy Policy Act of 2005 (EPACT), the National Energy Policy (NEP), the Department of Energy's (DOE) Strategic Plan, and to comply with the North American Electric Reliability Corporation (NERC) standards. This subprogram fulfills the requirements of Section 5 of the Flood Control Act of 1944 and reflects Southwestern Power Administration's (Southwestern) program goal to provide the benefits of Federal power to its customers by selling and reliably delivering renewable energy from Federal multipurpose hydroelectric dams at the lowest cost-based rates possible that produce revenues sufficient to repay all power costs to the American taxpayers.

Benefits

The activities of the PPW subprogram provide for the purchase of energy to meet limited peaking power contractual obligations to ensure the marketability of the Federal resource and repayment of the Federal investment. Southwestern's power sales contracts provide for only 1200 hours of peaking power per year, representing a portion of its customers' firm load requirements. The customers provide their own

[a] Southwestern's budget request for the Purchased Power and Wheeling subprogram reflects anticipated needs to ensure adequate funding to fulfill its 1200-hour peaking power contractual obligations based on volatile market prices, limited availability of energy banks, and all but the most severe hydrological conditions.

resources and/or purchases for the remainder of their firm loads. This subprogram also provides for wheeling services that deliver Federal power to optimize the operation of the hydroelectric facilities marketed by Southwestern. EPACT, NEP, NERC, and DOE's Strategic Plan reinforce the importance of domestic, renewable hydroelectric energy by emphasizing its ongoing significant contribution to the Nation's past, present, and future energy supply and identifies Southwestern's important role meeting electricity demand by supplying cost-based hydroelectric power to its customers. This subprogram enhances the reliability of the electrical transmission grid.

The reduced level of energy banking available from other electric utilities requires Southwestern to use alternative financing to fund power deliveries. Southwestern will continue to use Federal power receipts and alternative financing methods, including net billing, bill crediting, and/or reimbursable authority (customer advances), to fund this subprogram. When hydro generation is significantly below normal due to severe drought conditions, Southwestern will utilize the Continuing Fund for emergency PPW expenses.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
System Support	**42,500**	**44,500**	**45,500**

This activity funds purchased power requirements that fulfill all 1200-hour contractual peaking power obligations with customers. Southwestern will continue to use Federal power receipts and alternative financing methods, including net billing, bill crediting, and/or reimbursable authority (customer advances), to meet purchased power requirements.

System support requirements are affected by weather, volatile market prices, and limited availability of energy banks. For the past 20 years, Southwestern's purchased power requirements have been based on average water conditions, which were established in an effort to reduce unused appropriations during numerous good water years. Beginning in FY 2001, Southwestern received authority from Congress to use offsetting collections to fund power purchases, again based on average water conditions. However, during the FY 2005 and FY 2006 drought, funding problems developed resulting from the limited amount of offsetting collections authorized to fund PPW. Inadequate funding for PPW required constant requests to access the Continuing Fund in order to ensure sufficient funding was available to fulfill Southwestern's 1200-hour peaking power contractual obligations. Southwestern requested, and Congress approved, an increase in authority to use Federal power receipts (offsetting collections) in FY 2008. The use of this increased authority will be dependent upon the hydrological conditions of that fiscal year which, under average conditions, will be approximately half of the authority requested. Since the rates charged to its customers are based on costs, Southwestern has a built-in incentive to minimize its expenditures for purchased power. This additional authority will ensure greater flexibility in times of below average generation and volatile market prices, and will decrease dependence on the Continuing Fund under all but the most severe hydrological conditions. The increase in funding reflects projected market escalation.

Other Contractual Services	**3,500**	**3,500**	**3,500**

This activity funds other contractual services that provide for wheeling associated with the purchase of transmission service to meet limited peaking power obligations and for the integration of projects for the delivery of Federal power. The funding level for this activity is derived from contractual wheeling

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

requirements. Southwestern will continue to use Federal power receipts and alternative financing methods, including net billing, bill crediting, and/or reimbursable authority (customer advances), to meet wheeling requirements. The FY 2011 funding request reflects the projected cost for wheeling services based on contractual pricing and delivery terms.

Total, Purchased Power and Wheeling	**46,000**	**48,000**	**49,000**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
System Support	
▪ Increase in system support reflects anticipated needs based on projected increase in market prices.	+1,000
Other Contractual Services	0
Total Funding Change, Purchased Power and Wheeling	**+1,000**

Program Direction

Funding Profile by Category

	(dollars in thousands/whole FTEs)		
	FY 2009	FY 2010	FY 2011
Program Direction (PD)			
Salaries and Benefits	19,659	21,288	21,958
Travel	847	938	1,045
Support Services	1,718	2,212	2,580
Other Related Expenses	2,106	2,715	2,798
Subtotal, Program Direction	24,330	27,153	28,381
Alternative Financing	-2,200	0	-281
Offsetting Collections	0	-26,247	-26,880
Total, Program Direction	22,130	906	1,220
Full-time Equivalents	179	194	194

Mission

The mission of the Program Direction subprogram is to ensure continued reliability of the Federal power system by utilizing Federal staffing resources and associated funds required to provide overall direction and execution of Southwestern Power Administration's (Southwestern) Operation and Maintenance Program. This subprogram supports the 2005 Energy Policy Act (EPACT), the National Energy Policy (NEP), and the Department of Energy's (DOE) Strategic Plan by providing delivery of reliable, affordable, and environmentally sound energy to the Nation. This subprogram fulfills the requirements of Section 5 of the Flood Control Act of 1944 and reflects Southwestern's program goal to provide the benefits of Federal power to its customers by selling and reliably delivering renewable energy from Federal multipurpose hydroelectric dams at the lowest cost-based rates possible that produce revenues sufficient to repay all power costs to the American taxpayers.

The Departmental Strategic Plan emphasized that DOE's Strategic Goals will be accomplished not only through the efforts of the major program offices in DOE, but also with additional effort from offices which support the programs in carrying out the mission. The Program Direction subprogram provides compensation and all related expenses for 194 Federal personnel who market, deliver, operate, maintain, and administer Southwestern's high-voltage interconnected power system and associated facilities. Southwestern will use appropriations; appropriations offset by receipts; and alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances), with customers and others who provide services or funds to ensure a dependable and reliable Federal power system. Southwestern's authority to use net billing and bill crediting is inherent in the authority provided by the Flood Control Act of 1944, and has been affirmed by the Comptroller General.[a]

[a] Honorable Secretary of the Interior B-125127 (February 14, 1956) available at WL 3064 (Comp. Gen.)

Southwestern performs critical functions in meeting the challenges of operating and maintaining the Federal power system to ensure reliability, while meeting the growing demand for power and avoiding deterioration of the infrastructure. The functions include participation with entities to develop renewables in our region, managing information technology, ensuring sound legal advice and fiscal stewardship, developing and implementing uniform program policy and procedures, maintaining and supporting our workforce, safeguarding our facilities, and providing Congressional and public liaison.

Southwestern is committed to performing its mission while supporting the President's initiatives to reduce greenhouse gas emissions, reduce oil consumption, and provide economic benefits.

Southwestern's Program Direction subprogram further supports the Human Capital initiative, which is linked with careful planning and administration of the budget, through its Human Capital Management (HCM) Workforce Plan. This linkage is manifested in planning to ensure that funds are available and allocated properly to support the initiative's elements. HCM Workforce Plan requirements include: reducing the number of organizational layers, addressing succession planning, reducing the time to make decisions, redirecting positions to the front lines, improving operational processes, and addressing other key workforce challenges.

By the end of FY 2011, approximately 25 percent of Southwestern's staff will be eligible for retirement. However, Southwestern will retain a strong staff of professionals dedicated to the pursuit of excellence by continuing to invest in its current employees, emphasizing strong development programs, completing skills gap analyses, and pursuing aggressive recruitment and retention efforts as identified in its HCM Workforce Plan.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Salaries and Benefits	**19,659**	**21,288**	**21,958**

This activity funds salaries and benefits for 194 skilled Federal employees who market and deliver Federal hydropower by operating and maintaining Southwestern's high-voltage interconnected power system with its associated facilities and providing support for these functions. The funding level for salaries is derived from the current year budgeted salaries plus cost-of-living adjustments, promotions, and within-grade increases. The funding level for benefits is derived from a percentage of budgeted salaries. The benefits for FERS employees are higher than CSRS. As more and more CSRS employees retire, the benefit costs will continue to increase.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

The FY 2011 level supports 194 Federal employees: 54 percent of the employees are General Schedule (GS) and subject to the Administration's proposed cost-of-living adjustment; salaries of the remaining 46 percent (craft workers and power system dispatchers) are determined through union negotiations and wage surveys. This activity also includes overtime, awards, relocation, workers' compensation, recruitment bonuses, retention pay, and advanced in-hire rates. The increase in funding is due to salary and within grade increases, including salaries determined by prevailing rates in the electric utility industry.

Travel	**847**	**938**	**1,045**

This activity funds all related travel and per diem expenses for mission-related travel to maintain the integrity and reliability of Southwestern's geographically dispersed power system. The funding level for this activity is primarily derived from the daily requirement of the field maintenance personnel to maintain 1,380 miles of transmission line, 25 substations/switchyards, 51 microwave/radio sites, communication equipment, and the Supervisory Control and Data Acquisition network. Travel for the performance of general and administrative functions is also included. The increase in funding for this activity is due to rising per diem costs, GovTrip usage fees, and transportation rates due to increased fuel costs.

Support Services	**1,718**	**2,212**	**2,580**

This activity funds contracted management support services including information technology, E-Government, and administrative/records management support. The funding level for this activity is derived from the most recent negotiated contract for support services essential to achieve Southwestern's mission. The increase in funding for this activity reflects the terms of the recent negotiated contract.

Other Related Expenses	**2,106**	**2,715**	**2,798**

This activity funds rental space, facility security, financial audit, services of the Power Marketing Liaison Office, working capital fund, technology refresh in the areas of personal computers, hardware and software, printing and reproduction, and training and tuition fees in support of workforce planning and required training to meet the North American Electric Reliability Corporation (NERC) emergency operations requirement. Rental space costs assume the GSA inflation factor. Other costs are based on the historical usage and actual cost of similar items. The increase in funding for this activity is primarily due to additional training and the financial audit.

Total, Program Direction	**24,330**	**27,153**	**28,381**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Salaries and Benefits	
▪ Increase reflects survey-based wage determinations, union-negotiated and Administratively Determined pay adjustments, and salary and within grade increases.	+670
Travel	
▪ The increase in funding for this activity is due to rising per diem costs, GovTrip usage fees, and transportation rates due to increased fuel costs.	+107
Support Services	
▪ Increase reflects funding for support services per the recent negotiated contract.	+368
Other Related Expenses	
▪ Increase in funding for this activity is primarily due to increased training and the financial audit.	+83
Total Funding Change, Program Direction	**+1,228**

Support Services by Category

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Management Support			
Reports and Analysis Management and General Administrative Services	1,718	2,212	2,580
Subtotal, Management Support	1,718	2,212	2,580
Total, Support Services	1,718	2,212	2,580

Other Related Expenses by Category

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Other Related Expenses			
Training	178	190	200
Printing and Reproduction	49	49	50
Rent to Others	691	705	700
Employee Parking	83	84	85
Financial Audit	294	364	382
Power Marketing Liaison Office	140	140	140
Supplies and Materials	177	200	200
Working Capital Fund	88	160	160
Equipment	98	100	100
Other	308	723	781
Total, Other Related Expenses	2,106	2,715	2,798

Revenues and Receipts

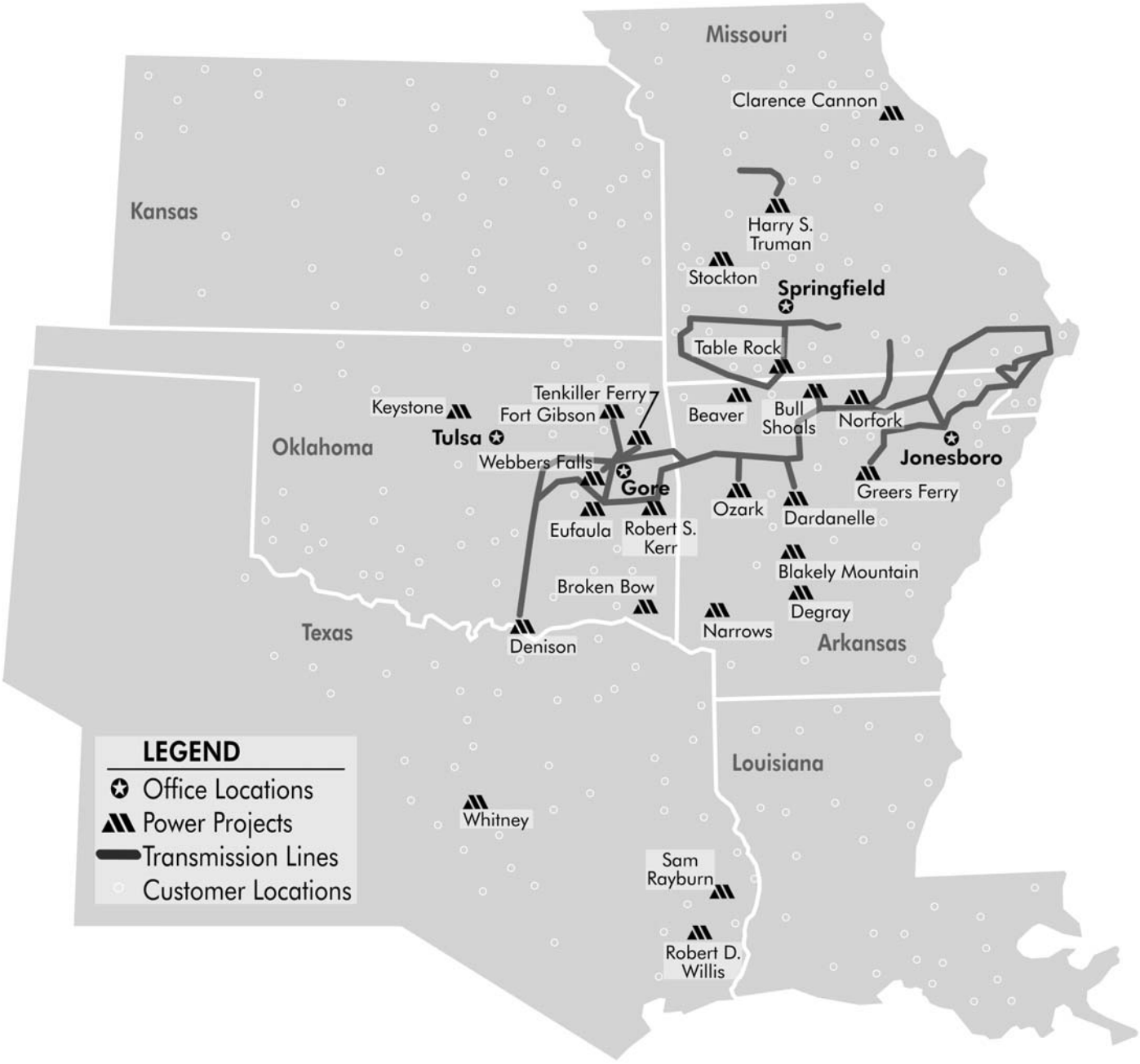
(dollars in thousands)

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Gross Revenues							
Sale and Transmission of Electric Energy	181,987	196,900	204,500	205,600	207,400	208,400	209,400
Total, Gross Revenues	181,987	196,900	204,500	205,600	207,400	208,400	209,400
Alternative Financing Credited as an Offsetting Receipt, Net Billing/Bill Crediting	-52,499	-57,400	-58,400	-59,400	-60,400	-61,500	-62,500
Offsetting Collections, Southwestern							
Annual Expenses (Net Zero)	0	-31,868	-33,613	-35,100	-36,399	-37,671	-37,890
Offsetting Collections Realized, Purchased Power and Wheeling	-1,550	-38,000	-39,000	-40,000	-41,000	-42,000	-43,000
White River Minimum Flows Legislation	0	-40,000	0	0	0	0	0
Adjustments not otherwise Classified	4,873	0	0	0	0	0	0
Continuing Fund Usage for PPW	-12,979	0	0	0	0	0	0
Total Proprietary Receipts	119,832	29,632	73,487	71,100	69,601	67,229	66,010
Percent of Sales to Preference Customers	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Energy Sales from Power Marketed (billions of kilowatt hours)	5.4	5.4	5.4	5.4	5.4	5.4	5.4

System Statistics

	FY 2009 Actual	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate
Generating Capacity (kilowatts)							
Installed Capacity	2,173,800	2,173,800	2,173,800	2,173,800	2,173,800	2,173,800	2,173,800
Peak Capacity	2,052,500	2,052,500	2,052,500	2,052,500	2,052,500	2,052,500	2,052,500
Generating Stations							
Generating Projects (Number)	24	24	24	24	24	24	24
Substations/Switchyards (Number)[a]	25	25	25	25	25	25	25
Substations/Switchyards (kVA Capacity)	1,026,900	1,026,900	1,026,900	1,026,900	1,026,900	1,026,900	1,026,900
Available Energy (Megawatt-hours)							
Energy Generated	6,263,469	5,444,100	5,415,000	5,412,700	5,412,700	5,412,700	5,412,700
Energy Received	58,528	188,100	209,000	209,700	209,700	209,700	209,700
Total, Energy Available for Marketing	6,321,997	5,632,200	5,624,000	5,622,400	5,622,400	5,622,400	5,622,400
Transmission Lines (Circuit-Miles)							
161-KV	1,117	1,117	1,117	1,117	1,117	1,117	1,117
138-KV	164	164	164	164	164	164	164
69-KV	99	99	99	99	99	99	99
Total, Transmission Lines	1,380	1,380	1,380	1,380	1,380	1,380	1,380

System Map


Missouri
Clarence Cannon
Kansas
Harry S. Truman
Stockton
Springfield
Table Rock
Tenkiller Ferry
Keystone
Fort Gibson
Beaver
Bull Shoals
Norfork
Tulsa
Oklahoma
Webbers Falls
Jonesboro
Gore
Greers Ferry
Ozark
Dardanelle
Eufaula
Robert S. Kerr
Blakely Mountain
Broken Bow
Degray
Narrows
Texas
Denison
Arkansas
LEGEND
Office Locations
Power Projects
Transmission Lines
Customer Locations
Louisiana
Whitney
Sam Rayburn
Robert D. Willis

Power Marketed, Wheeled, or Exchanged by Project

	State	Number of Plants	Installed Capacity (kW)	FY 2009 Actual Energy (GWh)	FY 2010 Estimated Energy (GWh)	FY 2011 Estimated Energy (GWh)	FY 2012 Estimated Energy (GWh)	FY 2013 Estimated Energy (GWh)	FY 2014 Estimated Energy (GWh)	FY 2015 Estimated Energy (GWh)
Power Marketed Interconnected System	Missouri	4	463,200	2,160	1,849	1,846	1,846	1,845	1,845	1,845
	Arkansas	9	1,037,100	1,192	1,020	1,019	1,018	1,018	1,018	1,018
	Oklahoma	7	514,100	1,311	1,123	1,121	1,121	1,121	1,121	1,121
	Texas	2	100,000	543	465	465	465	465	465	465
	Louisiana	0	0	437	375	374	374	374	374	374
	Kansas	0	0	485	416	415	415	415	415	415
Subtotals		22	2,114,400	6,128	5,248	5,240	5,239	5,238	5,238	5,238
Isolated:										
Robert D. Willis Project										
Sam Rayburn Project										
50% to Texas		2	59,400	28	76	76	76	76	76	76
50% to Louisiana		0	0	28	76	76	76	76	76	76
Subtotals		2	59,400	56	152	152	152	152	152	152
Total, Power Marketed		24	2,173,800	6,184	5,400	5,392	5,391	5,390	5,390	5,390
Power Wheeled/Exchanged										
Wheeled (MW)				1,177	1,273	1,293	1,305	1,305	1,305	1,305
Exchanged (GWh)				34	0	0	0	0	0	0

Western Area Power Administration

Western Area Power Administration

Construction, Rehabilitation, Operation and Maintenance

Western Area Power Administration

Proposed Appropriation Language

For carrying out the functions authorized by title III, section 302(a)(1)(E) of the Act of August 4, 1977 (42 U.S.C. 7152), and other related activities including conservation and renewable resources programs as authorized, including official reception and representation expenses in an amount not to exceed $1,500; **[**$256,711,000**]** *$285,864,000* to remain available until expended, of which **[**$245,216,000**]** *$277,430,000* shall be derived from the Department of the Interior Reclamation Fund: *Provided*, That notwithstanding 31 U.S.C. 3302, section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), and section 1 of the Interior Department Appropriation Act, 1939 (43 U.S.C. 392a), up to **[**$147,530,000**]** *$180,306,000* collected by the Western Area Power Administration from the sale of power and related services shall be credited to this account as discretionary offsetting collections, to remain available until expended, for the sole purpose of funding the annual expenses of the Western Area Power Administration: *Provided further*, That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year **[**2010**]** *2011* appropriation estimated at not more than **[**$109,181,000**]** *$105,558,000*, of which **[**$97,686,000**]** *$97,124,000* is derived from the Reclamation Fund: *Provided further*, That of the amount herein appropriated, **[**$7,584,000**]** *$7,627,000* is for deposit into the Utah Reclamation Mitigation and Conservation Account pursuant to title IV of the Reclamation Projects Authorization and Adjustment Act of 1992: *Provided further*, That notwithstanding 31 U.S.C. 3302, up to **[**$349,807,000**]** *$350,919,000* collected by the Western Area Power Administration pursuant to the Flood Control Act of 1944 and the Reclamation Project Act of 1939 to recover purchase power and wheeling expenses shall be credited to this account as offsetting collections, to remain available until expended for the sole purpose of making purchase power and wheeling expenditures**[**: *Provided further*, That of the amount herein appropriated, up to $18,612,000 is provided on a nonreimbursable basis for environmental remediation at the Basic Substation site in Henderson, Nevada: *Provided further*, That notwithstanding 31 U.S.C. 3302, section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), and section 1 of the Interior Department Appropriation Act, 1939 (43 U.S.C. 392a), funds collected by the Western Area Power Administration from the sale of power and related services that are applicable to the repayment of the annual expenses of this account in this and subsequent fiscal years shall be credited to this account as discretionary offsetting collections for the sole purpose of funding such expenses, with such funds remaining available until expended**]**: *Provided further*, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred (excluding purchase power and wheeling expenses). (Energy and Water Development and Related Agencies Appropriations Act, 2010.)

Explanation of Change

Permanent language enacted in FY 2010 reclassifying receipts associated with annual expenses is removed; the language does not require reenactment to remain in effect. Language providing nonreimbursable appropriations for environmental remediation at the Basic Substation site is removed.

Falcon and Amistad Operating and Maintenance Fund

Proposed Appropriation Language

For operation, maintenance, and emergency costs for the hydroelectric facilities at the Falcon and Amistad Dams, **[**$2,568,000**]** *$3,715,000*, to remain available until expended, and to be derived from the Falcon and Amistad Operating and Maintenance Fund of the Western Area Power Administration, as provided in section 2 of the Act of June 18, 1954 (68 Stat. 255) as amended: *Provided,* That notwithstanding the provisions of that Act and of 31 U.S.C. 3302, up to [$2,348,000] *$3,495,000* collected by the Western Area Power Administration from the sale of power and related services from the Falcon and Amistad Dams shall be credited to this account as discretionary offsetting collections, to remain available until expended for the sole purpose of funding the annual expenses of the hydroelectric facilities of these Dams and associated Western Area Power Administration activities: *Provided further,* That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year **[**2010**]** *2011* appropriation estimated at not more than $220,000**[**: *Provided further*, That notwithstanding the provisions of section 2 of the Act of June 18,1954(68 Stat. 255), as amended, and 31 U.S.C. 3302, all funds collected by the Western Area Power Administration from the sale of power and related services from the Falcon and Amistad Dams that are applicable to the repayment of the annual expenses of the hydroelectric facilities of these Dams and associated Western Area Power Administration activities in this and subsequent fiscal years shall be credited to this account as discretionary offsetting collections for the sole purpose of funding such expenses, with such funds remaining available until expended**]**: *Provided further,* That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred. (*Energy and Water Development and Related Agencies Appropriations Act, 2010.)*

Explanation of Change

Language removed speaks to reclassification of the receipts associated with annual expenses from mandatory to discretionary and sets forth the use of these receipts to offset the appropriations for annual expenses as first approved in the 2010 appropriation language.

Western Area Power Administration

Overview

Appropriation Summary by Program

(dollars in thousands)

	FY 2009 Current Appropriation	FY 2009 Current Recovery Act Appropriation	FY 2010 Current Appropriation	FY 2011 Request
Western Area Power Administration				
Construction, Rehabilitation, Operation and Maintenance (CROM)	901,634	10,000 [a]	899,317	912,890
Less use of alternative financing [b]	-276,804	0	-288,920	-271,895
Offsetting collections from Colorado River Dam Fund (P.L. 98-381)	-3,366	0	-3,879	-4,212
Offsetting collections, annual Operation and Maintenance and Program Direction expenses	0	0	-147,530	-180,306
Offsetting collections, Purchase Power and Wheeling expenses	-403,118	0	-349,807	-350,919
Total, CROM	218,346	10,000	109,181	105,558
Falcon and Amistad Operating and Maintenance Fund (Falcon and Amistad)	2,959	0	2,568	3,715
Offsetting collections, annual operation and maintenance expenses	0	0	-2,348	-3,495
Total, Falcon and Amistad	2,959	0	220	220
Colorado River Basins Power Marketing Fund (CRBPMF) operating expenses	240,284	0	261,723	227,303
Offsetting collections realized	-263,284	0	-284,723	-250,303
Total, CRBPMF	-23,000	0	-23,000	-23,000
Total, Western Area Power Administration	198,305	10,000	86,401	82,778
Reclassification of Mandatory Receipts to Discretionary Offsetting Collections	0	0	+149,878	0

[a] $10,000,000 was enacted in the American Recovery and Reinvestment Act of 2009 for Western to implement activities authorized in Section 402 of the Act.

[b] FY 2009, FY 2010, and FY 2011 CROM funding amounts include $197,842,000, $199,040,000, and $192,703,000 respectively, for planned alternative financing of the PPW subprogram; including use of Western's Continuing Fund as necessary to respond to below normal hydropower generation conditions. In addition, the FY 2009, FY 2010, and FY 2011 CROM funding amounts include $78,962,000, $89,880,000, and $79,192,000 respectively, for planned alternative financing of Western's Construction & Rehabilitation, Operation & Maintenance and Program Direction subprograms.

Preface

The Department of Energy (DOE) leads a critical effort to build a competitive, low-carbon economy and secure America's energy future in promoting a diverse supply of reliable, affordable, environmentally-sound energy. Western Area Power Administration (Western), in conjunction with the U.S. Army Corps of Engineers (Corps), U.S. Bureau of Reclamation (BOR) and the Department of State's International Boundary and Water Commission (IBWC), strongly supports this effort in managing the multipurpose operation of the Federal hydropower system to reliably deliver renewable energy across a high-voltage, integrated transmission system.

Within the three appropriation accounts (e.g. Construction, Rehabilitation, Operation and Maintenance Account (CROM), the Falcon and Amistad Operating and Maintenance Fund, and the Colorado River Basins Power Marketing Fund (CRBPMF)), there is one program: the Western Area Power Administration. Within Western, there are a total of eight subprograms; five in the CROM Account, one in the Falcon and Amistad Operating and Maintenance Fund and two in CRBPMF. Consistent with the authority provided in the 2010 Energy and Water Appropriations, the FY 2011 Budget provides funding for the annual expenses (operation and maintenance and program direction) through discretionary offsetting collections derived from power receipts collected to recover those expenses.

Mission

Western markets and delivers reliable, cost-based Federal hydroelectric power and related services throughout the central and western United States.

Benefits

Western's marketing efforts and delivery capability span a 1.3-million-square-mile area serving a diverse group of approximately 665 wholesale customers, including municipalities, cooperatives, public utility and irrigation districts, Federal and State agencies and Native American tribes. In turn, wholesale power is used to provide service to millions of retail consumers.

American Recovery and Reinvestment Act (Recovery Act)

- The American Recovery and Reinvestment Act of 2009 provided Western $10 million in nonreimbursable appropriations to implement activities authorized in section 402 of the Act.
- The Act provided Western borrowing authority for constructing, financing, facilitating, planning, operating, maintaining or studying construction of new or upgraded electric power transmission lines and related facilities with at least one terminus within the area served by Western; and for delivering or facilitating the delivery of power generated by renewable energy resources constructed or reasonably expected to be constructed after the date of enactment. This authority to borrow from the U.S. Treasury is available to Western on a permanent, indefinite basis, with the amount of borrowing not to exceed $3.25 billion at any one time. Western established a separate program and office to administer borrowing authority and to comply with the transparency and reporting requirements established under the Act. The new Transmission Infrastructure Program will support both Western and DOE priorities by facilitating the delivery of renewable energy resources to market.

Performance

Western, through its three appropriation accounts indentified above, contributes to the Secretary's Energy Goal to build a competitive, low-carbon economy and secure America's energy future, by performing its mission in a manner that promotes development of higher capacity U.S. energy

infrastructure to ensure flexible, reliable operations and efficient energy markets. Specifically, Western is modernizing its energy infrastructure, incrementally improving facilities to increase transmission capacity and enhance grid reliability to support continuing utility industry change, requests for interconnection to the Federal system and evolving regional needs and increasing interest in renewable resources. Western also jointly plans, develops, and finances system enhancements, encouraging partnerships for transmission development by fostering cooperation and economic coordination among transmission partners.

Means and Strategies

Western will use various means and strategies outlined below to achieve its GPRA Unit Program Goal to ensure customers continue to receive the maximum benefit from Federal resources. Although various external factors may impact Western's ability to achieve this goal, through the collaborative support of our Federal power partners, Western will continue to market and deliver cost-based, high-value power products and services that support Department efforts to ensure America's energy future.

Western will implement the following means:

- Improve the capability, performance and reliability of the integrated grid through technology and equipment enhancements.
- Strengthen ability to participate in large-scale transmission projects to improve Western's transmission infrastructure, maintain or enhance system reliability, support customer projects and increase the overall effectiveness of the nation's integrated grid.
- Improve workforce organizational capabilities and employee skills; hiring, training, and retaining a high-performing team to carry out the agency's mission.
- Operate the Federal power system efficiently, updating power system operation technologies to maintain required industry reliability standards and compliance.
- Conduct business process reviews to maximize organizational capabilities, improve organizational efficiency and better align or design the agency to meet growing demands in complying with transmission service commitments and energy policy requirements.

Western will continue to implement the following strategies:

- Ensure efficient transmission system operations to support the Nation's integrated power grid.
- Maintain and modernize systems and infrastructure to increase the reliability, efficiency, and use of Federal assets.
- Use sound business practices and prudent risk management in the conduct of agency activities and operations.
- Meet the increasing demands on maintenance for our aging infrastructure, from transmission growth and evolving transmission and regulatory reliability compliance standards.
- Manage power delivery costs.
- Participate in decision-making processes with natural resource agencies and others where decisions will affect Federal hydropower generation.
- Participate in reliability and restructuring initiatives in Federal, state and industry forums and transmission studies, as an advocate for customer benefits.
- Continue to provide open access to Western's transmission system in furthering industry restructuring and to support local/regional utilities in the delivery of electricity to their customers.

These strategies will result in a well-maintained, reliable Federal power system, and an exemplary workforce to operate and maintain the system in the most efficient and cost effective manner possible.

The following external factors may affect Western's ability to achieve its goal: Generally, system reliability can be affected by weather, natural disasters, changes in North American Electric Reliability Corporation (NERC) operating standards, industry deregulation, changing electric industry organizational structures, interconnections, open access and the lack of adequate funding resources. More specifically:

- The Nation's energy infrastructure is not keeping pace with the growth in energy supply and demand, thereby endangering the reliability of the integrated electrical system.
- Western's transmission infrastructure continues to age, despite an ongoing replacement program.
- A number of states have adopted aggressive Renewable Portfolio Standards calling for the integration of renewable resources into the Nation's energy mix further straining the grid.
- Grid operations are becoming more complex.
- Many of the best sites for these renewable generating sources--wind, solar and biomass--are located in parts of the West and Midwest that are not near load centers, and many of the nearby transmission lines lack available capacity to transport this energy.
- Industry efforts to improve the reliability of the bulk power grid are placing more requirements on our workforce to implement mandatory reliability standards.
- Our highly-skilled technical workforce continues to age and we are competing with the rest of the electric utility industry to attract and retain the caliber of workforce needed to provide reliable power supply and transmission services.

Successful collaboration on program activities among Federal partners, including the Corps, BOR, IBWC, customers, and regional utilities, is necessary for Western to achieve its goal to market and reliably deliver Federal power to customers, and to provide for the most efficient use of Federal assets and resources.

Validation and Verification

Western's performance results are validated and verified annually by an independent accounting firm as part of the Department's annual financial statement audit. The power supply and delivery reliability measures are also benchmarked against NERC operating standards for the electric utility industry; whereas, Western's efficiency measure to manage operation and maintenance costs associated with Federal power assets and infrastructure is benchmarked annually against public power entities in the utility industry.

The performance targets and associated performance reporting by the PMAs are synchronized to allow benchmarking of performance and costs as we look for efficiencies in operating, maintaining, and enhancing the Federal grid.

Western's program is subject to continuing independent review by external entities to include Congress (Congressional Research Service), the Government Accountability Office, the Department's Office of Inspector General, Federal Energy Regulatory Commission (FERC), the U.S. Environmental Protection Agency, Office of Personnel Management, NERC and regional reliability councils.

To ensure the continuous operation and reliability of the power system, Western partners with the Department's Office of Cyber Security and Special Reviews and the other power marketing administrations (PMAs) to recertify and accredit mission-critical SCADA systems under the U.S. Department of Commerce's National Institute of Standards and Technology to ensure energy security.

Other

Western's performance targets are extremely ambitious in light of the increasingly fast-paced and complex nature and environment within the electric utility industry, as coupled with the challenges associated with operating, maintaining and expanding the grid to meet future needs. However, Western will ensure it is positioned to effectively address industry trends and issues─be they regulatory, budgetary, legislative, environmental or any other initiatives "not yet conceived"; and will continue to market and deliver Federal power to our customers and contribute to enhancing America's energy security.

Annual Performance Targets and Results

Secretarial Goal: Energy

GPRA Unit Program Goal: Western Area Power Administration

FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
System Reliability Performance Measure: Meet North American Electric Reliability Corporation (NERC) Control Performance Standards (CPS) of CPS1>100 and CPS2>90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.									
T: CPS1>100, CPS2>90 A: CPS1 184.4, CPS2 98.7	T: CPS1>100, CPS2>90 A: CPS1 181.1, CPS2 98.6	T: CPS1>100, CPS2>90 A: CPS1 187.3, CPS2 99.2	T: CPS1>100, CPS2>90 A: CPS1 188.5, CPS2 99.45	T: CPS1>100, CPS2>90 A:	T: CPS1>100, CPS2>90 A:	T: CPS1>100, CPS2>90 A:	T: CPS1>100, CPS2>90 A:	T: CPS1>100, CPS2>90 A:	T: CPS1>100, CPS2>90 A:
System Reliability Performance Measure: Effectively operate the transmission system to limit the number of accountable outages to no more than 26 annually.									
	T: <=26 A: 18	T: <=26 A: 22	T: <=26 A: 15	T: <=26 A:	T: <=26 A:	T: <=26 A:	T: <=26 A:	T: <=26 A:	T: <=26 A:
Repayment of Investment Performance Measure: Ensure timely repayment of Federal investment in accordance with DOE Order RA 6120.2 by maintaining unpaid investment (UI) equal to or less than the allowable unpaid investment (AUI) **(Definition Revised in 2010).**									
	T: UI/AUI<=1 A: UI/AUI<=1	T: UI/AUI<=1 A: UI/AUI<=1	T: UI/AUI<=1 A: UI/AUI<=1	T: UI/AUI<=1 A:	T: UI<=$8,850 million A:	T: UI<=$8,879 million A:	T: UI<=$8,656 million A:	T: UI<=$8,515 million A:	T: UI<=$8,325 million A:
Efficiency Performance Measure: Provide power at the lowest possible cost by keeping total operation and maintenance expense per kilowatt-hour generated below the national median for public power.*									
				T:<$0.062/kWh A:	T:<$0.062/kWh A:	T:<$0.062/kWh A:	T:<$0.062/kWh A:	T:<$0.062/kWh A:	T:<$0.062/kWh A:

*Performance Measure was added in FY 2010. Future year targets will be adjusted based on the actual national median for public power.

Construction, Rehabilitation, Operation and Maintenance
Western Area Power Administration

Funding by Site by Program

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Western Area Power Administration	901,634	899,317	912,890
Total, Construction, Rehabilitation, Operation and Maintenance	901,634	899,317	912,890

Site Description

Western's service area covers 1.3-million square-miles in 15 States. Western markets and delivers energy to about 665 wholesale power customers. These customers, in turn, provide retail electric service to millions of consumers in these central and western States: Arizona, California, Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Texas, Utah and Wyoming.

Western annually markets and transmits about 10,000 megawatts of power from 56 hydropower plants and sells about 40 percent of regional hydroelectric generation. Western also markets the United States' entitlement from the coal-fired Navajo Generating Station near Page, Arizona.

Western operates and maintains an extensive and complex high-voltage transmission system to deliver power to its customers. Using its 17,107-circuit-mile Federal transmission system, Western will market and deliver reliable electric power to most of the western half of the United States.

The power facilities are made up of 14 multipurpose water resource projects and one transmission project. The systems include Western's transmission facilities and power generation facilities owned and operated primarily by the U.S. Bureau of Reclamation, the U.S. Army Corps of Engineers and the U.S. Section of the International Boundary and Water Commission.

Power sales, transmission operations and engineering services for Western's system are accomplished by its employees at 51 duty stations located throughout its service area. These include the Corporate Services Office in Lakewood, Colorado, and four customer service regional offices in Billings, Montana; Loveland, Colorado; Phoenix, Arizona; and Folsom, California. The Colorado River Storage Project Management Center in Salt Lake City, Utah, also provides customer support.

Falcon and Amistad Operating and Maintenance Fund
Western Area Power Administration

Funding by Site by Program

(dollars in thousands)

	FY 2009	FY 2010	FY 2011
Western Area Power Administration	2,959	2,568	3,715
Total, Falcon and Amistad Operating and Maintenance Fund	2,959	2,568	3,715

Site Description

The Falcon-Amistad Project consists of two international dams located on the Rio Grande River between Texas and Mexico. The United States and Mexico operate separate powerplants on each side of the Rio Grande River. The power output is divided evenly between the two Nations. The Department of State's International Boundary and Water Commission (IBWC) owns and operates the U.S. portion of the projects.

Falcon Dam is located about 130 miles upstream from Brownsville, Texas. The United States' portion of construction, operation and maintenance was authorized by Congress in 1950. Construction was started in that year and completed in 1954. The United States' share of Falcon Powerplant capacity is 31.5 megawatts (MW). The powerplant came on line in 1954.

Amistad Dam is located about 300 miles upstream from Falcon Dam. The Amistad Powerplant was constructed by the U.S. Army Corps of Engineers, as agent for the IBWC. The United States' portion of construction, operation and maintenance was authorized by the Mexican-American Treaty Act of 1950. Amistad Dam was completed in 1969. The United States' share of the two generating units, which came on line in 1983, is 66.0 MW.

Project power is marketed to a cooperative in south Texas via Central Power and Light Company's transmission system. There is no Federal transmission associated with these two projects.

Colorado River Basins Power Marketing Fund
Western Area Power Administration

Funding by Site by Program

(dollars in thousands)

	FY 2009	FY 2010	FY 2011
Western Area Power Administration	240,284	261,723	227,303
Total, Colorado River Basins Power Marketing Fund	240,284	261,723	227,303

Site Description

The Colorado River Basins Power Marketing Program is comprised of three power systems: the Colorado River Storage Project, including the Dolores and Seedskadee Projects; the Fort Peck Project; and the Colorado River Basin Project. Western Area Power Administration is responsible for construction, maintenance, and operation of facilities for transmitting and marketing the electrical energy generated in these power systems. A brief description of each follows:

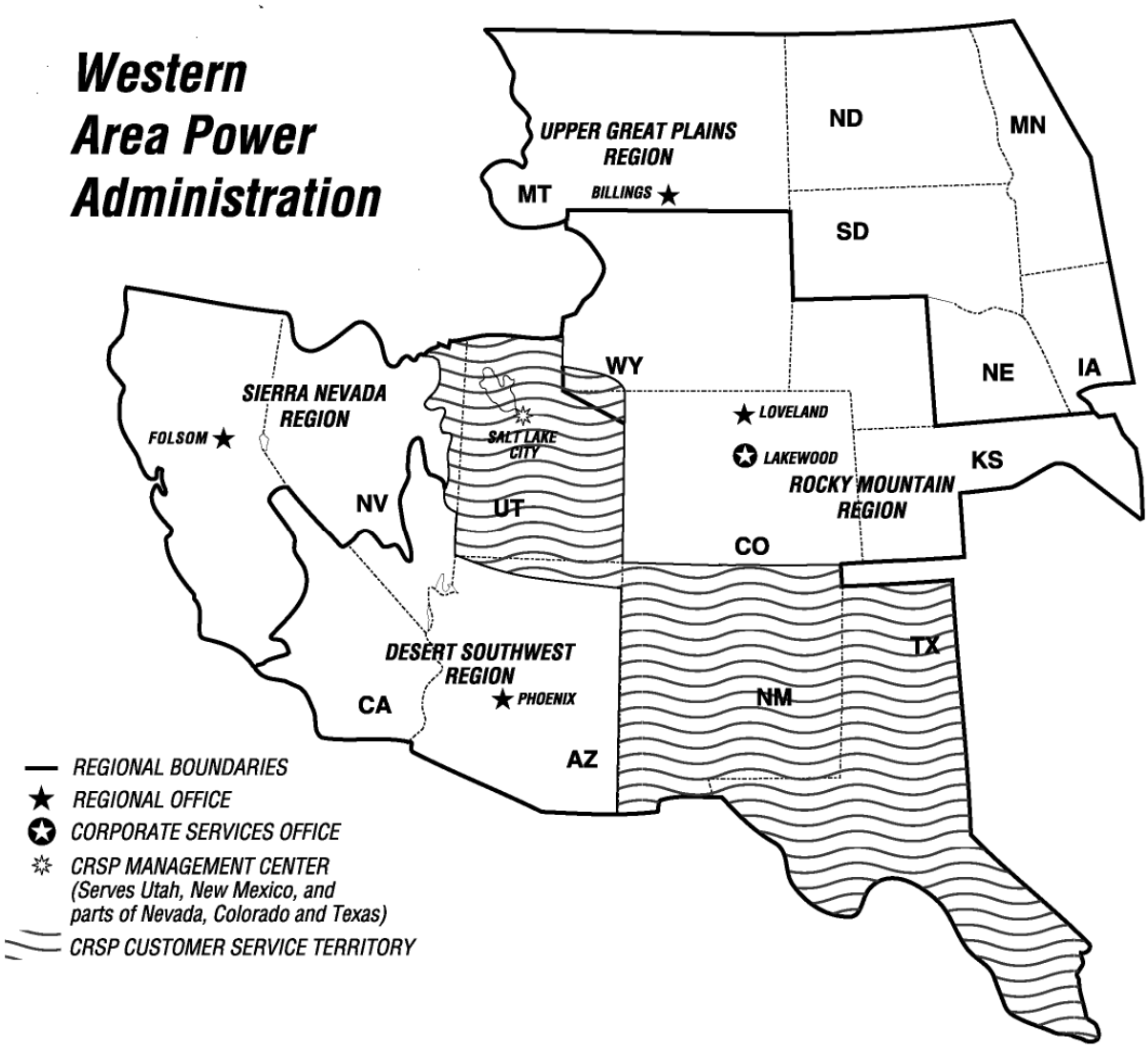
The **Colorado River Storage Project** (CRSP) was authorized in 1956. It consists of four major storage units: Glen Canyon, on the Colorado River in Arizona near the Utah border; Flaming Gorge on the Green River in Utah near the Wyoming border; Navajo on the San Juan River in northwestern New Mexico; and the Wayne N. Aspinall unit on the Gunnison River in west-central Colorado.

CRSP has a combined storage capacity that exceeds 33.5 million acre-feet. Five Federal powerplants associated with the project, with 16 generating units, have an operating capacity of 1,710 MW. CRSP provides for the electrical needs of more than a million people spread across Colorado, Utah, New Mexico and Arizona. Portions of Nevada and Wyoming are also served by CRSP power.

The **Dolores Project**, located in Montezuma and Dolores counties in southwestern Colorado, and the **Seedskadee Project**, located in southwestern Wyoming, were authorized as participating projects of CRSP. Dolores, a multipurpose project, provides 12.8 MW of installed power generating capacity along with municipal and industrial water, irrigation water, and recreation and fish and wildlife enhancement. The Dolores Project powerplants at McPhee Dam and the Towaoc Canal produce 1.3 and 11.5 MW, respectively. Seedskadee's power facilities, associated with the project's Fontenelle Dam, include an 11.5-MW powerplant, switchyard and necessary transmission lines to interconnect with the CRSP transmission system at Flaming Gorge Powerplant.

The **Fort Peck Project**, located on the Missouri River in northeastern Montana, was begun under an Executive Order in October 1933 as part of the Public Works Administration. The Fort Peck Project Act of 1938 authorized the completion, maintenance and operation of the project, and the Flood Control Act of 1944 authorized operational integration of the project with the Pick-Sloan Missouri Basin Program to serve a common market area. Installed generating capacity of the 5 units is 218 MW, which is delivered primarily to customers in eastern Montana and western North Dakota.

The Central Arizona Project (CAP) was authorized as an element of the **Colorado River Basin Project** to furnish irrigation and municipal water supplies to Arizona and New Mexico, and for other purposes. For financing, Western uses reimbursable arrangements to provide for its CAP expenses in lieu of revolving fund authorities.


Western
Area Power
Administration
UPPER GREAT PLAINS
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LAKEWOOD
ROCKY MOUNTAIN
REGION
KS
CO
DESERT SOUTHWEST
REGION
PHOENIX
CA
AZ
NM
TX
REGIONAL BOUNDARIES
REGIONAL OFFICE
CORPORATE SERVICES OFFICE
CRSP MANAGEMENT CENTER
(Serves Utah, New Mexico, and
parts of Nevada, Colorado and Texas)
CRSP CUSTOMER SERVICE TERRITORY

Construction, Rehabilitation, Operation and Maintenance

Funding Profile by Subprogram

(dollars in thousands)

	FY 2009 Current Appropriation	FY 2009 Current Recovery Act Appropriation	FY 2010 Current Appropriation	FY 2011 Request
Construction, Rehabilitation, Operation and Maintenance (CROM)				
Operation and Maintenance (O&M) [a]	52,365	0	57,159	57,793
Construction and Rehabilitation [b]	74,544	0	104,971	109,887
Purchase Power and Wheeling (PPW) [c]	600,960	0	548,847	543,622
Program Direction [d]	166,423	10,000	180,756	193,961
Utah Mitigation and Conservation	7,342	0	7,584	7,627
Total, CROM (Operating Expenses)	901,634	10,000	899,317	912,890
Use of Alternative Financing	-276,804	0	-288,920	-271,895
Offsetting Collections–Colorado River Dam Fund (P.L. 98-381)	-3,366	0	-3,879	-4,212
Offsetting Collections, annual Operation and Maintenance and Program Direction expenses	0	0	-147,530	-180,306
Offsetting Collections–PPW (P.L. 108-447, P.L. 109-103)	-403,118	0	-349,807	-350,919
Total, CROM (Budget Authority)	218,346	10,000	109,181	105,558
Reclassification of Mandatory Receipts to Discretionary Offsetting Collections	0	0	+147,530	0

Public Law Authorizations:
Public Law 57-161, "The Reclamation Act of 1902"
Public Law 78-534, "Flood Control Act of 1944"
Public Law 95-91, "Department of Energy Organization Act" (1977)
Public Law 102-486, "Energy Policy Act of 1992"
Public Law 66-389, "Sundry Civil Appropriations Act" (1922)
Public Law 76-260, "Reclamation Project Act of 1939"
Public Law 80-790, "Emergency Fund Act of 1948"

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[a] O&M funding amounts include activities of the Boulder Canyon Project which are funded through Colorado River Dam Fund receipts via a reimbursable agreement with the Department of Interior as authorized in P.L. 98-381. By year, the amounts are $803,000, $867,000 and $962,000 for FY 2009, FY2010, and FY 2011, respectively. Funding also includes use of alternative financing methods in the amount of $15,499,000, $400,000, and $3,623,000 for FY 2009, FY 2010, and FY 2011, respectively.
[b] Construction and Rehabilitation funding includes use of alternative financing methods in the amount of $47,663,000, $83,760,000, and $72,843,000 for FY 2009, FY 2010, and FY 2011, respectively.
[c] PPW program includes use of receipts from the recovery of PPW expenses of $403,118,000, $349,807,000, and $350,919,000 in FY 2009, FY 2010, and FY 2011, respectively. In addition, alternative financing methods are included in the amounts of $197,842,000, $199,040,000, and $192,703,000 for FY 2009, FY 2010, and FY 2011, respectively.
[d] Program Direction funding amounts include activities of the Boulder Canyon Project funded through the Colorado River Dam Fund via a reimbursable agreement in the amounts of $2,563,000, $3,012,000, and $3,250,000 for FY 2009, FY 2010, and FY 2011, respectively. Funding also includes use of alternative financing methods in the amount of $15,800,000, $5,720,000, and $2,726,000 for FY 2009, FY 2010, and FY 2011, respectively.

Public Law Authorizations:
Public Law 102-575, "Reclamation Projects Authorization and Adjustment Act of 1992"
"Economy Act" of 1932, as amended (41 stat. 613)
"Interior Department Appropriation Act of 1928" (44 stat. 957)
Public Law 70-642, "Boulder Canyon Project Act" (1928)
Public Law 75-756, "Boulder Canyon Project Adjustment Act" (1940)
Public Law 98-381, "Hoover Power Plant Act of 1984"

Mission

Western markets and delivers reliable, cost-based Federal hydroelectric power and related services.

Benefits

Western delivers reliable power and related services across a 1.3-million-square-mile area to a diverse group of about 665 customers, including municipalities, cooperatives, public utility and irrigation districts, Federal and State agencies, and Native American tribes. Western's marketing efforts and delivery capability provide for recovery of annual operational costs, including the generating agencies' hydropower related costs, and repayment of taxpayer investment in the Federal hydropower program. Western repays the Federal investment for which it is responsible within the timeframes established by law and regulations.

Operation and Maintenance
Funding Schedule by Activity

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Operation and Maintenance [a]			
Regular Operation and Maintenance	29,166	38,305	32,232
Replacements and Additions	23,199	18,854	25,561
Total, Operation and Maintenance	52,365	57,159	57,793
Alternative Financing	-15,499	-400	-3,623
Use of Receipts from Colorado River Dam Fund	-803	-867	-962
Offsetting Collections, Annual Expenses	0	-37,038	-31,270
Total, O&M Budget Authority	36,063	18,854	21,938

Description

The mission of Western's Operation and Maintenance (O&M) subprogram is to assure continued reliability of the Federal power system by operating and maintaining Western's transmission system at or above industry standards, including replacement of aging equipment and removal of constraints which would impede power flows.

Benefits

Western's O&M subprogram supports Secretary's Energy Goal to build a competitive, low-carbon economy and secure America's energy future, by emphasizing replacement and upgrading of existing electrical system infrastructure to sustain reliable power delivery to our customers, to support a stable and reliable interconnected power system, to contain annual maintenance expenses, and to retain the value of our assets. Western ensures reliable electric power in a safe, cost-effective manner, and achieves continuity of service throughout its 15-State service territory by maintaining its power system at or above industry maintenance standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing revenues gained from non-firm energy and transmission sales.

Detailed Justification

Supplies and materials, such as wood poles, instrument transformers, meters and relays must be procured to provide the necessary resources to respond to routine and emergency situations in Western's high-voltage interconnected transmission system. Western implemented reliability-centered maintenance (RCM) scheduling to contain costs. RCM focuses on identifying critical components in a system and uses preventive and predictive maintenance practices to repair or replace equipment as

[a] Program descriptions and funding amounts include activities of the Boulder Canyon Project. These activities are funded through receipts from the Colorado River Dam Fund via a reimbursable agreement with the Department of Interior as authorized in P.L. 98-381.

needed. Technical services, such as waste management disposal, environmental impact analyses, and pest and weed control are used as needed.

Western's planned replacements and additions activity is based on an assessment of condition and criticality of equipment, maintenance/frequency of problems for individual items of equipment, availability of replacement parts, safety of the public and Western's personnel, environmental concerns, and an orderly work plan. The work plans, coordinated with Western's power customers, who ultimately bear the burden of all Western expenses, reflect an overall sustainable level of effort, with shifts in emphasis between categories (i.e., electrical versus communication equipment) in any given year.

Electrical equipment replacements, such as circuit breakers, transformers, insulators, revenue meters, switches, control boards, relays and oscillographs must be made to assure reliable service to Western's customers. System component age, availability of spare parts, environmental concerns, and risk to system reliability necessitate orderly replacement before significant problems develop.

Replacement, upgrade and installation of fiber optics, Supervisory Control and Data Acquisition (SCADA) systems, and other communication and control equipment continues to provide increased system reliability and to reduce maintenance and equipment costs.

Capitalized movable equipment, such as special purpose vehicles (e.g., cranes, auger trucks, manlifts), special purpose equipment (e.g., pole trailers, industrial tractors, brush chippers), specialized test equipment (e.g., motion analyzers and relay test equipment), computer-aided engineering equipment, office equipment, and IT equipment and software, must be upgraded and replaced.

Personnel expenses and personnel performance accomplishments associated with the O&M subprogram are combined with those of the Construction and Rehabilitation subprogram and are reflected in the Program Direction subprogram of Western's budget request.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Regular Operation and Maintenance	**29,166**	**38,305**	**32,232**

Supplies and materials necessary to respond to routine and emergency situations in Western's high-voltage interconnected transmission system will be purchased. This includes miscellaneous equipment and software used for power billing, transmission planning, e-tagging, and energy scheduling, as well as supplies and materials such as wood poles (individual pole replacement; excludes whole line replacements), instrument transformers, meters, relays, etc. necessary to respond to routine and emergency situations in Western's high-voltage interconnected transmission system. The request includes $962 thousand for activities in the Boulder Canyon Project, funded directly through receipts from the Colorado River Dam Fund.

The continuing maintenance of Western's transmission system at or above industry standards supports DOE's Energy Goal by minimizing sudden failure, unplanned outages, and possible regional power system disruptions. Safe working procedures are discussed before work begins to optimize safety for the public, Western's staff, and equipment. The request is based on projected work plans for activities funded from this account. Estimates are based on historical data of actual supplies needed to operate and maintain the transmission system and recent procurement of similar items.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Replacements and Additions	**23,199**	**18,854**	**25,561**

Western's planned replacements and additions activity is based on an assessment of condition and criticality of equipment, maintenance/frequency of problems on individual items of equipment, availability of replacement parts, safety of the public and Western's personnel, environmental concerns, and an orderly work plan. Replacement of aged power system components maximizes the reliability and availability of Western's system by reducing the risk of equipment failure, unplanned outages, and possible regional power system disruptions. Removing environmental hazards and replacement of aged equipment eliminates safety hazards for the public and Western's personnel. Planned activity is detailed by category below.

▪ **Electrical Equipment**	**9,334**	**7,801**	**12,358**

Electrical equipment, such as circuit breakers, transformers, relays, batteries and chargers, reactors, meters, buses, surge arresters, capacitor banks and disconnect switches, will replace obsolete equipment at facilities throughout Western's 15-State area. Also included is test equipment used by maintenance crews, such as metering and relaying test sets, pentameters, Ohm testers, oil dielectric testers, battery load testers, and specialized communication and environmental control test equipment. Replacement and rehabilitation of single wood pole structures, overhead ground wires, and line hardware will extend the life of aging, deteriorating transmission lines. Examples of specific requests include the Jamestown to Grand Forks 230-kV wood pole rebuild, Edgeley to Forman line upgrade, Dos Amigos breaker replacements, Flanagan substation control system replacement, disconnect switch replacements at Folsom, Lusk transformer replacement and breaker installation, and San Luis pump plant protective relays replacement. Estimates are based on analysis of system operation/maintenance requirements and concerns, customer-coordinated work plans, actual costs of recent similar projects, and bottom-up budgeting techniques.

▪ **Communications Equipment**	**3,943**	**2,783**	**3,882**

Key to system reliability, replacement of remote terminal units, telephone systems, microwave links, and aged 7 Ghz analog radio systems with digital radio and fiber optics continues. Manufacturers have discontinued support of the obsolete analog equipment and there is inadequate channel capacity to support our needs. The staged movement to narrow communications band spectrums for UHF radios as directed by the National Telecommunications and Information Administration (NTIA) continues. Western's communication systems are currently made up of approximately 7 percent fiber optics, 81 percent fixed radio, and 12 percent mobile radio. Western currently has 1,380 radio frequency authorizations for fixed radio bands, of which 469, or 34 percent, are analog. This funding will not be used to replace equipment impacted by the Spectrum Relocation initiative.

In addition, Western will continue to upgrade its existing SCADA systems which control Western's electric power system. These hardware and software upgrades improve grid reliability by allowing the main computer to communicate with remote terminal units in over 300 substations across Western's territory, thus allowing the dispatcher to operate a device in any of these substations to make changes rapidly to respond to power industry requirements or system emergencies. Other specific examples requested in this estimate include the replacement of ground wire on the Beaver

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

Creek-Sterling transmission line and the Roseville-Elverta line with optical ground wire; SCADA hardware and software for Western's Operations Consolidation Project; replacement of phone lines with VoIP technology; replacement of communication generators; and, installation of fiber multiplex equipment.

Costs are based on analysis of system operation/maintenance requirements, customer-coordinated work plans, actual costs of recent similar projects, and bottom-up budgeting techniques.

▪ **Spectrum Relocation Equipment**	**0**	**0**	**0**

In December 2004, the Congress passed and the President signed the Commercial Spectrum Enhancement Act (CSEA, Title II of P.L. 108-494), creating the Spectrum Relocation Fund (SRF) to streamline the relocation of Federal systems from certain spectrum bands to accommodate commercial use by facilitating reimbursement to affected agencies of relocation costs. The Federal Communications Commission has allocated this spectrum for Advanced Wireless Services. Funds have been made available to agencies from the crediting of auction receipts to the SRF during fiscal year 2007 and system relocation efforts have commenced. The amount received by Western for this effort is $108,202 thousand and includes Western's estimated relocation costs, as approved by the Office of Management and Budget, and as reported to the Congress by the Department of Commerce in December 2005. Since receipt of these funds, Western has completed the preliminary and final design work to include radio path analysis, tower load analysis, communication building upgrades and replacements, acquiring radio frequency authorizations, and completing a majority of the radio and other communication equipment purchases. Structural loading analyses for both radio and fiber optic systems were completed in FY 2009. The first construction year for the Spectrum Relocation Fund was during FY 2008 with the beginning of building replacement installations. Continued building replacements, antenna and waveguide installations, and installation of radios will occur in FY2010. The phased replacement of 2 GHz radio systems is anticipated to continue into FY 2011. System clean-up, which includes removal of old equipment, buildings, and all associated systems, is anticipated to continue in FY 2012 and 2013, with project closing activity in FY2014. The funding for the Spectrum Fund is mandatory and will remain available until expended, and agencies will return to the SRF any amounts received in excess of actual relocation costs. No appropriations are being requested for this activity.

▪ **Capitalized Movable Equipment**	**9,922**	**8,270**	**9,321**

These funds will purchase special purpose line trucks and specialized trailers. Western's first choice of vehicle coverage is a GSA lease, when such vehicles are available. However, GSA cannot always accommodate our needs, especially in the Upper Great Plains Region and somewhat in the Desert Southwest Region, where vehicles must be equipped for extreme weather conditions that exist. At those times, it is necessary to purchase such vehicles, and this request is representative of that condition. All sedans, vans, SUVs, and light trucks are GSA-leased. Western uses 733 vehicles, 429 (59 percent) of which are leased from GSA. Replacement of government-owned vehicles is based on the Federal Management Regulations guidelines, the same guidelines used by GSA. Examples of specialized equipment such as pole trailers, road graders, digger trucks, man

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

lifts, snow cats, snow tractors, forklifts, cranes, front-end loaders, and caterpillars are included in this request.

Other capitalized movable equipment in this estimate that are needed to support the O&M of the interconnected power system include substation test equipment, brush chipper, map board replacement; security equipment such as perimeter intrusion detection devices, card readers and associated software, security cameras and recording devices at various sites throughout Western; Information Technology equipment such as server and router replacements, firewalls, cyber security upgrades, LAN upgrades, network equipment replacements, business tape backup library, disaster recovery and backup/restore equipment, replacement of equipment for the MiniPower Simulator at Western's Electric Power Training Center to accommodate changes in technology; and helicopter equipment replacements that add value to the helicopter or extend the service life, such as engine, rotor blades, avionics, airframe, and other major components.

Replacement needs are based on age, reliability, and safety of equipment, customer-coordinated review, cost analysis of rebuild versus replacement, availability of replacement parts, and obsolescence of diagnostic maintenance tools. Estimates are determined using actual costs of similar items.

Total, Operation and Maintenance	**52,365**	**57,159**	**57,793**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Regular Operation and Maintenance	
▪ The overall net decrease in regular O&M is attributed to the cyclical decrease in maintenance activities with the offset increase to Replacements and Additions.	-6,073
Replacements and Additions	
▪ The increase in replacements and additions of electrical equipment (+$4.6 million) is primarily attributable to the increased requirements for line upgrades and rebuilds of Western's aging infrastructure. Increased requirements also include aged and failing transformer replacement and protective equipment to aid in voltage control. The increase in communications equipment (+$1.1 million) is requested to replace segments of Western's ground wire due to faulty ground wire with optical ground wire. Funds are also requested to convert segments of Western's communication equipment from analog to digital. The increase in capitalized movable equipment (+1.0 million) is attributable to an increase in special vehicle purchases, cyber security equipment, maintenance test equipment required due to new innovations in power system equipment, and IT hardware.	+6,707
Total Funding Change, Operation and Maintenance	**+634**

Construction and Rehabilitation

Funding Schedule by Activity

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Construction and Rehabilitation			
Transmission Lines and Terminal Facilities	26,176	43,224	60,656
Substations	40,522	43,157	46,275
Other [a]	7,846	18,590	2,956
Subtotal, Construction & Rehabilitation	74,544	104,971	109,887
Alternative Financing [b]	-47,663	-83,760	-72,843
Total, Construction & Rehabilitation (Budget Authority)	26,881	21,211	37,044

Description

The mission of Western's Construction and Rehabilitation (C&R) subprogram is to assure continued reliability of the Federal power system by modification, replacement, additions, and interconnections to the Federal power system.

Benefits

Western's C&R subprogram supports the Secretary's Energy Goal to build a competitive, low-carbon economy and secure America's energy future by emphasizing replacement and upgrading of existing electrical system infrastructure to sustain reliable power delivery to our customers, to support a stable and reliable interconnected power system, to contain annual maintenance expenses, and to retain the value of its assets. Replacement and upgrade of aged power system components are crucial to system reliability, and communications improvements maintain vital control over system operations. Both contribute to attaining or exceeding monthly control performance standards established by the North American Electric Reliability Corporation (NERC) by reducing the risk of equipment failure, unplanned outages, and possible local and regional power system disruptions. C&R subprogram activities support the repayment of Federal power investment by promoting a well-planned C&R program with a relatively stable budget over the long term, by avoiding significant additional costs of emergency "breakdown maintenance," and by preventing outages which could impact power deliveries, purchase power costs, and power revenues. Reducing the hazards associated with worn or aging equipment, correcting design deficiencies, and replacing deteriorated wood poles which present a serious climbing hazard to linemen, minimizes Western's exposure to unsafe conditions. In addition, public safety is protected by avoiding or minimizing the negative impacts of unplanned outages and by minimizing the instances of downed transmission lines.

[a] Other includes communication equipment, maintenance facilities, power facility developmental costs, and minor unscheduled jobs.
[b] Alternative financing for Construction and Rehabilitation is dependent on cash advances from customers.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

The C&R request incorporates the most current information to identify and schedule necessary C&R projects. Western assigns the highest program priority to those situations that pose the highest risk to safety and system reliability, while meeting the mandates for open access to our transmission system. If conditions change, Western will shift funding as necessary to ensure the highest program priorities continue to be met to maintain the reliability and integrity of Western's power transmission system.

Western's transmission system has 17,107 circuit-miles of line and more than 300 substations. Of the 8,038 miles of wood poles, 5,917, or 74 percent, exceed the normal service life of 40 years, with 4,708, or 59 percent, exceeding 50 years. Western is continually testing, treating, and replacing individual wood poles and hardware to delay the need for replacing an entire transmission line. As substation equipment (such as power transformers, circuit breakers, and control equipment) ages, maintenance costs increase, replacement parts become unavailable, risk of outages increase, and system reliability declines. The normal service life for power transformers and power circuit breakers is 40 years and 35 years, respectively. While replacement of this equipment is systematically planned over 10 years, actual replacement varies depending on condition and criticality. All replacement and rehabilitation plans are coordinated with customers to help establish the timing and scope of work at specific substations. When upgrades or additional capacity are required, Western actively pursues opportunities to partner with neighboring utilities to jointly finance activities, which result in realized cost savings and increased efficiencies for all participants.

Western's FY 2011 C&R request is above prior year levels because of the aging power system infrastructure, backlog of rehabilitation needs, increasing industry requirements (FERC, NERC, WECC), and greater reliability concerns resulting from increasing loads and the need for integrating new generation sources to meet those loads.

Financing of the FY 2011 C&R budget will continue to rely heavily on customer participation in alternative financing methods. Approximately 66% of the program, or $72.8 million, will be requested from customers.

Personnel costs and related expenses for the workforce to plan, collect field data, write specifications, design facilities, award construction contracts, and purchase government-furnished equipment for the C&R activity are combined with those of the O&M activity and are reflected in the Program Direction section of Western's budget request.

Costs incurred within the C&R program are generally capitalized and recovered with interest over the useful life of the asset. In rare cases where a C&R project is abandoned, associated costs are expended.

For purposes of budget display, the C&R subprogram is broken into three activities: Transmission Lines and Terminal Facilities, Substations, and Other. The Other category includes communications equipment (microwave, fiber optic, and telecommunications), maintenance facilities, power facility development costs, and minor unscheduled jobs. Planned activity is detailed by category below.

Transmission Lines and Terminal Facilities	**26,176**	**43,224**	**60,656**
▪ **Transmission Lines and Terminal Facilities, Continuing Work**	**17,826**	**24,957**	**39,233**

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

Continuation of modifications and rehabilitation of the following transmission lines (TL) to ensure power system reliability and stability is planned in FY 2011. Net appropriations requested are $8,583,000. At this level, the following activities are planned:

- Davis-MEC Kingman Tap - Rebuild existing 27.3-mile Davis Switchyard to MEC Kingman Tap transmission line (Arizona). The 60 year old line is well beyond its engineered life span and is showing significant deterioration. The condition of the line, operated radially from Davis Substation, is a reliability concern for several utilities; it's also a safety concern for maintenance crews and residential and commercial areas encroaching on the existing right-of-ways.
- Upgrade the 500-kV California-Oregon Intertie (COI) to increase transfer capabilities across the California-Oregon border. The upgrade will increase the north-to-south COI rating by 300 MW, from 4800 MW to 5100 MW, allowing for greater import of energy, either renewable or non-renewable, from the Pacific-Northwest into California.
- Renew the transmission line right-of-way between Rogers and Coolidge Substations (Arizona). Agreement between Western and the Gila River Indian Community provides for the addition of a 230/69 kV transformer in the Coolidge Substation to serve the Gila River Indian Community.

Alternative financing will be pursued to fund the remaining on-going transmission line rehabilitation efforts estimated at $30,650,000 in FY 2011. Funding for these projects are at risk however since alternative financing is voluntary on the part of customers. The ongoing activities are:

- O'Banion-Elverta – Continue joint construction of the new 31-mile O'Banion to Elverta double circuit 230-kV line (California) consistent with the Sacramento Voltage Support Environmental Impact Statement. The project will relieve constrained generation, improving area voltage support and increasing stability and reliability for the greater Sacramento area.
- Lovell-Yellowtail – Rebuild the 46 mile Lovell-Yellowtail No. 1 and No. 2 transmission lines (Wyoming). The rebuild will include transmission lines within the National Park Service boundary of the Big Horn National Recreation Area, and involve reclamation of redundant and non-critical access roads within the park. The rebuild of the 55- and 45-year old lines, respectively, are needed to improve reliability and system capability in the northern Wyoming service area. Inspections show an increasing percentage of deteriorating structures; nearly one out of every three was rejected.

▪ **Transmission Lines and Terminal Facilities, Rehabilitation Starts**	**8,350**	**18,267**	**21,423**

The following transmission line and terminal facility rehabilitation starts are planned in FY 2011. Transmission line and terminal facility starts address specific system reliability risks or operational problems. The FY 2011 request includes $7,825,000 appropriations to:

- Rebuild the 19.1 mile Oracle-Saguaro 115-kV transmission facilities, built in the late 1950s. The line passes through a variety of terrain in western Arizona, including desert, cultivated

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

fields, hilly terrain, and residential. The bulk of the wood structures are well beyond their engineered lifespan and are showing signs of deterioration; including advanced external shell rot, weathering, and large cracks. The transmission line is a critical component of Western's system. The rebuild is necessary to maintain reliability and safety.

Alternative financing will be pursued to fund the remaining new transmission line rehabilitation efforts estimated at $13,598,000 in FY 2011. Funding for these projects are at risk however since alternative financing is voluntary on the part of customers. These activities are:

- Rebuild the 52-mile, 161-kV Blythe-Headgate Rock transmission line (Arizona). The 60-year-old line is well beyond its engineered lifespan, and is exhibiting deterioration, including shell rot, weathering, and cracking. The condition of the line is a significant reliability and safety concern. A significant portion of the line is located on Colorado River Indian Tribe lands, including several structures on tribal historic site called Black Point Mesa.
- Rebuild the 45-mile, 115-kV Coolidge-Oracle transmission line (Arizona). The 65-year-old line is also deteriorating. Shell rot, excessive weathering and cracking are a serious reliability concern to Western's 115-kV system and a safety concern for the maintenance personnel. Other issues affecting the line are raked and bowed poles, vehicle strikes, lightning and fire damage, water damage, flashover indications, broken and/or damaged insulators, and loose/missing hardware. Access constraints to these remote desert areas make addressing these problems through increased maintenance efforts lengthy and costly.
- Cottonwood-Roseville – Initiate reconductoring of the existing 140-mile 230-kV transmission line from Cottonwood to Roseville (California). The existing line is experiencing frequent outages as a result of the growing demand on the line. Replacement with larger conductors, and adding 5 mile double circuit loop through the O'Banion substation will increase capacity on the existing right-of-way by 90 MW, and significantly improve reliability throughout the region.

Estimates are based on actual costs of recent similar projects, expected costs of needed equipment and services, cost estimating guides, and experience.

Substations	**40,522**	**43,157**	**46,275**
▪ **Substations, Continuing Work**	**21,394**	**26,028**	**40,218**

Continue modifications and rehabilitation of the following substations in FY 2011 to ensure power system reliability and stability. The funding level is determined by estimating the cost to complete each project and breaking out these costs by fiscal year. The estimates are based on recent actual costs to complete similar projects, updated individual project requirements, and past experience. The FY 2011 request includes $14,671,000 in appropriations for continuing the following ongoing rehabilitation work at Western substations:

- Rebuild Bouse Tap (Arizona) as a three breaker ring bus to improve system reliability by restoring remote operating and emergency line-break capability to this segment of the Parker-Gila 161-kV transmission line. The existing switchyard, constructed in the early 1950's, has exceeded its useful life and can no longer support remote operations. Customer participation in

(dollars in thousands)

FY 2009	FY 2010	FY 2011

funding is anticipated to cover more than a quarter of the project's costs.

- Rebuild aging Davis Switchyards (Arizona) built in the late 1940s to provide increased reliability. The bulk of the equipment in the yards is operating beyond their useful service lives. Problems include failing circuit breakers, unreliable regulating transformer, broken disconnects, oil leaks, and abandoned equipment. The rebuild will provide a more effective bus arrangement, replace oil-filled circuit breakers with SF6 gas breakers to eliminate over 140,000 gallons of oil from the site adjacent to the Colorado River, and construct a control building to house the relays, control equipment, and battery systems.

- Upgrade of ED5 Tap Substation (Arizona) with a new five circuit breaker ring bus to replace the existing tap. Constructed in 1952, the existing motor-operated disconnects have not been upgraded, are deteriorating, and are a reliability concern. They are not capable of interrupting load or fault current, making maintenance difficult and costly. Spare parts are obsolete and difficult to replace.

- Mead Sub - Replace the 345-kV transformer at Mead Substation south of Boulder City (Nevada) providing the sole feed from Mead Substation to the heavily loaded Mead-Peacock 345-kV transmission line. Testing on this 45-year old transformer indicates both internal and external deterioration, including leaking, bushing and insulation degradation. Replacement will improve reliability of this critical component of the Mead to Peacock system, dramatically reducing the risk of failure and line outage.

- Liberty Sub – Replace the 345-kV transformer at Liberty Substation in western Phoenix (Arizona) supporting the critical 345-kV Liberty to Peacock transmission line. Testing on the 43-year old transformer indicates both internal and external deterioration, including extensive leaking from several areas of the transformer. Replacement is necessary to avoid catastrophic failure and/or lengthy outage on the heavily loaded Liberty-Peacock transmission line

- O'Neill Sub - Rebuild the 40 year old O'Neill Substation (California) to improve the reliability of the electrical supply facilities for the O'Neil pump/generating station. The substation is the sole source of power to six large pump/generation units operated by the U.S. Bureau of Reclamation as part of the San Luis Water Project.

Alternative methods of financing will be pursued to fund the remaining on-going substation rehabilitation efforts estimated at $25,547,000 in FY 2011. Funding for these projects are at risk however since alternative financing is limited and voluntary on the part of customers. Ongoing substation rehabilitation activities relying on customer financing are:

- Replacement of two transformers, KU3A and KU4A, at the Bismark Substation (North Dakota) with 200 MVA units and construction of a dedicated 230-kV bay for KU4A to provide increased reliability required by the addition of another interconnection and significant commercial and residential load growth in the area.

- Joint effort to construct a 230-kV substation (Appeldorn Substation) on the Watertown-Granite Falls 230-kV line near Boyd, Minnesota. Electric loads in the area have grown beyond the capability of Western's delivery points to the customer, affecting Western's reliability of

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

service. Western requests funding for the base 230-kV substation and customer will fund the transformer and bus structure requirements.

- Replace the Edgeley Substation (North Dakota) aging 1952 transformer KY1A and add equipment for improved protection, reliability, and operating flexibility.
- Replace the Sioux Falls (South Dakota) transformers KV3A (230/115 33.3 MVA) and KV5A (230/115 33.3 MVA) with 250 MVA 3-phase autotransformers to improve system reliability. System studies identify capacity deficiencies in the existing transformers as a result of significant commercial and residential load growth.
- Addition of a 230/115-kV transformer and power circuit breakers at Weld Substation (Colorado). The underlying 115-kV system is no longer adequate to reliably serve loads in the area. Addition of the transformer will improve system reliability and meet NERC N-1 overload contingency mitigation requirements. This is part of a joint project in combination with transmission line upgrades providing greater voltage support for northern Colorado loads.
- O'Banion - Construct a new 500-kV O'Banion Substation (California) with 500/230-kV transformation. Loop the existing PG&E's Table Mountain – Tesla 500-kV line into the new 500-kV yard. Add breaker bay and associated protection and control circuits to the existing O'Banion 230-kV yard as required. The project will improve the reliability of the CVP transmission system, conform to NERC/WECC reliability criteria, meet Western's transmission service obligations, and inhibit uncontrolled system-wide outages and loss of load impacting on local and regional grid and economies.
- Tracy Sub - Upgrade Tracy 230-kV Substation (California) to a double-breaker, double-bus configuration by adding breakers, disconnects, bus, and associated control, protection and communication equipment. The upgrade is necessary to meet operational reliability requirements for this very critical substation that serves central California and the San Francisco Bay Area. The current substation design is a main and transfer bus configuration which can lead to loss of up to six critical 230-kV transmission lines, two major ties to the Tracy 500-kV Substation, and the entire Tracy pumping plant if breaker failure happens due to human error or failure of breaker protection equipment. This would represent a loss of 2,150 MVA of transfer capacity, potentially causing a major West Coast power outage during critical load times of the year.

▪ **Substations, Rehabilitation Starts**	**19,128**	**17,129**	**6,057**

Several substation rehabilitation activities are planned to begin in FY 2011. Net appropriations of $4,980,000 are requested to directly fund a portion of these activities. At this level, the following substation rehabilitation activities will be started:

- Replace two aging transformers KY1A and KY1B at the Spencer Substation (Iowa). The replacements will increase the capacity to 100 MVA as the current loading conditions exceed the operating capability the existing 53 and 56-year-old transformers provide.
- Install 15 MVAR 115-kV shunt capacitor bank at both Western's Frenchman Creek Substation (Colorado) and Sidney Substation (Nebraska) to provide permanent voltage support. The

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

capacitor banks are necessary to avoid reductions to the transfer capability across the constrained TOT3, and/or establishment of load shedding requirements during peak load conditions.

Alternative methods of financing will be pursued to fund the remaining substation rehabilitation efforts estimated at $1,077,000. Funding to start these rehabilitation efforts are at risk however since alternative financing is limited and voluntary on the part of customers. The projects are dependent on alternative customer financing are:

- Construction of a 115-kV switching station near Elliot, North Dakota, on the Forman-Valley City transmission line. The new interconnection is requested to provide greater reliability and system protection in response to area load growth.
- Addition of a customer furnished 115/69 kV transformer to Western's Rapid City Substation (South Dakota) to provide greater reliability and operating flexibility necessary to meet substantial load growth in the area.

The funding level is determined by estimating the cost to complete each project and breaking out these costs by fiscal year. The estimates are based on recent actual costs to complete similar projects, updated individual project requirements, and past experience.

Other	**7,846**	**18,590**	**2,956**
▪ **Communications Systems**	**5,386**	**2,982**	**2,036**

Each project cost is determined using the actual costs of recent similar projects, estimated quantities of needed materials, past contract costs, specialized cost estimating guides, and in-house experience. Net appropriations requested are $565,000. At this level, work will continue to proceed on an alternate control center for the Sierra Nevada Region sub-control area.

Alternative customer financing of $1,471,000 will be needed to continue to replace, modernize, and expand communication systems (microwave, fiber optic, global information system, and telecommunication) in the Central Valley Project and the Pick-Sloan Missouri Basin Program to operate and control the transmission system. Replacement parts for existing obsolete communications systems are difficult to obtain and the increased use of remote control of facilities, coupled with the need for greater integration of the Federal system with the rest of the grid and technological advances in the communications field, make secure and reliable communications crucial to Western's mission. Rapid advances in technology and manufacturers' phase-out of support for existing systems drive the need for communications replacements and upgrades. Effective control of remote facilities is crucial to the operation of the power system. The equipment requested here is not included in the Spectrum Relocation Fund initiative.

▪ **Miscellaneous**	**2,460**	**15,608**	**920**

The FY 2011 request provides $420,000 to:

- Continue Western's power facility development activities providing technical products in support of the year's C&R program activities.
- Demolish the West Fargo maintenance shop/storage building and replace with same size 60' x

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

80' structure at the same location. The existing building is a significant safety concern. Deficiencies include asbestos contaminated material, drainage problems, heaving of exterior perimeter apron leading to water infiltration, extensive corrosion at base and anchor connections, rusting support beams, leaking roof, water penetration in electrical fixtures, and excessive mold.

Alternative methods of financing will be pursued to fund the remaining miscellaneous efforts estimated at $500,000 in FY 2011. Alternative financing is limited and voluntary on the part of customers.

- Continue the demolition and clean-up of the decommissioned Mesa Substation (Arizona) built in the early 1940s.

Total, Construction and Rehabilitation	**74,544**	**104,971**	**109,887**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Transmission Lines and Terminal Facilities	
▪ The increase in Transmission Lines and Terminal Facilities is due to increases in both new and ongoing transmission line construction project activity. The increase reflects the continued aging of Western's transmission infrastructure and the area load growth in the regions we serve. Thousands of miles of transmission line, built mostly in the 1940s through 60s, exceed their design life. Significant effort is needed to replace the aging infrastructure across Western's service area. For FY 2011 specifically, activities are underway to address deteriorating transmission lines in Arizona, Wyoming, and the Pick-Sloan Missouri Basin service territory, and voltage support problems in the growing Sacramento area.	+17,432
Substations	
▪ The increase is due primarily to several substation rehabilitation efforts ongoing from prior years that will be moving into the build phase. In addition, several more substation rehabilitation efforts will begin in FY 2011 reflecting the aging infrastructure across Western's service territory and the increasing demand on the Federal transmission facilities.	+3,118

	FY 2011 vs. FY 2010 ($000)
Other	
▪ Funding needs for Other capital expenditures, including communications, buildings, roads, and other miscellaneous construction activities is decreasing significantly in FY 2011. The FY 2010 appropriation included $15,248,000 on a nonreimbursable basis for environmental remediation work at the Basic Substation located in Henderson, Nevada.	-15,634
Total Funding Change, Construction and Rehabilitation	**+4,916**

Purchase Power and Wheeling

Funding Schedule by Activity

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Purchase Power and Wheeling			
Central Valley Project	295,472	284,441	293,721
Pick-Sloan Missouri Basin and Other Programs	305,488	264,406	249,901
Subtotal, Purchase Power and Wheeling (Gross)	600,960	548,847	543,622
Use of Alternative Financing [a]	-197,842	-199,040	-192,703
Subtotal, Purchase Power and Wheeling	403,118	349,807	350,919
Offsetting Collections Realized	-403,118	-349,807	-350,919
Total, Purchase Power and Wheeling (Budget Authority)	0	0	0

Description

The mission of the Purchase Power and Wheeling (PPW) subprogram is to support Western's long-term firm power sale contractual agreements, including wheeling over non-Federal transmission lines as necessary to deliver the firm hydropower resource to customers.

Benefits

The PPW subprogram supports Western's mission to market and deliver reliable, cost-based hydroelectric power and related services. These services are marketed at rates sufficient to recover expenses and Federal investment as established by law. To maximize the marketability of Western's products, Western has entered into long-term contracts with customers of the Central Valley Project (CVP), the Pick-Sloan Missouri Basin Program, as well as other projects, to deliver power based on the normal (average over the long-term) amount of power and/or capacity available from each of the power systems. By its nature, hydropower is a variable resource; it is affected by reservoir storage, drought conditions, powerplant maintenance and other project purposes. Variations occur between load and the hydro-generation hour-by-hour or even minute-by-minute. Western buys power and related transmission services to fulfill its firm power-sale contractual commitments. Western also buys transmission services, as needed, to provide the benefits of the Federal hydropower resource to numerous Federal, State, municipal, and other preference customers not directly connected to Western's system. Contracting for transmission services encourages the widespread use principle of the Flood Control Act of 1944 and avoids unnecessary Federal duplication of available transmission resources. The acquisition of non-Federal power and transmission services meets Western's power marketing contract provisions which place responsibilities on Western to provide firm power to customers of the Central Valley Project, Pick-Sloan Missouri Basin Program-Eastern Division, Loveland Area Projects and Parker-Davis Project.

[a] Alternative financing for purchase power and wheeling anticipates $176,548,000, $177,565,000, and $174,536,000 net billing and/or bill crediting in FY 2009, FY 2010, and FY 2011, respectively. Alternative financing also includes reimbursable customer funding planned at $21,294,000, $21,475,000, and $18,167,000 in FY 2009, FY 2010, and FY 2011, respectively.

The FY 2011 request provides for continuation of PPW receipt funded activities at the estimated level necessary to meet contractual firming needs. No appropriated budget authority is necessary. The request for receipt authority reflects improving water conditions in the drought-stricken Pick-Sloan Missouri River Basin.

The following table illustrates the PPW program assumptions.

Purchase Power and Wheeling Program Assumptions

	(dollars in thousands)		
	FY 2009 Enacted	FY 2010 Enacted	FY 2011 Request
Power Purchases (gigawatthours)			
Central Valley Project	4,295	4,293	4,475
Pick-Sloan Missouri Basin and Other Programs	4,996	4,290	3,805
Total, Purchases	9,291	8,583	8,280
Purchase Power Prices ($/megawatthour)			
Central Valley Project	55.1	55.4	54.9
Pick-Sloan Missouri Basin and Other Programs	57.4	57.2	60.8
Cost of Power Purchases ($000)			
Central Valley Project	236,601	237,945	245,786
Pick-Sloan Missouri Basin and Other Programs	286,890	245,535	231,497
Total, Purchase Power Costs	523,491	483,480	477,283
Wheeling Costs ($000)			
Central Valley Project	58,871	46,496	47,935
Pick-Sloan Missouri Basin and Other Programs	18,598	18,871	18,404
Total, Wheeling Costs	77,469	65,367	66,339
Total, Purchase Power and Wheeling ($000)	600,960	548,847	543,622

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Central Valley Project	**134,706**	**122,361**	**132,679**

No appropriations are requested. This is authority to use offsetting collections only.

- **Central Valley Project, Program Requirement** **295,472** **284,441** **293,721**

  In FY 2011, Western continues to deliver on its contractual power commitments to customers under the Central Valley Project's Post 2004 Marketing Plan. The budget request assumes current full

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

load service customers will continue to choose service from Western through "Custom Product" contractual arrangements. Western also purchases power to support variable resource customers on a pass-thru basis. If project net generation is not sufficient, Western may also purchase to support project use load, First Preference Customer load, and sub-control area reserve requirements.

▪ **Central Valley Project, Alternative/Customer Financing**	**-160,766**	**-162,080**	**-161,042**

Contractual arrangements have been made with customers providing opportunities for alternative financing of the purchase power requirements. Alternative financing methods include net billing, bill crediting, energy exchanges, and direct customer funding.

Pick-Sloan Missouri Basin and Other Programs	**268,412**	**227,446**	**218,240**

No appropriations are requested. This is authority to use offsetting collections only.

▪ **Pick-Sloan Missouri Basin and Other Programs, Program Requirement**	**305,488**	**264,406**	**249,901**

In FY 2011, the request continues to support long-term firm power commitments to customers of the Eastern and Western divisions of the Pick-Sloan Missouri Basin Program, the Fryingpan-Arkansas Project, and the Parker-Davis Project commensurate with the levels of average firm hydroelectric energy marketed by Western. The request also provides transmission support for the Pacific Northwest-Southwest Intertie Project. The total program estimates shown for FY 2011 are based primarily on market pricing of short-term firm energy, negotiated transmission rates, and Western and generating agency's forecasts. The FY 2011 program forecasts reduced purchases.

▪ **Pick-Sloan Missouri Basin and Other Programs, Alternative/Customer Financing**	**-37,076**	**-36,960**	**-31,661**

Alternative financing methods negotiated with customers will be used where effective to provide an offset to the total program receipt financing requirement. Alternative financing methods include net billing, bill crediting, energy exchanges, and direct customer funding.

Total, Purchase Power and Wheeling	**403,118**	**349,807**	**350,919**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Central Valley Project	
▪ The gross PPW requirement of $293.7 million in FY 2011 increases 3.3% from the $284.4 million level anticipated in FY 2010 providing for slight increase in anticipated purchases to meet marketed requirements.	
▪ Note: The PPW amounts are for offsetting collection authority and alternative financing; no direct appropriations are necessary.	
	+9,280
Pick-Sloan Missouri Basin and Other Programs	
▪ The gross PPW requirement of $249.9 million in FY 2011 is down by $14.5 million from the $264.4 million estimated for FY 2010. The decrease reflects a reduction in power purchased in anticipation of improving water conditions in the drought stricken Pick-Sloan Missouri Basin region.	
▪ Note: The PPW amounts are for offsetting collection authority and alternative financing; no direct appropriations are requested for this activity.	
	-14,505
Total Funding Change, Purchase Power and Wheeling	**-5,225**

Program Direction
Funding Profile by Category

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Program Direction [a]			
Salaries & Benefits	114,527	123,197	133,410
Travel	8,382	8,684	9,421
Support Services	24,265	26,552	27,902
Other Related Services	19,249	22,323	23,228
Total, Program	166,423	180,756	193,961
Less Use of Alternative Financing	-15,800	-5,720	-2,726
Use of Receipts from Colorado River Dam Fund	-2,563	-3,012	-3,250
Offsetting Collections, Annual Expenses	0	-110,492	-149,036
Total, Program Direction Budget Authority	148,060	61,532	38,949
Full Time Equivalents	1,073	1,107	1,114

Mission

Western's Program Direction subprogram provides compensation and all related expenses for the workforce that operates and maintains Western's high-voltage interconnected transmission system and associated facilities; those that plan, design, and supervise the construction of replacements, upgrades and additions (capital investments) to the transmission facilities; and those that market the power and energy produced to repay annual expenses and capital investment.

The Program Direction subprogram supports the Secretary's Energy Goal to build a competitive, low carbon economy and secure America's energy future. To attain reliability performance, dispatchers match generation to load minute-by-minute to meet or exceed performance levels established by NERC. Western maintains the interconnected system at or above industry standards to reduce transmission outages. Energy schedulers maximize revenues from non-firm energy sales and power rates are reviewed and adjusted to support repayment of Federal investment. Western trains its employees on a continuing basis in occupational safety and health regulations, policies and procedures, and conducts safety meetings at employee, supervisory and management levels to keep the safety culture strong. Accidents are reviewed to ensure lessons are learned and proper work protocol is in place.

The Program Direction subprogram further supports Western's Human Capital Management (HCM) Workforce Plan. HCM Workforce Plan activities include: exploring ways to increase HR efficiency through consolidation; the development and/or expansion of intern/apprenticeship programs in the occupations of energy marketing, dispatcher, lineman, and electrician; introduction of an under-study program in Power Marketing, prior to an incumbent retiring; rotational training programs for engineers;

[a] Program descriptions and funding amounts include activities of the Boulder Canyon Project. These activities are funded through a Reimbursable Agreement with the Department of the Interior, Bureau of Reclamation.

strategic use of knowledge sharing and training events in critical occupations; and, succession planning development programs for mid- to upper-level graded Federal positions. Western's 50/5/5 Trainee Program is part of its succession planning which trains employees in critical positions in known areas soon to be vacated by retiring employees. By design, costs for these HCM programs will be minimal as local area expertise and facilities will be used to the maximum extent possible. The HCM Workforce Plan noted that no new A-76 studies were required and/or anticipated at this time.

Western operates and maintains a transmission system to deliver reliable electric power in a clean and environmentally-safe, cost-effective manner within its 15-State service territory. Western achieves continuity of service by maintaining its power system at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing environmental clean-up activities, and maximizing the benefits gained from non-firm energy sales.

In concert with its customers, Western reviews required replacements and upgrades to its existing infrastructure to sustain reliable power delivery to its customers and to contain annual maintenance expenses. The timing and scope of these replacements and upgrades are critical to assure that Western's facilities do not become the "weak link" in the interconnected system. Western pursues opportunities to join with neighboring utilities to jointly finance activities, which avoid redundant facilities and result in realized cost savings and/or increased efficiencies for all participants.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Salaries and Benefits	**114,527**	**123,197**	**133,410**

Salaries and benefits are provided for Federal employees to operate and maintain, on a continuing basis, Western's high-voltage interconnected transmission system comprised of 17,107 circuit-miles of line, 302 substations, associated power system control and communication, and general plant facilities. Craft workers rapidly restore the transmission system following any disturbance, and routinely maintain and/or replace equipment to assure capability for reliable delivery of power. Dispatchers provide 24-hour-a-day operation of four dispatching centers and one reliability coordination center. Dispatchers respond to minute-by-minute changes to load and generation to meet or exceed NERC and industry averages for system reliability and performance. Engineers and craft workers maintain the interconnected system at or above industry standards to reduce transmission outages. Energy schedulers maximize revenues from non-firm energy sales. Staff provides continuing services such as system operations, power billing and collection, power marketing, rate setting, energy services, environmental, safety, security and emergency management. Due to the extreme hazards associated with a high-voltage electrical system, staff makes safety a priority in each and every task. Staff inspects construction activities in progress (identified in the Construction and Rehabilitation activity) to ensure quality results and safe working methods. General power resources planning and preconstruction activities continue, including planning, environmental clearance, collection of field data, design of facilities, and issuance of specifications for future rehabilitation and upgrades of existing transmission lines and the review/coordination of requests for transmission system interconnections. Staff evaluates general power resources, collaborating and planning with customers and other members of the interconnected transmission system, to identify the most effective transmission system improvements to maximize benefits to all participants. Western participates in public meetings with customers and initiatives

(dollars in thousands)

FY 2009	FY 2010	FY 2011

supported by the Department.

Total FTE numbers for FY 2011 include 1,114 for Western's Construction, Rehabilitation, Operation and Maintenance (CROM) Account activities. Included in this amount are 18 FTE for Boulder Canyon Project (BCP) activities accomplished using receipts from the Colorado River Dam Fund under a reimbursable agreement with the Bureau of Reclamation. FTE reflected for CROM Account activities total 1,073 and 1,107 for FY 2009 and 2010, respectively, which includes the FTE associated with BCP activities of 15 for FY 2009 and 17 for FY 2010. The change of FTE reflected in FY 2011 for Western's CROM Account is attributable to increase of 13 FTE for Western's Operations Consolidation Project, which will enable Western to lessen the future staffing and budget impacts of complying with new regulations by consolidating operations functions, where feasible. This increase is offset by a shift in 6 FTE in support of O&M activities under the Colorado River Basins Power Marketing Fund (CRBPMF).

The FY 2011 program level for salary and benefits reflects the increase in FTE and the anticipated salary to fund the majority of the FTE financed in this account. The program request includes approximately $2,216 thousand for salary and benefit activities of the Boulder Canyon Project, and other financing methods fund the remainder. Western's overall average budgeted salary/benefit costs per FTE for FY 2009, FY 2010 and FY 2011 are $106,735, $111,289, and $119,758 respectively. More than 37 percent of Western's personnel salaries and compensation policies are determined through wage surveys and union negotiations (craft workers, power system dispatchers, schedulers, and marketers) and become effective at the beginning of a fiscal year rather than in January as do the General Schedule increases.

Travel	**8,382**	**8,684**	**9,421**

Estimates, including $167,000 for the Boulder Canyon Project, include transportation and per diem allowances for day-to-day performance of duties of Federal staff, including crews who maintain the interconnected system. The remote and rural locations in Western's 15-State service area result in less competitive pricing. Rental/lease of GSA vehicles and other transportation estimates are also included. Estimates are based on historical costs and an assessment of planned activity. The slight increase is attributable to inflation, and an increase of planned travel activity.

Support Services	**24,265**	**26,552**	**27,902**

Support services funded in this category include information processing, warehousing, job related training and education, engineering, miscellaneous advisory and assistance services, and general administrative support. The Boulder Canyon portion of the support services estimate totals $365,000. The increase to this activity is required to support Western's mission needs in environmental analysis of substation construction, training requirements in support of Western's succession planning, and ADP program support for Western's financial system. Other increases are primarily inflationary in nature offset by a slight decrease in administrative services.

Other Related Expenses	**19,249**	**22,323**	**23,228**

Other related expenses include rental space, utilities, supplies and materials, telecommunications, personal computers, printing and reproduction, training tuition, and DOE's working capital fund

(dollars in thousands)

	FY 2009	FY 2010	FY 2011

distribution. The Boulder Canyon portion of these expenses total $502,000. Rental space costs assume the General Services Administration's (GSA) inflation factor. Other costs are based on historical usage and actual cost of similar items. The increase is primarily attributable to administrative equipment maintenance expenses charged to this account, an increase to miscellaneous services which includes Western's guard service requirements, and a slight increase in tuition reimbursements. These increases are offset by a decrease in purchases from other Government accounts as well as a decrease in planned architectural and engineering services required in FY 2011.

Total, Program Direction	**166,423**	**180,756**	**193,961**

Explanation of Funding Changes

	FY 2011vs. FY 2010 ($000)
Salaries and Benefits	
▪ The increase to salary and benefits includes Western's request for an increase of 7 FTE and supports the remaining FTE financed in this account, to include those salaries determined through negotiations.	+10,213
Travel	
▪ The increase to this activity includes inflationary factors and a slight increase in travel related to training for those employees hired under Western's 50-5-5 trainee program.	+737
Support Services	
▪ The increase to this activity is primarily attributable to economic and environmental analysis in support of Western's capital mission needs. Other increases include training and education as part of Western's succession planning, ADP support associated with Western's financial system upgrade, with the balance of increases being inflationary in nature. These increases are offset by a slight decrease to administrative requirements.	+1,350
Other Related Expenses	
▪ The increase is primarily attributable to administrative equipment maintenance expenses charged to this account, an increase in miscellaneous services which includes Western's guard service requirements, and a slight increase in tuition reimbursements. These increases are offset by decreases in purchases from other Government accounts as well as a planned architectural and engineering services required in FY 2011.	+905
Total Funding Change, Program Direction	**+13,205**

Support Services by Category

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Technical Support			
Economic and Environmental Analysis	2,738	3,981	5,756
Test and Evaluation Studies	0	0	0
Total, Technical Support	2,738	3,981	5,756
Management Support			
Management Studies	0	0	0
Training and Education	1,006	1,161	1,485
Automated Data Processing	6,284	6,444	6,513
Reports and Analyses Management and General Administrative Services	14,237	14,966	14,148
Total, Management Support	21,527	22,571	22,146
Total, Support Services	24,265	26,552	27,902

Other Related Expenses by Category

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Training	364	288	526
Working Capital Fund	1,174	1,159	1,117
Printing and Reproduction	104	118	116
Rental Space	1,858	2,303	2,316
Software Procurement/Maintenance Activities/Capital Acquisitions	3,940	3,695	4,339
Purchases from Government Accounts	1,131	976	560
Architectural and Engineering Services	2,889	2,961	2,213
Other Miscellaneous Expenses	7,789	10,823	12,041
Total, Other Related Expenses	19,249	22,323	23,228

Utah Mitigation and Conservation

Funding Schedule by Activity

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Utah Mitigation and Conservation Budget Authority	7,342	7,584	7,627
Total, Utah Mitigation and Conservation Budget Authority	7,342	7,584	7,627

Description

The Reclamation Projects Authorization and Adjustment Act of 1992, Title IV, established the Utah Reclamation Mitigation and Conservation Account (Account) in the Treasury of the United States. The purpose of this Account is to ensure that the level of environmental protection, mitigation, and enhancement achieved in connection with projects identified in the Act and elsewhere in the Colorado River Storage Project in the State of Utah is preserved and maintained. The Administrator of Western is authorized to deposit funds into the Account. Such expenditures are to be considered non-reimbursable and non-returnable. The Utah Reclamation Mitigation and Conservation Commission established under Title III of the Act, is authorized to administer all funds deposited into this Account.

Benefits

This Account provides for the preservation of fish and wildlife and recreation resources impacted by the Central Utah Project and the Colorado River Storage Project in the State of Utah.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Utah Mitigation and Conservation	**7,342**	**7,584**	**7,627**
A deposit of $7,627 thousand will be made to this Account.			
Total, Utah Mitigation and Conservation	**7,342**	**7,584**	**7,627**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Utah Mitigation and Conservation	
The increase is based on the required calculation using factors found in the Economic Assumptions, CPI-Urban Customers.	+43
Total Funding Change, Utah Mitigation and Conservation	**+43**

Falcon and Amistad Operating and Maintenance Fund

Funding Profile by Subprogram

(dollars in thousands)

	FY 2009 Current Appropriation	FY 2009 Current Recovery Act Appropriation	FY 2010 Current Appropriation	FY 2011 Request
Western Area Power Administration				
Falcon and Amistad Operating and Maintenance Fund	2,959	0	2,568	3,715
Less Offsetting Collections, Annual Expenses	0	0	-2,348	-3,495
Total, Falcon and Amistad Operating and Maintenance Fund	2,959	0	220	220
Reclassification of Mandatory Receipts to Discretionary Offsetting Collections	0	0	+2,348	0

Public Law Authorization:
Public Law 103-236, "Foreign Relations Authorization Act, Fiscal Years 1994 and 1995"
The Act of June 18, 1954 (68 Stat. 255)

Mission

The Falcon and Amistad Operating and Maintenance Fund (Maintenance Fund) was established in the Treasury of the United States as directed by the Foreign Relations Authorization Act, Fiscal Years 1994 and 1995. The Maintenance Fund is administered by the Administrator of Western for use by the Commissioner of the U. S. Section of the International Boundary and Water Commission (IBWC) to defray administrative, O&M, replacements, and emergency costs for the hydroelectric facilities at the Falcon and Amistad Dams.

Benefits

The Falcon-Amistad Project hydroelectric power generation plants sell generated power to rural electric cooperatives through Western. The United States' share of the generating capacity of the two power plants is 97.5 MW. All revenues collected in connection with the disposition of electric power generated at the Falcon and Amistad Dams, except monies received from the Government of Mexico, are credited to the Maintenance Fund. Any monies received from the Government of Mexico are credited to the General Fund of the U. S. Treasury. Revenues collected in excess of expenses are used to repay, with interest, the cost of replacements and original investments, thus supporting Western's Program Goal. Full funding will support 24-hour/day operation and maintenance of the two power plants to ensure response to ever-changing water conditions, customer demand, and continual coordination with operating personnel of the Government of Mexico. In addition, power will be marketed, repayment studies will be completed and revenues collected. The Federal staff funded under this program continues to be allocated to the U. S. Section of IBWC by the Department of State. Consistent with the authority provided in the 2010 Energy and Water Appropriations, the FY 2011 Budget provides funding for the annual expenses through discretionary offsetting collections derived from power receipts collected to recover those expenses.

Falcon and Amistad Operating and Maintenance Fund

Funding Schedule by Activity

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Falcon and Amistad Operating and Maintenance Fund			
Salaries and Benefits	1,965	2,019	2,505
Routine Services	803	392	1,015
Miscellaneous Expenses	176	142	179
Marketing, Contracts, Repayment Studies	15	15	16
Subtotal, Falcon and Amistad Operating and Maintenance Fund	2,959	2,568	3,715
Offsetting Collections, Annual Expenses	0	-2,348	-3,495
Total, Falcon and Amistad Operating and Maintenance Fund	2,959	220	220

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Salaries and Benefits	**1,965**	**2,019**	**2,505**

Salaries and benefits are provided for 42 positions of the U.S. Section of the IBWC who operate and maintain the two power plants on a 24-hour/day basis, including planned maintenance activities, required safety services, and emergency response to flood operations and/or equipment failure. The increase is attributed to promotions, salary and cost of living adjustments, and additional personnel.

Routine Services	**803**	**392**	**1,015**

Routine services such as inspection and service of the HVAC and air compressor systems, fire suppression systems, elevators, self-contained breathing apparatus, recharge and hydro-testing of fire extinguishers, calibration of test equipment, rebuild of electric motors, and repair of obsolete equipment when replacement parts are no longer available will be provided. The request includes capitalized estimates of $220 thousand to partially cover the expense of installing an Access Control System at both Falcon and Amistad power plants. At present, both Falcon and Amistad have weak physical security. Both power plants are considered soft targets, attractive to terrorists wishing to either enter the facility from the United States, Mexico, or the Rio Grande River. This leaves employees and area populations at risk. An access control system is needed as Falcon and Amistad power plants have been classified as Tier II facilities by the Department of Homeland Security.

Miscellaneous Expenses	**176**	**142**	**179**

Funding for IBWC employees and technical advisors, including travel, training, communications, utilities, printing, and office supplies and materials. Training activities include that which are essential to comply with standards of the Interagency Commission on Dam Safety (ICODS), Occupational and Health Administration (OSHA), and the National Dam Safety Act.

Marketing, Contracts, Repayment Studies	**15**	**15**	**16**

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Costs for marketing power, administration of power contracts, and preparation of rate and repayment studies are included. Based on accurate studies, staff ensures that power revenues are set at an appropriate level to recover annual expenses and meet repayment schedules.			
Total, Falcon and Amistad Operating and Maintenance Fund	**2,959**	**2,568**	**3,715**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Salaries and Benefits The increase is due to the addition of 7 FTE's to include more security guards and maintenance workers at both Falcon and Amistad power plants. Further increase is attributed to promotions, salary and cost of living adjustments.	+486
Routine Services The increase is due to an increase in operations and maintenance activities charged to this account.	+623
Miscellaneous Expenses The increase is due to inflation, an increase in utility estimates to include WAN services, and funding for employees to obtain Power Plant Technical Training Testing/Operations certification.	+37
Marketing, Contracts, Repayment Studies The increase is due to inflation.	+1
Total Funding Change, Falcon and Amistad, Operating and Maintenance Fund	**+1,147**

Colorado River Basins Power Marketing Fund

Funding Profile by Subprogram

(dollars in thousands)

	FY 2009 Current Appropriation	FY 2009 Current Recovery Act Appropriation	FY 2010 Current Appropriation	FY 2011 Request
Colorado River Basins Power Marketing Fund				
Equipment, Contracts and Related Expenses	195,137	0	212,766	174,734
Program Direction	45,147	0	48,957	52,569
Total, Operating Expenses from new authority	240,284	0	261,723	227,303
Offsetting Collections Realized	-263,284	0	-284,723	-250,303
Total, Obligational Authority	-23,000	0	-23,000	-23,000

Public Law Authorizations:
Public Law 75-529, "The Fort Peck Project Act of 1938"
Public Law 84-484, "The Colorado River Storage Project Act of 1956"
Public Law 90-537, "The Colorado River Basin Project Act of 1968"
Public Law 95-91, "Department of Energy Organization Act" (1977)

Mission

Western operates and maintains the transmission system for the projects funded in this account to ensure an adequate supply of reliable electric power in a clean and environmentally safe, cost-effective manner. The Colorado River Basins Power Marketing Program (Program) is comprised of the three power systems: the Colorado River Storage Project, including the Dolores and Seedskadee Projects; the Fort Peck Project, and the Colorado River Basin Project. This program is funded through Western's business-type revolving fund (Federal Enterprise Fund), the Colorado River Basins Power Marketing Fund.

Benefits

Western achieves continuity of service by maintaining its power systems at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the revenues gained from non-firm energy sales. In concert with its customers, Western reviews required replacements to its existing infrastructure to sustain reliable power delivery to its customers and to contain annual maintenance expenses.

Revenues from the sale of electric energy, capacity and transmission services replenish the fund and are available for expenditure for operation, maintenance, replacements, power billing and collection, program direction, purchase power and wheeling, interest, emergencies, and other power marketing expenses. Power sales and other revenues, which are collected in excess of expenses, are used to repay Federal investments to the U.S. Treasury. This request represents Western's estimate of obligations to finance these business-type operations.

Equipment, Contracts and Related Expenses

Funding Schedule by Activity

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Equipment, Contracts and Related Expenses			
Supplies, Materials, and Services	12,837	13,897	13,088
Purchase Power Costs	164,284	175,561	140,070
Capitalized Equipment	6,171	18,169	16,185
Interest/Transfers	11,845	5,139	5,391
Total, Equipment, Contracts and Related Expenses	195,137	212,766	174,734

Description

This program supports the Secretary's Energy Goal to build a competitive, low-carbon economy and secure America's energy future. Western ensures an adequate supply of reliable electric power in a safe, cost-effective manner, and achieves continuity of service throughout its service territory by maintaining its power system at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the revenues gained from ancillary services and cost-based non-firm energy sales.

Benefit

Western's equipment, contracts and related expenses are necessary to operate and maintain this activity. Revenues from the sale of electric energy, capacity and transmission services replenish the fund and are available for expenditure for operation, maintenance, power billing and collection, program direction, purchase power and wheeling, interest, emergencies, and other power marketing expenses.

Supplies and materials, such as wood poles, instrument transformers, meters and relays, must be procured to provide necessary resources to respond to routine and emergency situations in the high-voltage interconnected transmission system. Technical services, such as waste management disposal and pest/weed control, are used as needed.

Western's planned replacement and addition activity is based on an assessment of age and the maintenance frequency/problems of individual items of equipment, availability of replacement parts, safety of the public and Western's personnel, environmental concerns, and an orderly work plan. The work plans, coordinated with Western's customers who ultimately bear the burden of all Western expenses, reflect an overall sustainable level of effort, with shifts in emphasis between categories (i.e. electrical versus communication equipment) in any given year.

Electrical equipment replacements, such as circuit breakers, transformers, insulators, revenue meters, switches, control boards, relay and controls must be acquired to assure reliable service to Western's customers. System age and environmental concerns necessitate orderly replacement before significant problems develop.

Replacement and upgrade of microwave, SCADA, and other communication and control equipment continues to provide increased system reliability, and reduce maintenance and equipment costs.

Capitalized movable equipment such as special purpose vehicles (e.g., truck tractor, diggers), special purpose equipment (e.g., pole trailers, brush chippers), specialized test equipment (e.g., motion analyzers and relay test equipment), computer-aided engineering equipment, office equipment, IT equipment and software must be upgraded and replaced.

Electrical resources and transmission capability to firm up the Federal hydropower supplies needed to meet Western's contractual obligations will continue to be obtained. Transmission wheeling services are also purchased when a third party's transmission lines are needed to deliver Federal power to Western's customers.

Reimbursements to the U.S. Army Corps of Engineers for operation and maintenance of the Fort Peck Powerplant and planned interest payments to the U.S. Treasury are also included in this section.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Supplies, Materials, and Services	**12,837**	**13,897**	**13,088**

Supplies, materials, and services necessary to respond to routine and emergency situations in the high-voltage interconnected transmission system will be procured, and reimbursements to the U.S. Army Corps of Engineers for operation and maintenance of the Fort Peck Powerplant will continue. A well-maintained transmission system supports Western's attainment of reliability and transmission availability performance by preventing sudden failure, unplanned outages, and possible regional power system disruptions. By providing 24-hour/day reliable electric power delivery to its customers, Western secures revenues for repayment of the Federal investment. Safe working procedures are discussed before work begins to optimize public safety, Western personnel, and equipment. The request is based on projected work plans for activities funded from this Account. Estimates are based on historical data of actual supplies needed to maintain the transmission system reliably, including emergency situations such as ice storms and tornadoes. Costs are based on recent procurement of similar items. The decrease is primarily due to a slight decreased requirement in this activity.

Purchase Power Costs	**164,284**	**175,561**	**140,070**

Electrical resources, transmission capability and wheeling services will be purchased. The request anticipates the continued low-steady-flow tests conducted at Glen Canyon Dam, as required by the Glen Canyon Dam Environmental Impact Statement Record of Decision. Additionally, amounts include obligational authority to accommodate replacement power purchases for customers served by the Colorado River Storage Project. The replacement power purchases, a provision of the Salt Lake City Area Integrated Projects electric power contracts, are made at the request of power customers at times Western lacks sufficient generation to meet its full contract commitment. The funds for the replacement power purchases are advanced by the requestors prior to the purchase. Anticipated purchase power budget estimates increase in FY 2009 as a result of increased power costs to Western, and an increase in delivered MWh.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Capitalized Equipment	**6,171**	**18,169**	**16,185**

Capitalized equipment including circuit breakers, transformers, relays, switches, transmission line equipment, microwave, SCADA, and other communication and control equipment, will be acquired to assure reliable service to Western's customers. Replacement and upgrade of aged power system components are crucial to system reliability and transmission availability performance. Removing environmental hazards and replacing aged equipment eliminates safety hazards for the public and Western's personnel. Planned communications equipment purchases increases and includes microwave upgrades from Phoenix to Mexican Hat, Buffalo Pass microwave building replacement, and facilities repairs and replacements for Montrose to Mexican Hat. Mobile radio replacements are also planned as the lifespan of these mobile radios have passed. The installation of fiber multiplex equipment is included in this estimate as fiber optic cables are installed on key backbone routes. Included also is funding for the continuation of the project to replace analog microwave with fiber optic ground wire and fiber optic terminal. Aged fiberglass communication buildings that have suffered extensive irreparable physical damage are also scheduled for replacement. Transmission line estimates decrease and include the purchase of poles, crossarms, conductors, overhead ground wire and hardware for the continued transmission line rebuilds.

Planned substation estimates include the funding request for a maintenance building to provide adequate facilities to house motorized and moveable equipment along with storage and shop areas and crew quarters for the personnel duty stationed at this location. The existing metal buildings were built in 1952 and have reached the end of their useful life and continue to have numerous problems. Replacement of oil breakers at Crossover and Vernal is also included as the parts are worn due to the number of operations. Also included is the replacement of a transformer at Circle. This unit is over 50 years old and is showing signs of insulation breakdown from oil analysis tests. Small oil leaks are beginning to show in the radiators which are difficult to fix. The upgrade of the 230-kV transfer equipment at Glen Canyon substation is also planned. Funding for the conversion of the 115-kV bus into a 230-kV 3-terminal ring bus, transformers, breakers, and control panels are requested due to the upgrade of the Charlie Creek-Watford City-Williston Transmission Line. Also included in this estimate is the complete rebuild of the Shiprock substation access road. In addition, replacements of transformer monitors at various substations are also planned. Western is beginning the fifth year of a 10-year program to replace older electro-mechanical relays with microprocessor relays due to aged equipment. The microprocessor relays will assist in finding faults faster in order to more efficiently restore service to the customer. Other miscellaneous items required for substation replacements include surge arrestors, batteries and chargers, and monitoring equipment.

Planned movable capitalized property estimates increase only slightly and include the replacement of a front end loader at Montrose to access road repair and maintenance on transmission line right of ways, special purpose trucks at Havre and Ft. Peck, a caterpillar vehicle at Fort Peck as the existing unit is 35 years old and in need of replacement. The existing trucks and vehicles being replaced have reached the end of their useful life and require major transmission rebuilds, of which parts are not readily available. Also requested is a new Ag Tractor as the existing 1985 unit has been a maintenance issue for several years and has hydraulic, transmission, and differential problems making the unit extremely costly to

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

maintain. This unit has been out of production for 15 years and needs to be replaced. Other estimates include the replacement of outdated test equipment, and test equipment to troubleshoot the new digital microwave radio system. Ongoing replacement is also planned for aging information technology support systems and routers. The dependability of this equipment is nearing the uncertainty mark and reaching vendor end of life. Other requests include funding for the continuation SCADA Upgrade program, SCADA system software and hardware procurements for the Operations Consolidation Project, as well as other small minor enhancements that provide for the ease of maintenance, protection of equipment and materials, and environmental compliance.

Interest/Transfers	**11,845**	**5,139**	**5,391**

Interest payments to the U.S. Treasury will occur. Estimates are based on Power Repayment Studies for the Projects funded in this account. The projected interest payment increases in FY 2011 primarily due to an increase in investment and a reduction in principal payments made from the prior years estimated Power Repayment Study.

Total, Equipment, Contracts and Related Expenses	**195,137**	**212,766**	**174,734**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Supplies and Materials	
▪ The decrease is attributable to a slight change of requirements in this activity.	-809
Purchase Power Costs	
▪ Purchase power costs decrease in FY 2011 as a result of the anticipated improvement of water conditions and a decrease in the costs of purchase power.	-35,491
Capitalized Equipment	
▪ The decrease in capitalized equipment purchases is primarily attributed to a decreased level of purchases associated with planned replacement of substation equipment offset by a slight increase in replacement of transmission line hardware.	-1,984
Interest	
▪ Planned interest payment to the U.S. Treasury in FY 2011 increases due to increase in investment and a reduction in principal payments made from the prior years estimated Power Repayment Study.	+252
Total Funding Change, Equipment, Contracts and Related Expenses	**-38,032**

Program Direction

Funding Profile by Category

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Program Direction			
Salaries and Benefits	32,113	34,845	38,200
Travel	2,362	2,990	2,793
Support Services	5,338	5,653	5,466
Other Related Expenses	5,334	5,469	6,110
Total, Program Direction	45,147	48,957	52,569
Full Time Equivalents	272	291	297

Mission

Program Direction provides the Federal staffing resources and associated costs required to provide overall direction and execution of the Colorado River Basins Power Marketing Fund. Western trains its employees on a continuing basis in occupational safety and health regulations, policies and procedures, and conducts safety meetings at employee, supervisory and management levels to keep the safety culture strong. Accidents are reviewed to ensure lessons are learned and proper work protocol is in place.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Salaries and Benefits	**32,113**	**34,845**	**38,200**

Salaries and benefits will be provided for Federal employees who operate and maintain the Program's high-voltage integrated transmission system and associated facilities; plan, design, and supervise the replacement (capital investments) to the transmission facilities; and market the power and energy produced to repay annual expenses and capital investment. Engineers and craft workers rapidly restore the transmission system, comprised of approximately 4,000 circuit-miles of transmission lines and associated substations, switchyards, communication, control and general plant facilities, following any disturbance. Staff routinely maintain and/or replace equipment to assure capability for reliable power delivery. Dispatchers respond to minute-by-minute changes to load and generation to meet or exceed the NERC and industry averages. Energy schedulers maximize revenues from non-firm energy sales, and power rates are reviewed and adjusted, thereby supporting the repayment of Federal investment. Staff provides continuing services such as system operations, power billing and collection, power marketing, energy services, technology transfer, environmental, safety, security and emergency management activities. Due to the extreme hazards associated with a high-voltage electrical system, staff makes safety a priority in each and every task. Staff evaluates general power resources, collaborating and planning with customers and members of the interconnected transmission system to

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

identify the most effective transmission system improvements to maximize benefits to all participants.

The 297 FTE supported in this account reflects both direct and indirect (portions of administrative and general expense employees). Amounts are based on planned work associated with facilities funded through this Account and not on specific positions; therefore, FTE numbers may vary from year to year. The funding increase supports the increase of within target FTE and reflects anticipated salary and within-grade increases. As authorized in P.L. 99-141, Western annually establishes pay rates and compensation policy for some employees (craft workers, power system dispatchers, schedulers, and marketers) based on prevailing rates in the electric utility industry. Due to recruitment/retention issues for those occupations across the Nation and increased staff in these categories to meet the additional workload requirements attributed to FERC Order Nos. 888 and 889, Western's Federal salary/benefit costs for the dispatching/scheduling functions increase at varying rates.

Travel	**2,362**	**2,990**	**2,793**

Transportation/per diem allowances for day-to-day performance of duties of Federal staff, including crews maintaining the transmission facilities will continue. Rental/lease of GSA vehicles and transportation of things are also included. Estimates are based on historical travel costs, adjusted for inflation and planned activity. Decreased levels are attributable to a slight decrease in anticipated planned travel, offset by inflationary factors.

Support Services	**5,338**	**5,653**	**5,466**

Support services funded in this category include IT support, warehousing, computer-aided drafting/engineering, and general administrative support. The increase is attributed to inflationary factors, an increase in overhead distribution charged to this account, a slight increase in job related training, offset by a decrease to ADP and administrative support.

Other Related Expenses	**5,334**	**5,469**	**6,110**

Other related expenses include, but are not limited to, DOE's working capital fund distribution, space, utilities and miscellaneous charges, printing and reproduction, training tuition, maintenance of office equipment, supplies and materials, telecommunications, personal computers, and multi-project costs. Intermittent specialized services, not included in on-going support service contracts, are also included. Rental space costs assume the GSA inflation factor. Other costs are based on historical usage and actual cost of similar items. The request reflects inflationary increases, as well as increases from Western's overhead distribution, communications, miscellaneous contractual support, utility costs, and office equipment purchases.

Total, Program Direction	**45,147**	**48,957**	**52,569**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Salaries and Benefits	
▪ Increase in salaries and benefits is attributed to the increase in FTE charged to this account, as well as salary and within grade increases, including salaries determined by prevailing rates in the electric utility industry.	+3,355
Travel	
▪ Decreased levels are attributable to a slight decrease in anticipated planned travel, offset by inflationary factors.	-197
Support Services	
▪ The decrease is primarily attributed to a slight decrease to Administrative Support Services and ADP support directly charged to this account.	-187
Other Related Expenses	
▪ The request reflects inflationary increases, as well as slight increases in the distribution from DOE's Working Capital Fund, maintenance activities and office equipment purchases, offset by a slight decrease in A&E services.	+641
Total Funding Change, Program Direction	**+3,612**

Support Services by Category

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Technical Support			
Economic and Environmental Analysis	0	0	0
Test and Evaluation Studies	0	0	0
Total, Technical Support	0	0	0
Management Support			
Management Studies	0	0	0
Training and Education	241	297	319
ADP Support	1,246	1,290	1,259
Administrative Support	3,851	4,066	3,888
Total, Management Support	5,338	5,653	5,466
Total, Support Services	5,338	5,653	5,466

Other Related Expenses by Category

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Training	31	30	28
Working Capital Fund	204	268	305
Printing and Reproduction	29	29	26
Rental Space	743	806	813
Software Procurement/Maintenance Activities/Capital Acquisitions	796	545	1,167
Other Services	3,531	3,791	3,771
Total, Other Related Expenses	5,334	5,469	6,110

Estimate of Gross Revenues [a]

(dollars in thousands)

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Boulder Canyon Project	84,561	84,894	81,718	83,897	85,283	82,682	85,119
Central Valley Project	390,711	386,062	407,581	420,279	440,548	440,548	440,548
Central Arizona Project [b]	122,242	122,242	122,242	122,242	122,242	122,242	122,242
Falcon-Amistad Project	4,809	4,814	4,813	4,813	4,812	4,811	4,811
Fryingpan-Arkansas Project	17,063	17,770	16,795	16,795	16,795	16,741	16,741
Pacific Northwest-Southwest Intertie Project	30,570	31,000	31,859	32,719	33,578	34,433	34,433
Parker-Davis Project	53,937	54,257	54,253	54,248	54,243	54,238	54,232
Pick-Sloan Missouri Basin Program	448,134	523,878	514,476	520,201	533,324	533,115	533,429
Provo River Project	300	285	289	297	304	312	312
Washoe Project	780	828	829	850	882	852	852
Salt Lake City Area Integrated Projects	167,437	181,504	182,304	182,304	182,304	182,492	182,492
Financial statement adjustments							
Total, Gross Revenues	1,320,544	1,407,534	1,417,159	1,438,645	1,474,315	1,472,466	1,475,211

[a] For most power systems, amounts are based on the FY 2008 Final Power Repayment Studies (PRS). The Central Arizona Project (CAP) amounts shown are estimated projections.
[b] Western has contracted with the Salt River Project (SRP) to act as the scheduling entity and operating agent for CAP's portion of the Navajo Generating Station's output (547 MW). In return, as Western retains marketing responsibility, SRP agreed to pay monthly costs to cover annual expenses.

Estimate of Energy Sales[a]

(in gigawatthours) [b]

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Boulder Canyon Project	3,772	4,047	4,069	4,076	4,081	3,958	3,897
Central Valley Project	8,954	9,053	9,091	9,314	9,549	9,796	10,055
Central Arizona Project	4,357	4,357	4,357	4,357	4,357	4,357	4,357
Falcon-Amistad Project	141	141	141	141	141	141	141
Loveland Area Projects [c]	2,123	2,123	2,123	2,123	2,123	2,123	2,123
Pacific Northwest-Southwest Intertie Project [d]	0	0	0	0	0	0	0
Parker-Davis Project	1,425	1,425	1,425	1,425	1,425	1,425	1,425
Pick-Sloan Missouri Basin Program, Eastern Division	8,742	8,742	8,763	8,763	8,763	8,763	8,763
Provo River Project	22	22	22	22	22	22	22
Washoe Project	12	12	12	12	12	12	12
Salt Lake City Area Integrated Projects [e]	5,431	5,390	5,433	5,433	5,433	5,433	5,433
Total	34,979	35,312	35,436	35,666	35,906	36,030	36,228

[a] For most power systems, sales amounts are based on FY 2008 Power Repayment Studies (PRS). The estimates for Central Arizona, Falcon-Amistad, and Provo River projects are typically based on average sales over the prior five years.
[b] One gigawatthour (GWh) equals one million kilowatt-hours (kWh).
[c] Loveland Area Projects include Fryingpan-Arkansas Project and the Western Division of the Pick-Sloan Missouri Basin Program.
[d] Pacific Northwest-Southwest Intertie shows no energy sales, but reflects revenues from the transmission of energy (refer to the Estimate of Revenues table). The Intertie Project is for transmission of energy only.
[e] Salt Lake City Area Integrated Projects include the Colorado River Storage Project, Collbran Project, Rio Grande Project, Seedskadee Project, and Dolores Project.

Estimate of Proprietary Receipts

	(dollars in thousands)						
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
MANDATORY							
Falcon Amistad Maintenance Fund, 895178	2,959	220	220	220	220	220	220
Sale and transmission of electric power, Falcon and Amistad Dams, 892245	1,600	2,228	1,098	975	846	710	572
Sale of Power and Other Utilities Not Otherwise Classified, 892249	18,807	30,000	30,000	30,000	30,000	30,000	30,000
Sale of Power–Western–Reclamation Fund, 895000.27	172,844	58,236	94,241	102,415	116,479	105,401	111,350
Total, Mandatory Receipts	196,210	90,684	125,559	133,610	147,545	136,331	142,142
DISCRETIONARY							
Offsetting Collections from the recovery of power related expenses – Western – 89X5068.01	248,509	349,807	350,919	359,808	367,070	368,628	376,199
Less Purchase Power and Wheeling expenses	-248,509	-349,807	-350,919	-359,808	-367,070	-368,628	-376,199
Subtotal, 89X5068.01	0	0	0	0	0	0	0
Offsetting Collections from the recovery of annual expenses – Western - 89X5068.91[a]	0	147,530	180,306	185,983	186,970	192,848	198,929
Less Operating and Maintenance expenses	0	-37,038	-31,270	-32,008	-32,644	-33,358	-34,093
Less Program Direction expenses	0	-110,492	-149,036	-153,975	-154,326	-159,490	-164,836
Subtotal, 89X5068.91	0	0	0	0	0	0	0
Offsetting Collections from the recovery of power related expenses – Falcon Amistad Maintenance – 89X5178 [b]	0	2,348	3,495	3,618	3,746	3,881	4,019
Less Operating and Maintenance expenses	0	-2,348	-3,495	-3,618	-3,746	-3,881	-4,019
Subtotal, 89X5178	0	0	0	0	0	0	0
Subtotal, Discretionary Receipts	0	0	0	0	0	0	0
TOTAL, PROPRIETARY RECEIPTS	196,210	90,684	125,559	133,610	147,545	136,331	142,142

[a] Pursuant to the Energy and Water Development and Related Agencies Appropriations Act, 2010, the FY 2010, FY 2011, and outyear receipt estimates reflect that receipts associated with annual expenses of this account are reclassified from mandatory to discretionary.

[b] Pursuant to the Energy and Water Development and Related Agencies Appropriations Act, 2010, the FY 2010, FY 2011, and outyear receipt estimates reflect that receipts associated with annual expenses of the Falcon and Amistad Operating and Maintenance Fund are reclassified from mandatory to discretionary.

Status of Treasury Borrowing

(dollars in millions)

	Direct Financing with Treasury		
	FY 2009	FY 2010	FY 2011
Total Legislated Treasury Borrowing Authority	3,250	3,250	3,250
Start-of-Year – Total Borrowing Authority Available	3,250	3,250	3,103
Annual Activity [a]			
Annual Borrowing Plan	0	-147	-914
Repayment	0	0	0
Subtotal, Annual Activity	0	-147	-914
Total, Remaining Treasury Borrowing Authority	3,250	3,103	2,189

The accompanying notes are an integral part of the table.

Western's estimate for the use of borrowing authority is comprised of funding for the construction schedules of projects selected to date, as impacted by interest rates and other cash management factors. In executing our mandate under the Recovery Act, as projects are added the estimates will be updated in subsequent reporting periods to reflect an accurate balance of legislated borrowing authority.

Borrowing authority will fund the construction of infrastructure by Western or our external partners(s). When work is performed by our partners, Western will report only the direct financing with Treasury. When work is performed internally, Western will use existing financial system and related accounting and business rules to isolate project obligations and expenditures, and will expand the table to incorporate this information. Western will also isolate project revenues in the same manner. Any and all reporting will be available at the individual project level, but reported cumulatively in the table above.

[a] Amounts shown for annual borrowing plan and repayment are estimates.

Bonneville Power Administration

Bonneville Power Administration

Bonneville Power Administration

Proposed Appropriations Language

Expenditures from the Bonneville Power Administration Fund, established pursuant to Public Law 93-454, are approved for [the Leaburg Fish Sorter, the Okanogan Basin Locally Adapted Steelhead Supplementation Program, the Crystal Springs Hatchery Facilities, and, in addition, for] official reception and representation expenses in an amount not to exceed [$1,500]*$3,000*.
During fiscal year 2011, no new direct loan obligations may be made.

Explanation of Changes

Proposed FY 2011 appropriation language increases the annual limit on BPA reception and representation expenditures to $3,000 per year.

The proposed appropriations language restricts new direct loans in FY 2011 as in FY 2010.

Bonneville Power Administration

Overview

Summary by Program

(accrued expenditures in thousands of dollars)

	FY 2009	FY 2010	FY 2011
CAPITAL INVESTMENTS			
Power Services	185,335	262,379	272,808
Transmission Services	192,731	450,498	462,213
Capital Equipment & Bond Premium	31,092	23,723	23,889
Total, Capital Investments	409,158	736,600	758,910
Accrued expenditures will require budget obligations of	409,158	736,600	758,910
Operating Expenses	2,410,146	2,983,698	3,219,446
Projects Funded in Advance	184,000	77,403	77,179
Capital Transfers (cash)	432,019	459,829	386,870
BPA Net Outlays	234,000	(10,000)	(10,000)
BPA Staffing (FTE)	3,021	3,100	3,100

Outyear Summary

(accrued expenditures in thousands of dollars)

	FY 2012	FY 2013	FY 2014	FY 2015
CAPITAL INVESTMENTS				
Power Services	278,470	288,682	290,409	294,266
Transmission Services	526,854	437,557	394,952	428,746
Capital Equipment & Bond Premium	28,782	28,923	29,297	29,884
Total, Capital Investments	834,106	755,162	714,658	752,896
Accrued expenditures will require budget obligations of	834,106	755,162	714,658	752,896
Operating Expenses	3,343,947	3,531,188	3,614,487	3,683,485
Projects Funded in Advance	78,060	78,099	78,137	59,231
Capital Transfers (cash)	332,261	197,364	150,700	90,958
BPA Net Outlays	(10,000)	(10,000)	(10,000)	(10,000)
BPA Staffing (FTE)	3,100	3,100	3,100	3,100

Overview

The accompanying notes are an integral part of this table.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses. Actual Net Outlays are volatile and are reported in Report on Budget Execution and Budgetary Resources (SF-133). Estimated Net Outlays could change due to changing market conditions, streamflow variability, and ongoing changes in the electric industry.

Revenues, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming rate adjustment mechanisms, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, causing the same Net Outlay result. Adjustments for depreciation and 4(h)(10)(C) credits of the NW Power Act are also assumed.

The cumulative amount of actual advance amortization payments as of the end of FY 2009 is $2,536 million.

FTE outyear data are estimates and may change.

Preface

The Bonneville Power Administration (Bonneville or BPA) serves the Pacific Northwest through operating an extensive electricity transmission system and marketing wholesale electrical power at cost from Federal dams and other non-Federal generating units including some wind energy generation facilities.

The organization of Bonneville's FY 2011 budget reflects Bonneville's business services basis for utility enterprise activities. Bonneville's two major areas of activity on a consolidated budget and accounting basis include Power Services (PS) and Transmission Services (TS) with administrative costs included. The PS includes line items for Fish and Wildlife, Conservation and Energy Efficiency, Residential Exchange Program (REP), Associated Projects O&M Costs, and Northwest Power and Conservation Council (Planning Council, Council).

Mission

The strategic mission of Bonneville as a public service organization is to create and deliver the best value for its customers and constituents as it acts in concert with others to assure the Pacific Northwest:

- An adequate, efficient, economical and reliable power supply;
- A transmission system that is adequate to the task of integrating and transmitting power from Federal and non-Federal generating units, providing service to BPA's customers, providing interregional interconnections, and maintaining electrical reliability and stability; and
- Mitigation of the Federal Columbia River Power System (FCRPS) impacts on fish and wildlife.

As BPA shapes programs and plans spending levels, it is driven by its strategic vision that encompasses the following four pillars:

- High reliability;
- Low rates consistent with sound business principles;
- Responsible environmental stewardship; and
- Accountability to the region.

Bonneville is committed to cost-based rates and public and regional preference in its marketing of power. Bonneville will set its rates as low as possible consistent with sound business principles and the full recovery of all of its costs, including timely repayment of the Federal investment in the system.

Benefits

Bonneville provides electric power (about one third of the electricity consumed in the region), transmission (about three-fourths of the region's high voltage transmission capacity), and energy efficiency throughout the Pacific Northwest, a 300,000 square mile service area that includes a population of about 12.3 million people. Bonneville markets the electric power produced from 31 operating Federal hydro projects in the Pacific Northwest owned by the U.S. Army Corps of Engineers (Corps) and the U.S. Department of Interior, Bureau of Reclamation (Reclamation), and also acquires non-Federal power, including the power from the Columbia Generating Station (CGS), to meet the needs of its customer utilities. Bonneville owns and operates over 15,000 circuit miles of transmission lines, 259 substations and associated power system control and communications facilities over which

this electric power is delivered. Bonneville also has capital leases for certain transmission facilities. Bonneville also supports the protection and enhancement of fish and wildlife, and provides leadership in conservation and renewables development, as part of its efforts to preserve and balance the economic and environmental benefits of the FCRPS.

Bonneville's strategic direction establishes the agency's most important long-term objectives and the actions that will help it manage to these objectives. The strategic direction is advanced by BPA consistent with its three core values: trustworthy stewardship of the FCRPS, collaborative relationships, and operational excellence.

American Recovery and Reinvestment Act of 2009

In the American Recovery and Reinvestment Act of 2009 (ARRA), Section 401 provides for an increase in the amount of BPA's Treasury bonds that may remain outstanding at any given time under the Federal Columbia River Transmission System Act (Transmission System Act). This $3.25 billion increase in the limit on BPA's available Treasury bonds gives BPA the certainty of sufficient access to capital to proceed with planned new projects and ensures that existing capital projects will be able to proceed as planned.

Construction has begun on the $343 million West of McNary Reinforcements Group 1 (known as McNary-John Day), which will be funded by the increased Treasury borrowing authority through the ARRA. The project is expected to create between 100-200 construction jobs at its peak and provide transmission for over 575 MWs of wind energy, once energized in 2012. The project supports regional economic recovery efforts and the integration of wind development in the Northwest.

BPA is also moving ahead with environmental reviews under National Environmental Policy Act (NEPA) for three additional high-voltage transmission lines to meet load growth and facilitate renewable resource development needs throughout the Northwest. These projects and other capital investments in this FY 2011 budget support BPA's power generation, transmission, fish and wildlife, conservation, and renewable resources efforts.

BPA is committed to assuring that BPA's actions contribute to and support the Administration's goals under the ARRA. Integration of renewable energy sources onto the electrical grid helps the economic recovery efforts through clean, secure and affordable energy sources. See the Department of Energy (DOE) Recovery website (http://www.energy.gov/recovery/index.htm) as a source for up to date information.

Contribution to the Secretary's Priorities

DOE's five Secretarial priorities are Science and Discovery, Clean Energy, Economic Prosperity, National Security and Legacy, and Lower Green House Gas Emissions. Bonneville's Government Performance Results Act (GPRA) Unit Program Goal, to Market and Deliver Federal Power, supports DOE's Economic Prosperity priority.

GRPA Unit Program Goal 01.03.18.00: Bonneville Power Administration. Market and Deliver Federal Power: Ensure Federal hydropower is marketed and delivered while passing the North American Electric Reliability Corporation's (NERC) control compliance ratings, meeting planned repayment targets, and achieving targeted hydropower generation efficiency performance.

Contribution to GPRA Unit Program Goal 01.03.18.00: BPA. Market and Deliver Federal Power

Bonneville contributes to this strategic goal through its strategic vision to advance a Northwest power system that is a national leader in providing reliability, low rates consistent with sound business principles, environmental stewardship, and accountability to the region. For FY 2010, BPA is continuing its emphasis on performance with over 25 Key Agency Targets designed to measure progress toward achieving its business objectives. These objectives are focused within four interrelated perspectives: stakeholder value, financial performance, internal operations, and people and culture. Bonneville's infrastructure investments in the Pacific Northwest to meet power and transmission needs continue to support DOE's strategic goal on energy infrastructure.

Bonneville's strategic direction has helped to identify a number of key long-term issues. These issues center on providing Bonneville customers with certainty over load service obligations and enabling customers and the market to respond with the necessary electric industry infrastructure investments. Other key strategic interests include general market stability, BPA risk management, and long-term assurance of funding to repay the U.S. Treasury (Treasury) investment in infrastructure.

Annual Performance Targets and Results

Secretarial Goal: Economic

GPRA Unit Program Goal: Bonneville Power Administration

FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
System Reliability Performance Measure: Attain average North American Electric Reliability Corporation (NERC) compliance ratings for the following NERC Control Performance Standards (CPS) measuring the balance between power generation and load, including support for system frequency: (1) CPS1, which measures generation/load balance on one-minute intervals (rating > or =100); and (2) CPS2, which limits any imbalance magnitude to acceptable levels (rating > or =90). See note on FY 2010 CPS-2 target on p. 8.									
T: CPS1>100, CPS2>90 A: CPS1 193.3, CPS2 96.1	T: CPS1>100, CPS2>90 A: CPS1 193.9, CPS2 96.01	T: CPS1>100, CPS2>90 A: CPS1 191.4, CPS2 95.0	T: CPS1>100, CPS2>90 A: CPS1 192.5, CPS2 95.9	T: CPS1>100, A:	T: CPS1>100, CPS2>90 A:	T: CPS1>100, CPS2>90 A:	T: CPS1>100, CPS2>90 A:	T: CPS1>100, CPS2>90 A:	T: CPS1>100, CPS2>90 A:
Hydropower Generation Efficiency: Achieve > or = 97.5% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700-2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.									
T: >=97% A: 100%	T: >=97% A: 99.6%	T: >=97.5% A: 98.8%	T: >=97.5% A: 100.2%	T: >=97.5% A:	T: >=97.5% A:	T: >=97.5% A:	T: >=97.5% A:	T: >=97.5% A:	T: >=97.5% A:
Repayment of Federal Power Investment Performance: Meet planned annual repayment of principal on Federal power investments.									
T: $304 million A: $646 million	T: $387 million A: $618 million	T: $409 million A: $555 million	T: $276 million A: $432 million	Meet planned annual repayment of principal on Federal power investments.	Meet planned annual repayment of principal on Federal power investments.	Meet planned annual repayment of principal on Federal power investments.	Meet planned annual repayment of principal on Federal power investments.	Meet planned annual repayment of principal on Federal power investments.	Meet planned annual repayment of principal on Federal power investments.

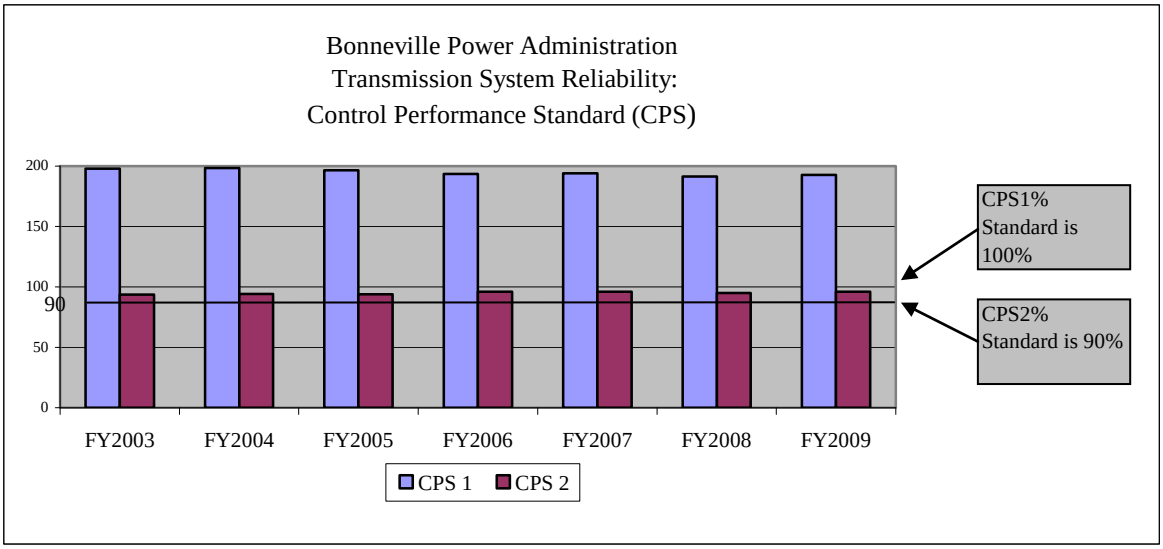
Transmission System Reliability Performance Indicator

This indicator defines a standard of minimum monthly control performance as established by the NERC. Each control area within the system is to operate above minimum monthly control compliance ratings that can be achieved within the bounds of reasonable economic and physical limitations. Each control area is to monitor its control performance continuously against two standards, CPS 1 and 2.

The CPS-1 and CPS-2 performance indicators are industry standards that U.S. and Canadian electric utilities use in conjunction with NERC to help assure the reliability of the North American high voltage distribution system, and thereby to benefit the public. These measures are intended to indicate whether or not electric utility systems are being operated within acceptable operating parameters. Any deviation from the minimum standards must be reported to NERC. CPS-1 helps assure generation and load balance. CPS-2 helps limit the magnitude of any imbalance to acceptable levels, and provides a frequency sensitive evaluation of how well a control area meets its demand requirements.

Transmission System Reliability Target in FY 2011: Attain average NERC compliance ratings for the following NERC CPS measuring the balance between power generation and load, including support for system frequency: (1) CPS-1, which measures generation/load balance on one-minute intervals (rating >= 100); and (2) CPS-2, which limits any imbalance magnitude to acceptable levels (rating >=90).

Note: As part of the Western Electricity Coordinating Council (WECC) field trial of NERC's Reliability Based Control (RBC) draft standard beginning in FY 2010, BPA will not report CPS-2 to DOE for FY 2010 because the RBC and CPS-2 standards are mutually exclusive (only one of these standards can be in effect at the same time). After the RBC field trial, BPA will reevaluate the use of CPS-2 for FY 2011 forward.



Repayment of Federal Power Investment Performance Indicator

This indicator measures the variance of actual from planned principal payments to the Treasury.

Treasury payment outyear estimates for planned amortization of principal are based on rate case estimates when available and planned amortization for future rate case periods. These estimates may change due to revised capital investment plans, actual Treasury borrowing, and advanced amortization payments. Bonneville made its full FY 2009 payment of $845.1 million to the Treasury comprised of $432 million in amortization that includes $234 million in advanced amortization, $366.8 million in interest, and $46.3 million of unfunded CSRS liabilities and other costs.

Repayment target in FY 2011 – Meet planned repayment of principal on Federal power investments in FY 2011.

The following chart displays principal repayment only.

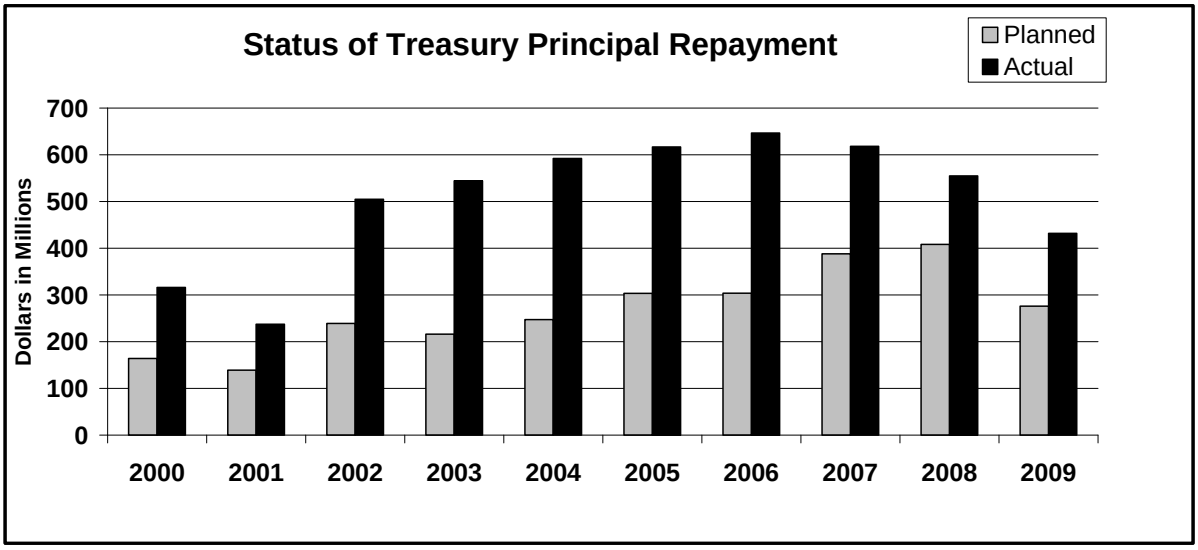


Chart Notes:

FYs 2000 - 2009 payments include portions of future planned amortization amounts consistent with BPA's capital strategy plan and debt optimization.
Advance amortization due to sale of low-voltage transmission facilities includes $13 million and $5.3 million in FYs 2003 and 2006, respectively.

For FYs 2007 - 2009, the planned repayment of principal of Federal power investment reflects the amounts calculated in Bonneville's 2007 Power Rate Case and 2006 and 2008 Transmission Rate Cases that were scheduled to be the lowest level of amortization satisfying the repayment requirements. This display of planned repayment of principal is consistent with all prior years shown on the table. The rate cases also included some amount of advanced repayment of principal to the U.S. Treasury that resulted from BPA's debt optimization program, which involved restructuring Energy Northwest (EN) debt.

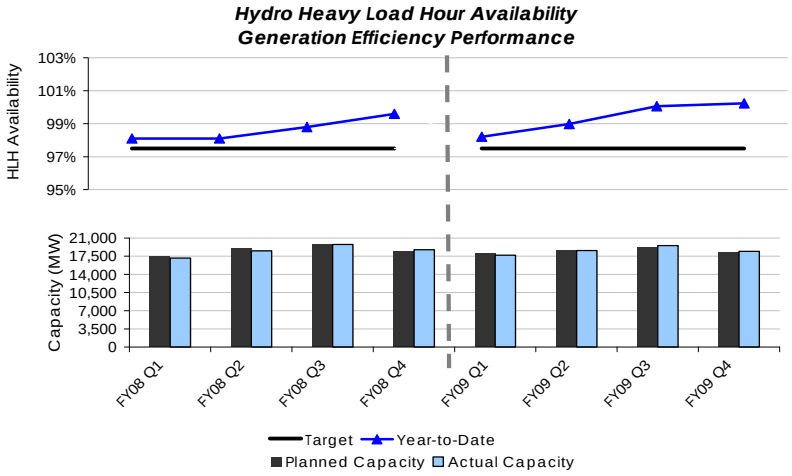
Hydropower Generation Efficiency Performance Indicator

The fundamental programmatic role of Bonneville within the FCRPS is the marketing of electricity generated at the multi-purpose hydro projects in the Pacific Northwest owned and operated by the Corps and Reclamation. Heavy Load Hour Availability (HLHA) concerns the actual effective performance of the hydro system, reflecting joint work between BPA, the Corps, and Reclamation to improve performance of these generating projects when generation is needed most for commercial power operation. It is important from a reliability and economic standpoint to have power generation available when loads are high.

HLHA is the ratio of actual available machine capacity during heavy load hours, divided by planned available capacity during heavy load hours, expressed as a percentage.

Actual available machine capacity is measured directly from data supplied from the hydro plants. Planned available capacity is established annually through the Annual Outage planning process, then updated quarterly based on changes in load and water forecasts. The resulting outage plans are stored in BPA's Outage Database.

> Hydropower Generation Efficiency target: Achieve actual efficiency results at or above planned availability target levels for hydropower generation efficiency.



As represented above, FCRPS hydro performance tracked very closely to the HLHA targets for all four quarters of FY 2009.

Means and Strategies

Bonneville provides electric power, transmission and energy services while supporting the achievement of its vital responsibilities for fish and wildlife, energy conservation, renewable resources and low-cost power in the Pacific Northwest.

BPA's strategic direction and balanced scorecard establish a key objective of meeting electricity availability, adequacy, reliability and cost-effectiveness standards through power and transmission performance, and expansion of the transmission system. The strategic direction and balanced scorecard efforts include a long-term vision of Bonneville's future and an assessment of critical environment factors and key objectives. The vision and assessment help direct Bonneville activities needed to meet its mission over the long term. The objectives are supported by multi-year targets to lay out the long-term course for achieving the objectives.

To improve system adequacy, reliability and availability, BPA has embarked on major transmission infrastructure projects. The projects shore up the region's transmission system and help deliver the region's future power needs. These projects address multiple challenges, such as integration of renewable energy, the need to relieve a number of congested transmission paths, the pressure to keep up with growing energy demands and the need to meet BPA's open access policy in support of competitive markets.

For FY 2011, BPA's total transmission capital budget includes a total of $539 million for main grid additions, upgrades and additions, system replacements, area and customer services, and projects funded in advance (PFIA). These investments, repaid entirely by revenues from BPA's transmission customers or benefiting third parties, are fundamental to BPA's transmission performance.

As part of BPA's strategic direction, Bonneville is also working to improve efficiency and initiate further cost reductions. Bonneville coordinates its power operational activities with the Corps, Reclamation, NERC, regional electric reliability councils, its customers, and other stakeholders to provide the most efficient use of Federal assets. Ongoing work with the Corps and Reclamation is focused on improving the reliability of the FCRPS, increasing its generation efficiency, and optimization of hydro facility operation.

In addition, Bonneville is committed to continue funding efforts to recover listed fish and wildlife species in the Columbia Basin under the Endangered Species Act (ESA) and to work closely with the Council, regional fisheries managers, and other Federal agencies to prioritize and manage fish and wildlife program projects.

Bonneville initiatives are impacted by external factors such as continually changing economic and institutional conditions, competitive dynamics, and ongoing changes in the electric industry.

Private and public sector partners have been and continue to be an important part of BPA's collaborative efforts to promote and foster efficient use of energy. BPA has initiated efforts to explore non-Federal financial participation in its transmission infrastructure projects with transmission customers and others in the region. Additionally, BPA has partnered and assisted with a DOE Wind Power crosscutting initiative to strengthen energy security by adding alternative sources of renewable energy.

Additional activities and products contributing to BPA's long-term achievement of its mission include implementing the Regional Dialogue, an enhanced capital asset management plan, a workforce plan that addresses the long-term staffing needs of the agency, and continued efforts to increase operational efficiencies. A separate Technology and Innovation office within BPA leads the long-term strategy development and management for research, development, demonstration and deployment of new

technology by BPA.

Validation and Verification

To validate and verify program performance, Bonneville conducts various internal and external reviews and audits. Bonneville's programmatic activities are subject to review by Congress, the U.S. Government Accountability Office (GAO), the Department's Inspector General, and other governmental entities. Bonneville accounts and financial statements are reviewed annually by an independent outside auditor. Bonneville has received a clean audit opinion since the mid-1980s and no material weaknesses have been identified in controls over financial reporting.

Program Perspectives

This section provides an introduction to Bonneville operations and statutory authorities followed by a description of ongoing activities.

Introduction

Bonneville is DOE's electric Power Marketing Administration for the FCRPS. Bonneville provides electric power, transmission and energy efficiency throughout the Pacific Northwest. Created in 1937 to market and transmit the power produced by the Bonneville Dam on the Columbia River, Congress has since directed Bonneville to sell at wholesale the electrical power produced from 31 operating Federal hydro projects and to acquire non-Federal power and conservation resources sufficient to meet the needs of Bonneville's customer utilities. Bonneville also owns and operates over 15,000 miles of high-voltage transmission lines, transmitting power from the dams and other sources on an open-access non-discriminatory basis. Bonneville serves a 300,000 square mile area including Oregon, Washington, Idaho, Western Montana, and parts of Northern California, Nevada, Utah, and Wyoming.

The Bonneville Project Act of 1937 provided the statutory foundation for Bonneville's utility responsibilities and authorities. In 1974, passage of the Transmission System Act placed Bonneville under provisions of the Government Corporation Control Act (31 U.S.C. 9101-9110). The legislation provided Bonneville with "self-financing" authority and established the Bonneville Fund, a permanent, indefinite appropriation, allowing Bonneville to use its revenues from electric power and transmission ratepayers to directly fund all programs and to sell bonds to the Treasury to finance the region's high-voltage electric transmission system requirements.

In 1980, enactment of the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) expanded Bonneville's utility obligations and responsibilities to: encourage electric energy conservation; develop renewable energy resources; and protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries. In support of these responsibilities, Bonneville's Treasury borrowing authority was expanded to allow the sale of bonds to finance conservation and other resources and to carry out fish and wildlife capital improvements.

By 2002, BPA had a cumulative authority to have $3.75 billion in bonds outstanding to the Treasury. Bonneville received an additional $700 million in available Treasury financing through the Consolidated Appropriations Act, 2003 (Pub. L. 108-7, title VII, Section 701; 117 Stat. 551, 2003) to help assure a

sufficient level of infrastructure planning. The FY 2003 Appropriations Act increased to $4.45 billion the aggregate amount of bonds Bonneville was authorized by statute to sell to the Treasury and have outstanding at any one time. The ARRA increased the amount of borrowing that BPA conducts under the Transmission System Act by $3.25 billion to the current authority for $7.70 billion in bonds outstanding to the Treasury.

Bonneville's program is treated as mandatory and nondiscretionary. As such, Bonneville is "self-financed" by the ratepayers of the Pacific Northwest and is not annually appropriated by Congress. Under the Transmission System Act, Bonneville funds the expense portion of its budget and repays the Federal investment with revenues from electric power and transmission rates. Bonneville's revenues fluctuate primarily in response to market prices for fuels and stream flow variations in the Columbia River System due to weather conditions and fish recovery needs. Through FY 2009, Bonneville has returned approximately $25.6 billion to the Treasury for payment of FCRPS O&M and other costs (about $3.1 billion), interest (about $13.0 billion), and amortization (about $9.5 billion) of appropriations and bonds.

In this FY 2011 budget, the term BPA "bonds" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13(a) of the Transmission Act (PL Law 93-454), which defines BPA bonds as all bonds, notes, and other evidences of indebtednesses issued and sold to the Treasury.

Bonneville and Treasury completed negotiations in April 2008 on an agreement to establish a new, more formal and detailed banking arrangement that meets key aims of each agency. The arrangement also modernized and formalized the BPA-Treasury relationship, and aligned practices with current Treasury standards.

The comprehensive arrangement covers BPA's short- and long-term Federal borrowings and establishes a phased-in approach to a market-based investing program. The arrangement is laid out in two primary agreements: 1) an Obligation Purchase Memorandum of Understanding and 2) an Interest Offset Credit Memorandum of Understanding. The Obligation Purchase MOU streamlines and adds flexibility for BPA's federal borrowings and provides BPA the ability to borrow for Northwest Power Act-related operating expenses. This ability provides BPA with much needed liquidity to help manage within year cash flow needs and mitigate risk. Access to this use of borrowing authority has been incorporated into and relied upon in BPA's rate-setting process.

The Interest Offset Credit MOU provides for the phase out of the interest offset methodology over a 10-year period and establishes the procedures for the phase in of market-based investing of deposits in the BPA Fund.

The Northwest Power Act also required regional energy plans and programs and created the Pacific Northwest Electric Power and Conservation Planning Council, now commonly called the Northwest Power and Conservation Council.

Treasury Payments and Budget Overview:

Bonneville made its full planned FY 2009 payment of $845 million to the Treasury, including $234 million in advanced amortization (as part of BPA's debt optimization program). Total 4(h)(10)(C) credits applied to the FY 2009 Treasury payment for fish mitigation were about $91 million. For FY 2010, Bonneville plans to pay the Treasury $834 million: $460 million to repay investment principal, $343 million for interest, and $31 million for Associated Project costs and pension and post-retirement benefits. The FY 2011 Treasury payment is currently estimated at $785 million. The FYs 2010 & 2011 4(h)(10)(C) credits, associated with fish recovery and to be applied toward BPA's Treasury payment, are estimated at $95 million and $102 million, respectively.

Estimates of interest and amortization levels for outyear Treasury payments are based on estimates from the 2010 final transmission and power rate case proposals. Bond and Appropriations Interest will continue to be revised based on upcoming capital investments and debt management actions. These estimates may change due to revised capital investment plans and actual Treasury borrowing. In recent years, BPA has made amortization payments in excess of those scheduled in its FERC-approved rate filings resulting in a balance of advance repayment. The cumulative amount of advance amortization payments as of the end of FY 2009 is about $2,536 million. Amortization estimates in this FY 2011 budget include planned amortization in advance of scheduled amortization (due to earlier EN refinancing) in FYs 2010 and 2011 of $38 million and $70 million, respectively, consistent with rate case documentation.

Starting in FY 1997, Bonneville began direct funding the Reclamation's Pacific Northwest power O&M costs, and in FY 1999 Bonneville began direct funding the Corps' Pacific Northwest power O&M costs. Bonneville began direct funding the U.S. Fish and Wildlife Service (USFWS) in FY 2001 to pay for O&M costs of the Lower Snake River Compensation Plan facilities. Bonneville's direct funding arrangement includes a portion of power O&M and capital investments. Direct funded capital costs, previously funded through appropriations, are now being paid through BPA borrowing from the Treasury. BPA's total O&M direct funding, including the small capital program, was $261 million in FY 2009.

This FY 2011 budget proposes Bonneville accrued expenditures of $3,219 million for operating expenses, $77 million for Projects Funded in Advance, $759 million for capital investments, and $387 million for capital transfers in FY 2011. The budget has been prepared on the basis of Bonneville's major areas of activity, power and transmission. This reporting structure arose as a response to FERC Orders requiring BPA to employ separate repayment studies for its generation and transmission functions to determine the repayment requirements for each.

The estimated spending levels in this budget are still subject to change to accommodate competitive dynamics in the region's energy markets, debt optimization strategies, and the continued restructuring of the electric industry.

Current Financial Status

- BPA is striving to enhance its competitive, cost-effective delivery of utility products and services and continued delivery of the public benefits of its operations, while ensuring its ability to make its

payments to the Treasury on time and in full. BPA utilizes a strategic planning process using the balanced scorecard model to align all business units around specific goals and align resources to achieve these goals. From these efforts, results include continued efficiency gains, performance integration improvements, and a high assurance for repayment of Treasury borrowing.

- After many years of sustained effort, BPA has recovered from the financial effects of the 2000-2001 west coast power crisis. Continued cost management efforts have helped BPA regain adequate reserve levels despite mostly below-average water years. These gains are helping BPA continue its efforts to assure full recovery of its costs and to assure long-term financial stability while meeting its overall responsibilities to the Pacific Northwest and the U.S. taxpayer. In 2009, BPA experienced low water conditions and the effects of the downturn in the economy. BPA did not achieve its modified net revenue target for the year, but the financial reserves BPA has established resulted in still making the annual scheduled Treasury repayment in full.

- BPA aligned its transmission and power rate cases for the FY 2010-2011 rate period and consolidated its public processes on agency-wide expenses and capital plans as part of its efforts to increase transparency for customers and stakeholders. The new public process, the Integrated Program Review (IPR), was established in 2008. Costs estimated in the initial 2008 IPR process provided the basis for the final Supplemental Proposal for FY 2009 power rates, which received final approval from the FERC on July 16, 2009.

- In spring 2009, BPA initiated a second IPR to provide regional stakeholders an opportunity to revisit proposed program spending estimates for FY 2010-2011. The second IPR process assumed added significance due to the severe economic downturn as well as the FY 2009 deterioration of BPA's financial condition. Costs estimated in the second IPR provided the basis for the final proposed power and transmission rates for FYs 2010 and 2011. In July 2009, BPA issued its final Record of Decision (ROD) and submitted final proposed rates to the FERC. The FERC granted interim approval to be effective October 1, 2009. The final ROD set an average power rate increase of 7 percent, down from the initial proposal of 9.4 percent. There was no increase for any transmission rate and two required ancillary services. The Wind Balancing Service rate was increased and expanded to include imbalance.

- Bonneville released its Long-Term Regional Dialogue Policy and Record of Decision (Regional Dialogue Policy) in July 2007. The Regional Dialogue Policy is focused on defining how Bonneville will market its wholesale power after FY 2011 and to ensure it does so in a way that meets key regional and national energy goals and ensures BPA's ability to meet its Treasury obligations. BPA is working with customers now to prepare to implement the policy in 2012.

- Bonneville and 135 of its Northwest utility customers signed new power sales contracts in 2008 under which power deliveries will begin in October 2011. BPA is currently preparing a Resource Program to identify any gaps in its power supply and suggest types and amounts of resources to fill those gaps, as guided by the Council's Northwest Power Plan.

- In the Regional Dialogue Policy, BPA committed to updating its Financial Plan given the significant business and regulatory changes in the last decade. The Financial Plan, released in July 2008,

addresses financial risk metrics, access to capital, variation in annual financial performance, and cost recovery. In addition, the Financial Plan describes how BPA will continue to manage to ensure that it meets its Treasury repayment responsibilities. The new plan is intended to guide the development of new financial policies and practices as they are needed.

Infrastructure Investment:

- Bonneville is planning infrastructure investments in the Pacific Northwest to meet Northwest transmission needs that will also continue to support a competitive wholesale market in the Western Interconnection that encompasses 14 western States, two Canadian provinces and one Mexican State. Construction of the 79 mile McNary-John Day line and three additional proposed transmission lines would add more than 225 miles of lines to the Northwest transmission grid, improving reliability and allowing BPA to provide service to about 3,360 MWs of requests for BPA transmission, including service for 2,575 MWs of additional green energy.

- These efforts will help meet the increasing demand for our service to meet regional greenhouse gas reduction and environmental goals. In support of these goals and as part of the Regional Dialogue implementation, BPA is working with stakeholders to determine its role in the development and use of energy efficiency for the post-2011 period. BPA is continuing to target transmission investments in those areas with reliability needs. BPA completed the first Network Open Season (NOS) in 2009 and is conducting a second NOS process, expected to be completed in May 2010. The NOS process is designed to ensure the region will have sufficient transmission infrastructure available for customers seeking capacity on BPA's transmission system network. Many of the customer capacity requests have been for delivery of wind-generated electricity.

- Bonneville has identified a number of actions that it is taking or could take over the next several years to provide additional electric system infrastructure relief. These actions include Federal hydro generation efficiencies and additions, additional renewable resource generation and conservation efforts, long-term and short-term power purchases, and construction of transmission projects that reinforce the grid and integrate new generation.

- Bonneville considers other strategies to sustain funding for its infrastructure investment requirements as well. These additional strategies include restructuring of EN debt, reserve financing of some amount of transmission investments, and seeking, when feasible, third party financing sources. See the BP-5 Potential Third Party Financing Transparency table in the budget schedules section of this budget. This FY 2011 budget assumes $15 million of annual reserve financing in FYs 2010-2015 for transmission infrastructure capital that is included in this budget in Projects Funded In Advance.

- As part of its continuing efforts, Bonneville is working to further optimize debt service costs (often referred to as debt optimization elsewhere in this budget). BPA, in collaboration with EN, may pursue the refinancing of certain EN bonds as part of an ongoing debt optimization program. Through this program, BPA uses the reductions in debt service for its EN bonds to make advance payments on its Federal debt. Implementation of the refinancing components will be subject to favorable market conditions and interest rate environment.

Budget Estimates and Planning:

- This FY 2011 budget includes capital and expense estimates based on the second IPR forecasted data and is consistent with the 2010 final transmission and power rate proposals. FY 2009 costs are based on BPA's FY 2009 audited actual financial results.

- Capital funding levels also reflect BPA's capital asset management process and external factors such as the significant changes affecting the West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region and national energy security goals. Capital investment levels in this FY 2011 budget also reflect executive management decisions from BPA's Capital Allocation Board (CAB).

- The FYs 2010-2015 revenue estimates in this budget, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools; for example, upcoming rate adjustment mechanisms, reduced cost estimates, a net revenue risk adjustment, debt management strategies, and/or short-term financial tools to manage net revenues and cash.

- Revenue calculations include depreciation and 4(h)(10)(C) credit assumptions. These credits offset BPA's fish and wildlife program costs allocable to the non-power project purposes of the FCRPS, consistent with the Northwest Power Act. Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses.

- Bonneville's efforts to keep its rates as low as possible are augmented by the implementation of the BPA Appropriations Refinancing Act (part of the Omnibus Consolidated Rescissions and Appropriations Act of 1996) that refinanced Bonneville's outstanding repayment obligations on appropriations. The legislation called for raising low interest rates on historic appropriations to then current Treasury market rates and resetting the principal of unpaid FCRPS appropriations. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the refinancing to the Treasury. The Treasury then approved the BPA submission in July 1997, thus finalizing the implementation of the BPA Appropriations Refinancing Act refinancings.

- The Residential Exchange Program (REP) was created by the Northwest Power Act to extend the benefits of low-cost Federal power to the residential and small farm customers of Pacific Northwest electric utilities that meet certain conditions. In 2000, BPA and the region's six Investor Owned Utilities (IOUs) signed agreements that settled the REP and discontinued implementation of a traditional REP. In May 2007, the U.S. Court of Appeals for the Ninth Circuit held that the REP Settlement Agreements reached with IOUs were not consistent with the Northwest Power Act. The WP-07 Supplemental rate case was conducted in 2008 to respond to the Court's rulings and revise power rates for FY 2009. The 2007 Supplemental Wholesale Power Rate Case Administrator's Final Record of Decision (WP-07 Supplemental ROD), studies and documentation for the WP-07

Supplemental rate case determined the amount by which the Preference customers were overcharged in FYs 2002-2006 as a result of the REP Settlement Agreements, the PF and PF Exchange rates for FY 2009, as well as the magnitude of the initial amount to be returned to the Preference customers in FY 2009 for overcharges during FYs 2002-2006. See the BPA/Power Services- Operating Expense section of this FY 2011 budget for a more complete discussion of REP.

- The Energy Policy Act of 2005 authorized FERC to approve and enforce mandatory electric reliability standards with which users, owners and operators of the bulk power system, including traditionally non-jurisdictional entities, are required to comply. These standards became enforceable on June 18, 2007, and compliance is monitored by the NERC and the regional reliability organizations. The Department of Energy, however, is currently reviewing whether financial penalties may be imposed on federal agencies for violations of electric reliability standards.

- As part of its strategic staffing efforts and implementation of operational efficiency initiatives, Bonneville decreased its Full-Time Employee (FTE) level. More recently Bonneville has taken on added mission related responsibilities, including its increasing wind integration efforts. BPA expects FTE to level out at about 3,100 FTE for the next few years. BPA continues to consider various authorities, including the use of Voluntary Separation Incentive Payments (VSIP) and Voluntary Early Retirement Authority (VERA) to help achieve targeted levels.

Fish and Wildlife Program Overview:

- Bonneville is committed to continue funding its share of the region's efforts to recover listed Columbia Basin fish and wildlife. To the extent possible, Bonneville is integrating the actions implemented in response to the FCRPS Biological Opinions (BiOps) [including the National Oceanic and Atmospheric Administration (NOAA) Willamette River BiOp and the United States Fish and Wildlife Service's (USFWS) 2006 Libby Dam BiOp] with projects implemented under the Council's Fish and Wildlife Program. Sub-basin plans that include prioritized strategies for mitigation actions will help guide project selection to meet both BPA's ESA and Northwest Power Act responsibilities.

- Bonneville's Fish and Wildlife program provides for extensive protection, mitigation, and enhancement of Columbia River Basin fish and wildlife adversely affected by the development and operation of Federal hydroelectric projects on the Columbia River and its tributaries from which Bonneville markets power. Bonneville satisfies a major portion of its fish and wildlife responsibilities by funding projects and activities consistent with the Council's Fish and Wildlife Program (Program) developed pursuant to Section 4(h) of the Northwest Power Act. Through the Program BPA also implements measures addressed to the recovery of fish in the Columbia River and its tributaries, listed as threatened or endangered under the ESA. Bonneville pursues a comprehensive approach to integrate the ESA requirements of the FCRPS BiOps with the broad resource protection, mitigation and enhancement objectives of the Program.

- BPA, the Corps and Reclamation signed historic 10-year agreements, known as the Columbia Basin Fish Accords, with five Columbia Basin Indian tribes and two states in 2008. In 2009, Agreements were signed with another tribe, state, and federal agencies. These agreements provide specific

hydro, habitat, hatchery and other measures that will address recovery needs and provide measurable biological benefits for fish. The agreements set a course of action for restoration of salmon and steelhead listed for protection under the ESA and other important non-listed populations.

- Included with the budget schedules section of this budget document is the current tabulation of Bonneville's fish and wildlife costs from FY 2000 through 2009.

Overview of Detailed Justifications:

Bonneville's Detailed Justification Summaries, included in this FY 2011 budget, follow present budget requirements for budget line items on the basis of accrued expenditures. Accrued expenditure is the basis of presenting Bonneville's program funding levels in the power and transmission rate making processes and the basis upon which Bonneville managers control their resources to provide products and services. Accrued expenditures relate period costs to period performance. Traditional budget obligation requirements for Bonneville's budget are assumed on the Program and Financing Summary Schedule prepared in accordance with OMB Circular A-11.

The organization of BPA's FY 2011 budget and these performance summaries reflect Bonneville's business services basis for utility enterprise activities. Bonneville's major areas of activity on a consolidated budget and accounting basis include power and transmission with administrative costs included. PS includes line items for Fish and Wildlife, Conservation and Energy Efficiency, REP, Associated Projects O&M Costs, and the Council. Environmental activities are shown in the relevant PS and TS sections, as are reimbursable costs. Bonneville's interest expenses, pension and post-retirement benefits and capital transfers to the Treasury are shown by program.

The first section of performance summaries, Capital Investments, includes accrued expenditures for investments in electric utility and general plant associated with the FCRPS generation and transmission services, conservation and energy efficiency services, fish and wildlife, and capital equipment. These capital investments will require budget obligations and use of borrowing authority of $759 million in FY 2011.

The near-term forecast capital funding levels have undergone an extensive internal review as a result of the capital asset management strategy. These capital reviews encompass project cost management initiatives, capital investment assessments, and categorization of capital projects to be funded based on risk and other factors. Consistent with BPA's near-term capital funding review process and BPA's standard operating budget process, this FY 2011 budget includes updated capital funding levels for FY 2010. Utilizing this review process helps Bonneville in its efforts to compete in the deregulated wholesale energy market. Bonneville will continue to work with the Corps and Reclamation to optimize the best mix of projects.

In addition to its extensive internal management assessment of capital investments, Bonneville has developed and implemented an associated external capital investment review process that provides significant benefits to Bonneville. The combined internal and external processes add value by both improving direction on what the FCRPS invests in (tying investments more closely to agency strategy) and by improving how those investments are made (better analysis and review of capital investments and their alternatives).

Bonneville's second section of the performance summaries, entitled Annual Operating Expenses, includes accrued expenditures for services and program activities financed by power sales revenues, transmission services revenues and projects funded in advance. For FY 2011, budget expense obligations are estimated at $3,219 million. The total program requirements of all Bonneville programs include estimated budget obligations of $4,054 million in FY 2011.

Bonneville Power Administration

Funding Profile by Subprogram 1/

(accrued expenditures in thousands of dollars)

	Fiscal Year				
	2009 Audited Actuals	2010 Original /2	2010 Adjustments	2010 Revised /2	2011 Proposed
Capital Investment Obligations					
Associated Project Costs 3/	139,552	N/A	-	158,884	172,477
Fish & Wildlife	27,795	N/A	-	70,000	60,000
Conservation & Energy Efficiency 3/	17,988	N/A	-	33,495	40,331
Subtotal, Power Services 4/	185,335	N/A	-	262,379	272,808
Transmission Services	192,731			450,498	462,213
Capital Equipment & Bond Premium	31,092	N/A	-	23,723	23,889
Total, Capital Obligations 3/ 5/	409,158	845,566	-	736,600	758,910
Expensed and Other Obligations					
Expensed	2,410,146	3,029,504	-	2,983,698	3,219,446
Projects Funded in Advance	184,000	105,164	-	77,403	77,179
Total, Obligations	3,003,304	3,980,234		3,797,701	4,055,535
Capital Transfers (cash) 5/	432,019	419,996	-	459,829	386,870
BPA Total	3,435,323	4,400,230	-	4,257,530	4,442,405
Full-time Equivalents (FTEs)	3,021	3,061	-	3,100	3,100

Public Law Authorizations include:

Bonneville Project Act of 1937, Public Law No. 75-329, H.R. 7642

Federal Columbia River Transmission Act of 1974, Public Law No. 93-454 S. 3362

Regional Preference Act of 1964, Public Law No. 88-552

Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act), Public Law No. 96-501, S. 885

Outyear Funding Profile by Subprogram 1/

(accrued expenditures in thousands of dollars)

	Fiscal Year			
	2012	2013	2014	2015
Capital Investment Obligations				
Associated Project Costs 3/	180,371	190,603	192,327	196,180
Fish & Wildlife	50,000	50,000	50,000	50,000
Conservation & Energy Efficiency 3/	48,099	48,080	48,082	48,086
Subtotal, Power Services 4/	278,470	288,683	290,409	294,266
Transmission Services	526,854	437,557	394,952	428,746
Capital Equipment & Bond Premium	28,782	28,923	29,297	29,884
Total, Capital Obligations 3/ 5/	834,106	755,163	714,658	752,896
Expensed and Other Obligations				
Expensed	3,343,947	3,531,188	3,614,487	3,683,485
Projects Funded in Advance	78,060	78,099	78,137	59,231
Total, Obligations	4,256,113	4,364,450	4,407,282	4,495,612
Capital Transfers (cash) 5/	332,261	197,364	150,700	90,958
BPA Total	4,588,374	4,561,814	4,557,982	4,586,570
Full-time Equivalents (FTEs)	3,100	3,100	3,100	3,100

The accompanying notes are an integral part of this table.

1/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of current-law funding estimates.

2/ Original estimates reflect BPA's FY 2010 Congressional Budget Submission. Revised estimates, consistent with BPA's annual near-term funding review process, provide notification to the Administration and Congress of updated capital and expense funding levels for FY 2010.

3/ Includes infrastructure investments designed to address the long-term needs of the Northwest, to reflect significant changes affecting BPA's power and transmission markets, and to reflect project implementation schedules. Actual expenditures may vary.

4/ Power Services includes Fish & Wildlife, Residential Exchange Program, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.

5/ This FY 2011 budget includes capital and expense estimates based on IPR 2 forecasted data for FYs 2010-2015 and consistent with estimates from the 2010 final transmission and power rate cases.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

The cumulative amount of actual advance amortization payments as of the end of FY 2009 is $2,536 million.

Refer to 16 USC Chapters 12B, 12G, 12H, and BPA's other organic laws, including P.L. 100-371, Title III, Sec. 300, 102 Stat. 869, July 18, 1988 regarding BPA's ability to obligate funds.

Major Outyear Considerations

Bonneville's outyear estimates reflect its ongoing efforts to achieve its long-term mission and strategic direction. The outyear estimates are developed with consideration of and support of BPA's multi-year performance targets that lay out the course for achieving BPA's long-term objectives. Outyear capital investment levels support BPA's infrastructure program, hydro efficiency program, conservation and energy efficiency projects, and its fish and wildlife mitigation projects.

With passage of the Energy Policy Act of 2005, Bonneville continues to incorporate the various aspects of the legislation related to its business, in particular the energy supply, conservation and new energy technologies for the future that are highlighted in the legislation.

Power Services - Capital

Funding Schedule by Activity

Power Services - Capital	(accrued expenditures) (dollars in thousands) FY 2009	FY 2010	FY 2011
Associated Project Costs	139,552	158,884	172,477
Fish & Wildlife	27,795	70,000	60,000
Conservation & Energy Efficiency	17,988	33,495	40,331
Total, Power Services - Capital	185,335	262,379	272,808

Outyear Funding Schedule

	(accrued expenditures) (dollars in thousands) FY 2012	FY 2013	FY 2014	FY 2015
Total, Power Services - Capital	278,470	288,682	290,409	294,266

Description

Associated Project Costs provide for direct funding of additions, improvements and replacements of existing Reclamation and Corps hydroelectric projects in the Pacific Northwest that provide for increased performance and availability of generating units. The Reclamation and Corps hydro projects produce electric power that is marketed by Bonneville.

Maintaining the availability and increasing the efficiency of the FCRPS is critical to ensuring that the region has an adequate, reliable and low-cost power system. The FCRPS represents about 80 percent of Bonneville's firm power supply and is comprised of 31 operating Federal hydro electric projects with over 200 generating units. These projects have an average age of about 50 years, with some that exceed 60 years of age. Through direct funding and the close cooperation of the Corps and Reclamation, Bonneville uses its Treasury borrowing authority to make investments needed to restore generation availability and improve efficiency, reducing demand on Corps and Reclamation appropriations for power-related investments. Since the beginning of direct funding, Bonneville, along with these joint operating partners has improved system performance. In 1999, at the direction of Congress, Bonneville issued a report that it soon began to implement called the "Asset Management Strategy for the FCRPS." Bonneville concluded in this report that it needed to invest nearly $1 billion in the projects over the next 12-15 years. Without these investments, which are focused on restoring and maintaining the reliability of the system, history indicates that unit availability may initially decline at a rate of about 1.5 percent per year. Supplementary analyses and experience with the system have revealed additional investment needs above and beyond the levels originally planned under the Asset Management Strategy for this and the next several rate periods. In late 2008, BPA completed a System Asset Plan that effectively updated the 1999 Asset Management Strategy and refined the long-term capital investment needs to preserve the performance of the system.

These planned investments, included in the FY 2011 budget funding estimates, will maintain the generation performance of the FCRPS. Moving forward with the cost-effective opportunities to expand the generation and to preserve and enhance the capability of the Federal system is a smart economic and environmental decision when compared to purchasing power from the market to serve growing Pacific Northwest electricity needs.

Fish and Wildlife Program costs provide funding to implement measures to aid in the recovery of fish in the Columbia River and its tributaries that are listed as threatened or endangered under the ESA and the protection, mitigation, and enhancement, of fish and wildlife impacted by the development and operation of the FCRPS, from which Bonneville markets power.

Bonneville continues a comprehensive approach to integrate the ESA requirements of the FCRPS Biological Opinions with the broad resource protection, mitigation and enhancement objectives of the Columbia River Basin Fish and Wildlife Program (Program), adopted by the Council pursuant to the Northwest Power Act. Bonneville satisfies a major portion of its fish and wildlife responsibilities by funding projects and activities that implement the Program. Bonneville also implements measures addressed to avoid jeopardizing listed salmon and steelhead as required under the ESA.

The ESA measures are part of the most recent BiOps issued by the National Oceanic and Atmospheric Administration Fisheries Service (NOAA) and the USFWS. In February 2006, USFWS issued a new BiOp for Libby Dam for the Kootenai River white sturgeon and bulltrout. In May 2008, NOAA issued the new, remanded FCRPS BiOp, which is again being challenged in Oregon District Court by the same plaintiffs. Also, as described below, in July 2008, USFWS and NOAA issued Willamette River BiOps for the first time, to address impacts from 13 federal dams located throughout the Willamette Basin. These BiOps, and the 2000 USFWS FCRPS BiOp covering bull trout, collectively, require the action agencies (Corps, Bureau, and BPA) to implement actions throughout the Columbia River Basin to address impacts stemming from the operation of the Federally operated hydro-dams on ESA-listed fish, and to ensure that operations of the federal dams do not jeopardize the continued existence of the listed species or adversely modify their designated critical habitat.

The 2004 FCRPS BiOp was challenged in Federal District Court. During the remand period, the Court ordered the applicable tribes and state governments to collaborate to try to develop a Biological Opinion that would have broad regional support. The collaboration process resulted in the NOAA Fisheries' May 2008 FCRPS BiOp.

An additional result from the remand collaboration was the 2008 Columbia Basin Fish Accords (Fish Accords) that the FCRPS action agencies signed with five Northwest Tribes, and the states of Idaho and Montana. In 2009, additional agreements were signed with another tribe, federal agencies, and the State of Washington. The Fish Accords supplement the activities encompassed within the 2008 BiOp and the Council's Program, by providing firm commitments to mitigation actions and to secure funding for the next 10 years. As a result of the new BiOp and the Accords, as discussed below, expenditures above and beyond those planned in FY 2009 are required for FY 2010 and FY 2011.

There has also been litigation directed at the USFWS Biological Opinions for Libby Dam. In 2003, the Corps and BPA reinitiated consultation for the operations at Libby Dam to address impacts to recently designated critical habitat for the Kootenai River white sturgeon, and to evaluate information that had been developed on Kootenai River white sturgeon and bull trout since the 2000 USFWS BiOp. That consultation was completed in February 2006 but was challenged by environmental groups, the Kootenai Tribe, and the State of Montana in Federal District Court in Montana. That litigation was settled in March 2009.

The NOAA 2008 Willamette BiOp was issued on July 11, 2008. In this BiOp NOAA Fisheries issued a Jeopardy Opinion with Reasonable and Prudent Alternatives (RPAs) that describe potential river operations and configuration changes, improvements to hatcheries, flow changes, and habitat actions designed to address Willamette Project impacts to the Upper Willamette River spring chinook and the Upper Willamette River steelhead, both listed as threatened under ESA in 1999. The USFWS also issued a BiOp for the Willamette Projects on July 11, 2008, that addresses Project impacts on bull trout and the Oregon chub. The Oregon chub was listed as endangered in 1993. The bull trout was listed as threatened in 1998.

These BiOps and Fish Accord commitments, and other projects undertaken to implement the Columbia Basin Fish and Wildlife Program pursuant to the Northwest Power Act, are the basis for BPA Environment, Fish and Wildlife division's planned capital investment.

Bonneville's fish and wildlife capital program is directed at activities that increase numbers of Columbia River Basin fish and wildlife resources, including projects designed to increase juvenile and adult fish passage in tributaries and at mainstream dams and to increase fish production and survival through construction of hatchery and acclimation facilities, land acquisitions for resident fish and wildlife that are consistent with Bonneville's Capital Policy, and fish monitoring facilities. Capital project funding will focus on integrating ESA-related priorities with the region's Columbia Basin Fish and Wildlife Program in order to efficiently meet the regional costs of both salmon and steelhead recovery and the mitigation of hydrosystem impacts to other Columbia Basin fish and wildlife.

The FY 1996 Energy and Water Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an Independent Scientific Review Panel (ISRP) "to review a sufficient number of projects" proposed to be funded through Bonneville's fish and wildlife budget "to adequately ensure that the list of prioritized projects recommended is consistent with the Council's program." The Northwest Power Act further states that " . . . in making its recommendations to Bonneville, the Planning Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives." Today, most mitigation projects funded by Bonneville receive ISRP review as part of the Council recommendation process. The Council has shifted to a multi-year project review cycle during which the ISRP will review categories of projects grouped together; e.g., all terrestrial wildlife projects were recently reviewed. The Council plans to complete this cycle in 2011.

Under the Northwest Power Act, the Council must develop a Fish and Wildlife Program that protects, mitigates and enhances Columbia River Basin fish and wildlife affected by any

hydroelectric project in the basin. To the extent possible, Bonneville is integrating the actions implemented in response to the FCRPS BiOps with projects implemented under the Columbia Basin Fish and Wildlife Program. Sub-basin plans that include prioritized strategies for mitigation actions will help guide project selection that meets both BPA's ESA and Northwest Power Act responsibilities. In order to address the *in lieu* provision of the Northwest Power Act, which prohibits BPA from funding mitigation that other entities are authorized or required to undertake, BPA continues its ongoing work with the Council and the regional fish and wildlife managers, customers, and tribes to review projects to ensure ratepayers fund appropriate mitigation.

Conservation is an important part of Bonneville's diverse portfolio of resources that provides a reliable approach to meeting Bonneville's load obligations. When acquiring resources to meet planned future loads, the Northwest Power Act requires the Administrator to first consider and acquire cost-effective conservation that the Administrator determines is consistent with the Northwest Power and Conservation Council's Power Plan. The Council's most recent Power Plan, finalized in January 2005, recommended that the region target 700 aMW of conservation in 2005 to 2009. These conservation targets increased as a result of the Council's 6th Power Plan which was issued September 3, 2010. Bonneville's share of the conservation target from the 5th Power Plan is 40 percent or 280 aMW. Bonneville anticipates that between 100 and 150 aMW of this amount will be acquired under its capital conservation acquisition program. Program performance measurements ($/aMW) indicate that Bonneville is realizing excellent value for these investments as benchmarked against other utilities across the nation.

Long-term investments in energy efficiency help buffer the FCRPS against future resource uncertainties. During periods of price volatility, conservation also helps reduce financial risk associated with relying on the market for energy purchases in the future. The demand for more energy efficiency is driven by potential climate change initiatives, the high cost of new generation, and citizens and businesses wanting to reduce costs and be green.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Associated Project Costs	**139,552**	**158,884**	**172,477**

BPA will work with both the Corps and Reclamation to reach mutual agreement on those capital improvement projects that need to be budgeted and scheduled, are cost-effective and provide system or site-specific enhancements, increase system reliability, or provide generation efficiencies.

(dollars in thousands)

FY 2009	FY 2010	FY 2011

The work is focused on improving the reliability of the FCRPS, increasing its generation efficiency or capacity through turbine runner replacements, optimization of hydro facility operation and new unit construction, and small capital reimbursements associated with routine maintenance activities. Also, limited investments may be made in joint use facilities that are beneficial to both the FCRPS operations and to other Corps and Reclamation project purposes.

- **Corps of Engineers (known projects to date)**

FY 2009: For overall general system, continued hydro optimization investigations and equipment installations at selected projects through the power plant efficiency improvements project. Completed Intercontrol Center Communications Protocol (ICCP) improvements at multiple projects.

For Bonneville, continued exciter installation, DC and preferred AC upgrades, station service upgrades, headgate refurbishment/replacements, gantry crane replacement, unwatering pump replacement, HVAC upgrade, fire protection upgrades, additional crane and deck refurbishments, and began elevator replacements. For Bonneville Powerhouse 1, continued rehabilitation work which is nearly completed. For John Day, continued exciter replacements, fire protection upgrades and bridge crane refurbishment, and began elevator rehabilitation. And, began protective relay replacements. For The Dalles, completed T-2 transformer replacement, and continued governor replacement, station service improvements, generator rewinds, a 230kV transformer replacement, fire protection design and upgrades, disconnect replacement, oil/water separator development, intake crane rehabilitation and heat pump replacement. And, began elevator upgrades.

For the Willamette plants, completed plant upgrade and refurbishing of the turbine replacement which failed during testing at Cougar, main unit breaker replacement at Dexter, and butterfly valve refurbishment at Hills Creek. Continued turbine runner replacement and bridge crane refurbishment at Hills Creek and at Lookout Point, exciter replacements at Cougar, Green Peter, Foster, and Hills Creek, fire protection upgrades for all Willamette Valley projects, remote control upgrades, generator winding replacement and electric reliability upgrades at Detroit, emergency engine installation at Detroit, and penstock roller gate repair at Lookout Point. And, began protective relay replacements at Cougar, Green Peter, Foster, Hills Creek, Lookout Point and Dexter, fire protection upgrades at Lost Creek, spillway bulkhead gates refurbishment at Big Cliff and Dexter, and stop log fabrication at Foster.

For Albeni Falls, continued governor replacement project, hi-lift pump replacement, auxiliary boards upgrades, and began DC system boards and breaker replacement, and spillway crane modernization. For Libby, continued exciter replacement, HVAC controls rehabilitation, various elevator refurbishments and selective withdrawal crane refurbishment. For Chief Joseph, continued 480-V upgrade/SQ0 substation replacement, CO2 system replacement, supervisory control console replacement, exciter replacements, protective relay replacements, automatic synchronizer replacement and turbine replacements, And, began DC and preferred AC upgrades, generator brake replacement, and generator cooling system upgrades.

(dollars in thousands)

FY 2009	FY 2010	FY 2011

For McNary, completed external oil cooler installation and spare bulkhead replacements. Continued governor replacements, DC and preferred AC upgrades, generator winding replacements, transformer purchases and installations and drainage pump replacement. And, began protective relay replacements and bridge and intake crane refurbishments. For Dworshak, completed fire protection upgrades, and continued bridge crane refurbishment, emergency notification upgrades and elevator upgrades.

For Lower Snake plants, completed fire protection and continued emergency notification upgrades. Individually, for Ice Harbor, continued unit 2 runner replacement and tailrace crane rehabilitation, and began T6 transformer replacement and potable water system replacement. For Little Goose, continued diesel generator replacement, and began exciter replacements and HVAC control upgrade. For Lower Granite, continued generator winding replacements, unit 2 linkage repair, diesel generator replacement and intake crane replacement, and began exciter replacements, SQ2 replacement and elevator refurbishments. For Lower Monumental, completed T-1 disconnect replacement, and continued diesel generator replacement, bridge crane refurbishment, spare draft tube bulkhead purchase and intake crane refurbishment/replacement. And, began exciter replacements, SQ2 replacement and unit 1 linkage repair.

In addition, new investments were pursued per the Asset Plan and repairs to failed units occurred as needed to restore availability.

FY 2010: For overall general system, continue hydro optimization investigations and equipment installations at selected projects through the power plant efficiency improvements project.

For Bonneville, complete exciter installation, DC and preferred AC upgrades, gantry crane replacement, unwatering pump replacement, HVAC upgrade and elevator replacement, and continue station service upgrades, headgate refurbishment/replacements, fire protection upgrades and additional crane and deck refurbishments. For John Day, complete exciter replacements and elevator rehabilitation, and continue fire protection upgrades, protective relay replacements, and bridge crane refurbishment. For The Dalles, complete the 230 kV transformer replacement, disconnect replacement, oil/water separator development, intake crane rehabilitation and heat pump replacement, and continue governor replacement, station service improvements, generator rewinds and fire protection design and upgrades.

(dollars in thousands)

FY 2009	FY 2010	FY 2011

For the Willamette plants, complete fire protection upgrades for all projects, except Lost Creek, exciter replacements at Cougar, Green Peter, Foster, and Hills Creek, crane refurbishments at Detroit, Hills Creek and Lookout Point and spillway bulkhead gates refurbishment at Big Cliff and Dexter. Also, complete remote control upgrades, electric reliability upgrades and emergency engine installation at Detroit, and stop log fabrication at Foster. Continue protective relay replacements at Cougar, Green Peter, Foster, Hills Creek, Lookout Point and Dexter, turbine runner replacements at Hills Creek and Lookout Point, penstock roller gate repair at Lookout Point and fire protection upgrades at Lost Creek.

For Albeni Falls, complete governor replacement project, hi-lift pump replacement and spillway crane modernization, and continue auxiliary board upgrades and DC system boards and breaker replacement. For Libby, complete HVAC controls rehabilitation, various elevator refurbishments and selective withdrawal crane refurbishment, and continue exciter replacement. For Chief Joseph, complete supervisory control console replacement, and continue 480-V upgrade/SQ0 substation replacement, CO2 system replacement, exciter replacements, protective relay replacements, automatic synchronizer replacement, DC and preferred AC upgrades, generator brake replacement, generator cooling system upgrades and turbine replacements.

For McNary, complete DC and preferred AC upgrades, drainage pump replacement and bridge and intake crane refurbishments. Continue governor replacements, generator winding replacements, new transformer installations and protective relay replacements. For Dworshak, complete bridge crane refurbishment and elevator upgrades, and continue emergency notification upgrades.

For Lower Snake plants, complete emergency notification upgrades at 2 of the 4 plants. Individually, for Ice Harbor, complete potable water system replacement and tailrace crane rehabilitation, and continue unit 2 runner replacement and T6 transformer replacement. For Little Goose, complete HVAC control upgrade, and continue diesel generator replacement and exciter replacements. For Lower Granite, complete unit 2 linkage repair and elevator refurbishments, and continue generator winding replacements, diesel generator replacement, exciter replacements, SQ2 replacement and intake crane replacement. For Lower Monumental, complete spare draft tube bulkhead purchase, and continue diesel generator replacement, exciter replacements, SQ2 replacement, unit 1 linkage repair bridge crane refurbishment and intake crane refurbishment/replacement.

In addition, new investments will be pursued per the Asset Plan and repairs to failed units will occur as needed to restore availability.

(dollars in thousands)

FY 2009	FY 2010	FY 2011

FY 2011: For overall general system, continue hydro optimization investigations and equipment installations at selected projects through the power plant efficiency improvements project.

For Bonneville, complete station service upgrades and additional crane and deck refurbishments, and continue headgate refurbishment/replacements and fire protection upgrades. For John Day, continue fire protection upgrades, protective relay replacements and bridge crane refurbishment. For The Dalles, complete station service improvements and generator rewinds, and continue governor replacement and fire protection design and upgrades.

For the Willamette plants, complete fire protection upgrades at Lost Creek, and continue protective relay replacements at Cougar, Green Peter, Foster, Hills Creek, Lookout Point and Dexter, turbine runner replacements at Hills Creek and Lookout Point and penstock roller gate repair at Lookout Point.

For Albeni Falls, complete auxiliary board upgrades, and continue DC system boards and breaker replacement. For Libby, continue exciter replacement. For Chief Joseph, complete 480-V upgrade/SQ0 substation replacement, and continue CO2 system replacement, exciter replacements, protective relay replacements, automatic synchronizer replacement, DC and preferred AC upgrades, generator brake replacement, generator cooling system upgrades and turbine replacements.

For McNary, complete new transformer installations, and continue governor replacements, generator winding replacements and protective relay replacements. For Dworshak, complete emergency notification upgrades.

For Lower Snake plants, complete emergency notification upgrades an additional plant bringing the total completions to 3 of the 4 plants. Individually, for Ice Harbor, continue unit 2 runner replacement and T6 transformer replacement. For Little Goose continue diesel generator replacement and exciter replacements. For Lower Granite, complete generator winding replacements and intake crane replacement, and continue diesel generator replacement, exciter replacements and SQ2 replacement. For Lower Monumental, complete bridge crane refurbishment, and continue diesel generator replacement, exciter replacements, SQ2 replacement, unit 1 linkage repair and intake crane refurbishment/replacement.

In addition, new investments will be pursued per the Asset Plan and repairs to failed units will occur as needed to restore availability.

(dollars in thousands)

FY 2009	FY 2010	FY 2011

Bureau of Reclamation (known projects to date):

FY 2009: For Grand Coulee, completed left/right and third power plants roof replacements, 500 MV breaker replacements and 500 kV bus differential relay replacements. Continued SCADA replacement, 11.95 KV switchyard upgrade, 500-230 kV relay replacements, air housing cooler replacements, various transformer replacements, right power plant station service upgrades, third power plant exciter replacements, third power plant governor replacement, left power plant spare transformer purchases, left and right powerhouse runner replacements and hydro optimization investigations with related equipment installations. And, began third power plant high voltage cable replacement, unit 19-20 upgrades including winding replacements, purchase of another left and right powerhouse spare winding, third power plant fixed wheel gate chamber modifications, third power plant elevator rehabilitation and construction of a material storage building. For Hungry Horse, completed station service breaker replacement, and continued SCADA replacement, molded case breaker replacement and main unit breaker replacements. For Palisades, began design for turbine runner replacement. For Chandler, continued exciter replacements, and began transformer replacement. For Roza, completed transformer replacement, and continued exciter replacements. For Green Springs, continued transformer replacement. In addition, new investments will be pursued per the Asset Plan and repairs to failed units will occur as needed to restore availability.

FY 2010: For Grand Coulee, complete 11.95 KV switchyard upgrade, 500-230 kV relay replacements and third power plant fixed wheel gate chamber modifications. Continue SCADA replacement, air housing cooler replacements, various transformer replacements, right power plant station service upgrades, third power plant exciter replacements, third power plant governor replacement, left power plant spare transformer purchases, third power plant high voltage cable replacement, unit 19-20 upgrades including winding replacements, purchase of another left and right powerhouse spare winding, third power plant elevator rehabilitation, construction of a material storage building, left and right powerhouse runner replacements and hydro optimization investigations with related equipment installations. For Hungry Horse, complete molded case breaker replacements, and continue SCADA replacement and main unit breaker replacements. For Palisades, continue turbine runner replacement. For Chandler, complete exciter replacements and continue transformer replacement. For Roza, complete exciter replacements. For Green Springs, continue transformer replacement. In addition, new investments will be pursued per the Asset Plan and repairs to failed units will occur as needed to restore availability.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

FY 2011: For Grand Coulee, complete K10 transformer replacement. Continue SCADA replacement, air housing cooler replacements, third power plant transformer replacements, right power plant station service upgrades, third power plant exciter replacements, third power plant governor replacement, left power plant spare transformer purchases, third power plant high voltage cable replacement, unit 19-20 upgrades including winding replacements, purchase of another left and right powerhouse spare winding, third power plant elevator rehabilitation, construction of a material storage building, left and right powerhouse runner replacements and hydro optimization investigations with related equipment installations. For Hungry Horse, complete main unit breaker replacements, and continue SCADA replacement. For Palisades, continue turbine runner replacement. For Chandler, continue transformer replacement. For Green Springs, complete transformer replacement. In addition, new investments will be pursued per the Asset Plan and repairs to failed units will occur as needed to restore availability.

Fish and Wildlife	**27,795**	**70,000**	**60,000**

BPA continues to build budgets based on the suite of mitigation projects it adopted in 2007 on recommendations from the Council. BPA reaffirmed many project-specific commitments in 2008 through both Biological Opinions and Fish Accords. These decisions were based upon the management objectives and priorities in the Program and Sub-basin Plans as well as an integration of ESA responsibilities as described in the NOAA Fisheries and U.S. Fish and Wildlife Service's FCRPS Biological Opinions. Coordination continues among BPA, Council, Federal resource management agencies, states, tribes and others to plan for additional projects to fill specific gaps in BPA's mitigation portfolio through targeted solicitations.

BPA intends to continue implementation of the projects listed below for 2009 - 2011. These facilities are based upon the best available science and are regionally important in that they provide high priority mitigation and recovery actions for fish and wildlife populations as affected by the FCRPS, under the auspices of the Northwest Power Act and the Endangered Species Act. Projects and facilities listed below deliver direct on-the-ground benefits to both ESA listed and non- listed fish and wildlife throughout the Columbia River Basin and have been evaluated and coordinated with the Northwest Power and Conservation Council, state, Federal and tribal fish and wildlife resource managers, local governments, watershed and environmental groups and other interested parties.

(dollars in thousands)

FY 2009	FY 2010	FY 2011

FY 2009-2011 efforts include continued implementation of high priority ESA-related projects and activities associated with the currently operative NOAA and USFWS BiOps and Fish Accords.

Implementation of reforms to FCRPS hatchery programs that help reduce impacts upon ESA-listed populations will be done following ESA consultations with NOAA and after information on the types of changes to these facilities are established through the BPA funded hatchery genetic management plans and priorities for sequencing implementation are developed.

Although not subject to the Northwest Power Act's section 4(h)(10)(B) for capital construction projects, Bonneville may include capitalization of investment in some fish and wildlife habitat acquisitions provided the land acquisition costs exceed $1 million, such investment provides a creditable and quantifiable benefit against a defined obligation for Bonneville, and is consistent with Bonneville's Capitalization Policy.

The five types of capital projects as defined by the FY 2009 Power Rate Case are as follows:

1) Tributary passage -- Activities that enhance fish passage to tributary rivers. For the purpose of this policy, a tributary is defined by the Council designated sub-basin of the tributary. Functionally interdependent work elements could contain the following: wells, ladders, screens, pumping, culverts, diversion (irrigation) consolidation, piping to reduce water loss, irrigation efficiencies (drip irrigation), lining of ditches (seepage reduction), removal of damming objects or pushup dams in conjunction with related construction, and construction related habitat restoration.
2) Gas abatement -- Projects that reduce or eliminate the super-saturation of gaseous nitrogen in water beneath the dam spillways.
3) Hatchery facility construction -- Projects and activities relating to the construction of fish hatcheries, including related satellite facilities (acclimation ponds). This may also include construction-related habitat restoration.
4) Mainstem passage -- Projects and activities which benefit fish passage in the mainstem of Columbia River or Snake River. Capital projects include: ladders, removable spillway weirs, collection facilities, PIT tag facilities, etc.
5) Land acquisition -- Land acquisition projects protect, enhance, and maintain instream wetland and riparian habitat and provide habitat units (HUs) for wildlife and instream miles for resident fish to fulfill the legal obligation of FCRPS.

(dollars in thousands)

FY 2009	FY 2010	FY 2011

Anadromous fish supplementation, production and related facilities, and/or juvenile and adult passage improvement projects that may require capital funds in FY 2011 include the following:

- Okanogan Basin Locally Adapted Steelhead Supplementation Program: This project will expand Cassimer Bar Hatchery to meet the estimated production level of 200,000 summer steelhead smolts to supplement natural production within the Okanogan River Basin. The goal is to increase abundance and accelerate recovery of endangered steelhead in the Basin. The Colville Tribes will operate the hatchery program using locally-adapted broodstock collected at weirs. The project will require development, review and approval of a Master Plan and completion of the other steps of the Council's 3-Step Review Process.

- Leaburg Dam Fish Sorter: This project is located on the Willamette River and will allow managers to efficiently separate natural origin Upper Willamette Spring Chinook (UWSC) from hatchery reared Chinook. The UWSC are listed as an endangered species under the Endangered Species Act. The Willamette Biological Opinion identifies the need to exclude hatchery reared salmon from entering habitat that is being reserved only for natural origin (wild) salmon. This project will ensure that only UWSC fish pass the dam and move into some of the most highly productive salmon habitat available in the Willamette River.

- Crystal Springs Hatchery Facilities: This project will develop facilities for rearing and out-planting resident and anadromous fish in central and southern Idaho. The facility will be located near the American Falls Reservoir in Idaho. Resident fish include Yellowstone Cutthroat and Westslope Cutthroat trout. The anadromous fish include Snake River spring Chinook salmon and Snake River steelhead. The facility is sponsored by the Shoshone-Bannock Tribes, who are expected to operate and manage the facility once it is complete. The project will require development, review and approval of a Master Plan, completion of environmental analysis (including possibly a full EIS) and completion of other steps of the Council's 3-Step Review Process, including review by the ISRP.

- Yakima River Spring Chinook Supplementation Facility, located in Cle Elum, Washington: This project includes the construction of an interpretive building for public education at Bonneville's existing hatchery and for the design and construction of a monitoring and evaluation building at Nelson Springs for use by project biologists.

- Snake River Spring Chinook Salmon artificial propagation facilities (known as the Northeast Oregon Hatchery or NEOH); to be located on the Upper Grande Ronde River near La Grande, Oregon, on Catherine Creek near Union, Oregon, and on Lostine River near Enterprise, Oregon. While design has been ongoing for this project for several years, the decision to proceed with construction is pending approval by NOAA Fisheries of a Hatchery and Genetic Management Plan for the facility. This project, as a measure in the Council's Fish & Wildlife Program, would also identify and develop artificial propagation facilities to protect and enhance salmon and steelhead native to the Imnaha and Grande Ronde River Basins.

(dollars in thousands)

FY 2009	FY 2010	FY 2011

-Kootenai River Hatchery: The Kootenai River sturgeon hatchery, in Bonners Ferry, Idaho, is in need of hatchery upgrades and expansion to improve temperature control and rearing conditions that will result in the increased overall survival of these ESA-listed fish after release from this facility. In addition this may also include development of a burbot production facility to offset the loss of natural production below Libby Dam. The project requires development and review of a Master Plan prior to implementation.

-Nez Perce Tribal Hatchery: Additional rearing and acclimation facilities are requested as part of the existing Nez Perce Tribal Hatchery in Clearwater County, Idaho, for reintroduction of up to 700,000 coho smolts into the Clearwater River in Idaho. The Master Plan is complete and is under continuing review by regional entities, including the Council. The project will require an approved Master Plan prior to implementation. The Nez Perce Tribe (NPT) is motivated to implement the Clearwater Coho Restoration Project for the following reasons: 1) historically, coho salmon were one of the species making up a complex multi-species anadromous ecosystem within the Clearwater; and 2) coho salmon are a cultural resource to the NPT. The NPT goal is to restore coho salmon to the Clearwater sub-basin measured by 14,000 adults at Lower Granite Dam annually. Plans are to develop an integrated management plan to optimize the use of hatchery fish to meet recovery and harvest objectives.

-The NPT intend to seek an additional round of review for the Master Plan by the Council in 2011 with a goal of receiving a final recommendation to initiate environmental planning and design development in late 2011. Final design and construction approval would follow in late 2011 with possible construction starting in 2012.

- Redfish Lake Sockeye Salmon Captive Broodstock expansion: This project continues to expand the sockeye salmon captive broodstock program by constructing new or increasing the capacity of existing facilities at Eagle Hatchery in Eagle, Idaho, Burley Creek Fish Hatchery in Kitsap County Washington, and at Oxbow Hatchery in Multnomah County, Oregon, to meet the interim goal of increasing production to 150,000 sockeye salmon smolts per year. An additional site will be selected in Idaho to bring production annually to between 500,000 and 1,000,000 smolts as called for in the 2008 FCRPS BiOp. Project requires development and review of a Master Plan prior to implementation. Precipitous declines of Snake River sockeye salmon led to their Federal listing as endangered in 1991 (56 FR 58619). In that same year, the Idaho Department of Fish and Game (IDFG) initiated a Captive Broodstock Program for Snake River sockeye salmon to prevent species extinction. The ultimate program goal is to reestablish sockeye salmon runs to Stanley Basin waters and to provide for sport and treaty harvest opportunities. The program's near-term goal is to prevent species extinction, slow the loss of critical population genetic diversity and heterozygosity, and increase the number of individuals in the population.

- Chief Joseph Dam Hatchery: BPA is proposing to fund the Chief Joseph Dam Hatchery Program, a comprehensive management program for supplementing Chinook salmon to increase the abundance, productivity, distribution, and diversity of naturally spawning populations of spring/summer and fall Chinook in the Okanogan River and in the Columbia River below Chief Joseph Dam, Washington (between the confluence of the Okanogan River and Chief Joseph Dam).

(dollars in thousands)

FY 2009	FY 2010	FY 2011

Project includes a new hatchery facility (at the base of the Chief Joseph Dam) and acclimation ponds (throughout the Okanogan River sub-basin), broodstock collection, egg incubation, rearing, release, and selective broodstock collection method development. Planned production levels are 2 million summer/fall chinook and 0.9 million spring chinook smolts. Cost sharing for O&M and capital has been established with three public utility districts having some level of mitigation responsibility for their hydro projects within this geographic area.

- Klickitat Production Expansion: The Klickitat River Master Plan was completed by the Yakama Nation, reviewed by the ISRP, recommended by the Council, and approved by BPA in 2008. The plan's goal is to restore and maintain sustainable, naturally producing populations of spring chinook and steelhead that support tribal and non-tribal harvest and cultural and economic practices while protecting the biological integrity and the genetic diversity of indigenous fish stocks in the sub-basin. Consistent with the Klickitat Master Plan, in early 2009 BPA completed the Lyle Falls Environmental Impact Statement (EIS) and ROD. In 2009, final designs for construction of the Lyle and Castile Falls passage improvements, the enumeration and collection facilities at Lyle and Castile, as well as certain Klickitat hatchery upgrades necessary for maintenance of existing program activities and hatchery safety concerns are expected to be complete. Construction at Lyle Falls is to begin in fall 2009, with construction at Castile Falls and hatchery upgrades scheduled for summer of 2010. A new Klickitat Hatchery EIS was initiated in July 2009 that will examine options for the development and operation of new supplementation facilities and acclimation alternatives, and additional upgrades to the existing hatchery facility. This EIS is anticipated to be completed in spring 2011.

- Hood River Production Facility: This project includes expansion of existing Parkdale fish facility to accommodate spring chinook rearing, construction of new Hood River adult salmonid trapping facilities, and development of alternative adult trapping sites. Powerdale Dam, which is owned and operated by PacifiCorp, is scheduled for decommissioning during the summer of 2010. The dam forms an integral part of the Powerdale Dam Fish Trap, as fish are shunted into the fish trap as they ascend the fish ladder at the facility. Removal of the dam will also remove the fish trapping facility. The Powerdale Dam Fish Trap currently provides the foundation for many of the activities associated with implementation of the Hood River Production Program. These include: monitoring escapement, collecting life history characteristics, and broodstock acquisition. In order to continue implementing the production program, alternative trapping sites will need to be developed. The Hood River Production Program has four primary goals: 1) re-establish naturally sustaining runs of spring chinook in the Hood River; 2) re-build naturally sustaining runs of summer and winter steelhead in the Hood River; 3) maintain genetic characteristics of Hood River fish populations; and 4) provide fish for sustainable harvest by both sport and tribal fishers**.**

(dollars in thousands)

FY 2009	FY 2010	FY 2011

- Mid Columbia Coho restoration: Indigenous natural coho salmon no longer occupy the mid-Columbia river basins. Columbia coho salmon populations were decimated in the early 1900s. For several reasons, including the construction and operation of mainstem Columbia River hydropower projects, habitat degradation, release locations, harvest management, and hatchery practices and genetic guidelines, self-sustaining coho populations were not re-established in mid-Columbia basins. Currently, the lack of locally adapted stock and in-basin habitat degradation may be the biggest challenges to coho reintroduction in mid-Columbia tributaries. This program's vision is to re-establish naturally reproducing coho salmon populations in the Wenatchee and Methow sub-basins at biologically sustainable levels which provide significant harvest in most years.

Cultural, socio-economic, and ecological benefits are expected from the return of this species to areas where it once occurred in abundance. The phased approach, including associated facilities, incorporates development of a mid-Columbia hatchery broodstock, local adaptation to tributaries in the Wenatchee and Methow Basins, and habitat restoration that will benefit coho as well as ESA-listed spring chinook, steelhead, and bull trout.

- Walla Walla Hatchery: Hatchery planning and design, based on the Hatchery Master Plan, is near completion. The next phase of the project, pre-design and permitting (environmental compliance) is underway. Construction for the proposed facility is scheduled to begin in FY2011. When complete, the facility will hold, spawn, incubate and rear spring Chinook on the South Fork Walla Walla River near Milton-Freewater, Oregon.

-Yakama Coho restoration: The goal of this restoration project, including associated facilities, is to restore extirpated coho salmon to the Yakima River basin at biologically sustainable levels. Before the ocean and lower Columbia exploitation of salmon and steelhead in the late l9th century and early 20th century, and before the Yakima River valley was developed with extensive agricultural irrigation systems, the Yakima Sub-basin supported large runs of spring, summer and fall Chinook, summer steelhead, coho and sockeye. Historical returns of coho to the Yakima River Basin have been estimated in the range of 44,000 to more than 100,000 fish annually.

Cumulative effects from the disruption of the Yakima Sub-basin ecosystem functions and processes, out of sub-basin impacts, and harvest of salmon have resulted in a significant decline of fish and wildlife abundance from historic levels.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011

- Walla Walla River Juvenile and Adult Passage Improvements: This project would provide safe passage for migrating juvenile and adult salmonids in the Walla Walla Basin by constructing and maintaining passage facilities at irrigation diversion dams and canals.

Potential non-construction capital Wildlife and Resident Fish Habitat Acquisitions (Including Conservation Easements) eligible for capitalization:

- Grand Coulee and Chief Joseph Wildlife Habitat Acquisition
- Albeni Falls Wildlife Mitigation
- Palisades and Minidoka Wildlife Habitat Acquisition
- Black Canyon, Boise Diversion, Anderson Ranch Wildlife Habitat Acquisition
- Willamette Wildlife Habitat Acquisition
- Libby and Hungry Horse Reservoirs Resident Fish Acquisitions

Conservation and Energy Efficiency	**17,988**	**33,495**	**40,331**

The conservation acquisition program offers several ways for customers to participate in regional conservation. Program components include: (1) utility standard offer and custom programs, which result in customer proposals to conserve energy through residential weatherization, commercial lighting, Heating, Ventilation, and Air Conditioning (HVAC), industrial processes and lighting, and irrigated agriculture; (2) third party delivery programs, such as residential compact fluorescent lighting, and the Energy Smart Grocer, Green Motors programs, and the Water and Waste Water Treatment Facilities program; (3) programs to help Federal installations in the region reduce energy use, which includes the Federal Hatcheries program and work at various dams to help the Corps and Reclamation in their efforts to reduce energy use; and (4) other initiatives still in the design stage.

Total Power Services – Capital	**185,335**	**262,379**	**272,808**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Associated Project Costs	
▪ Reflects a reshaping of funding requirements based on the need to maintain a minimum level of generation each year.	+13,593
Fish and Wildlife	
▪ Reflects a reshaping of funding to implement Biological Opinions, Fish Accord commitments, and *Columbia Basin Fish and Wildlife Program* activities.	-10,000
Conservation and Energy Efficiency	
▪ Funding is consistent with the Council's most recent Power Plan.	+6,836
Total Funding Change, Power Services - Capital	**+10,429**

Transmission Services – Capital

Funding Schedule by Activity

Transmission Services - Capital	(accrued expenditures) (dollars in thousands) FY 2009	FY 2010	FY 2011
Main Grid	47,509	180,119	193,821
Area & Customer Services	8,027	32,062	6,384
Upgrades & Additions	16,525	96,759	114,886
System Replacements	120,670	141,558	147,122
Projects Funded in Advance	184,000	77,403	77,179
Total, Transmission Services - Capital	376,731	527,901	539,392

Outyear Funding Schedule

	(accrued expenditures) (dollars in thousands) FY 2012	FY 2013	FY 2014	FY 2015
Total, Transmission Services - Capital	604,915	515,656	473,089	487,977

Description

Transmission Services is responsible for about 75 percent of the Pacific Northwest's high-voltage transmission. TS provides for all additions, upgrades and replacements to the Federal BPA transmission system, resulting in reliable service to northwest generators and utility customers. The Federal BPA transmission system also facilitates the sale and exchange of power to and from the region.

The eastern blackout on August 14, 2003, alerted the Nation to the lack of investment in utility transmission infrastructure. BPA has been working on infrastructure investments and operational practices to improve the transmission grid since the West Coast disturbance on August 10, 1996. TS continues to make significant infrastructure improvements and additions to the system to assure reliable transmission in the Northwest. These improvements and additions will help the Federal transmission system continue to comply with national reliability standards, replace aging equipment, allow for interconnection of needed new generation, and remove constraints that limit economic trade or the ability to maintain the system. Prior to beginning the infrastructure improvements, TS had built no major transmission projects since 1987. Only incremental additions had been added to the system over the years.

The Northwest transmission system continues to show signs of stress, as two close calls in 2003 demonstrated. On June 4, 2003, voltage instability in the Spokane area was prevented by quick operator action on the Federal system. Two weeks later, the non-Federal transmission path between Montana and Idaho was overloaded for two days, and Washington operator adjustments prevented load loss. In 2004, it was noted that a small load change at BPA's interconnection with Idaho Power near LaGrande, Oregon was causing an unusually large voltage change. These examples demonstrate how the transmission system is being 'pushed' to its limits of capacity to carry power.

To maintain system reliability Bonneville has completed a number of infrastructure projects that have strengthened the electrical grid. The completion of the Grand Coulee-Bell, Kangley-Echo Lake, and Schultz-Wautoma line projects have provided dispatchers with greater Operational Transfer Capability and have reduced the likelihood of outages or reduction of transmission capacity for outage situations.

Bonneville's completed infrastructure investments that further strengthen the network consist of the following projects: Puget Sound Area Additions, North of Hanford/ North of John Day, Celilo Modernization, Eastern Washington Reinforcement, and Portland Area Additions.

These projects relieve congestion and contribute toward restoring an adequate reliability margin to the grid. They will be used to respond to a competitive market, meet regional load during outages, move power to meet changing loads and perform maintenance without harming the market.

In 2005, with the Congressional approval of wind tax credits, a number of potential wind generation companies made requests for connection to the BPA transmission grid. In 2007, BPA built facilities to connect up to 2500 MW of wind generation and connected 650 MW. In 2008, 659 MW was connected and in 2009, 795 MW was connected to the FCRPS grid. Bonneville has several thousand MW in additional wind project interconnection requests, many interconnecting in the 2010 through 2012 timeframe. BPA expects additions of 837 MW in 2010 and 1,370 MW in 2011. BPA plans a major construction phase in 2011-2013, building several new large substations to meet the interconnection requests. Current projections are for an additional approximately 1000 MW to interconnect in each of the years 2012 through 2015. Also in the interconnection queue is approximately 1000 MW of natural gas, bio-mass and geothermal fueled generation proposed for connection between 2012 and 2015. Much of the wind generation demand is a result of the Renewable Portfolio standards enacted by Oregon and Washington that require an estimated 5000 MW of renewable generation by 2015. Export to California could add another 2000-3000 MW during the same time period.

In June 2008, Bonneville concluded the first phase of its 2008 NOS. During that time, those desiring to secure long-term firm capacity on Bonneville's network transmission system where no existing capacity was available were required to sign agreements which committed them to take service at a specified time and under specified terms. BPA had received 153 requests from 28 customers for 6,410 MW of new service, about three-fourths for wind energy integration. BPA subsequently offered 1,782 MW of new transmission service on its existing system. Bonneville identified four new Main Grid capital projects from the 2008 NOS: (1) McNary-John

Day 500 kV transmission line (part of West of McNary Reinforcements Group 1), (2) Big Eddy-Knight 500 kV transmission line and substation (part of West of McNary Reinforcements Group 2), (3) Central Ferry- Lower Monumental 500kV Reinforcement (formerly Little Goose Area Reinforcement), and (4) I-5 Corridor 500 kV Reinforcement. These projects will provide almost 3,700 MW of new transmission service. Contingent upon NEPA review, Bonneville will construct the new facilities and provide service at embedded rates.

System Replacements: Bonneville's Transmission Asset Management Sustain Program replaces high-risk, obsolete, and maintenance-intensive facilities and equipment and reduce the chance of equipment failure by: 1) replacing high voltage transformers and power circuit breakers which are at or near the end of their useful life; 2) replacing risky, outdated and obsolete Control Center and control and communications equipment and systems; and includes replacements provided for in the Commercial Spectrum Enhancement Act (CSE Act) (under PFIA); and 3) replacing all other existing high-risk equipment and facilities affecting the safety and reliability of the transmission system.

As noted, Bonneville's capital program for Transmission Services includes a wide variety of specific investments that are determined after internal review and in some cases external review. On occasion, capital investments must be made on short notice because of unexpected needs, because of the identification of obsolete, worn out, failed, failing, or at risk systems and facilities, because of system reliability requirements, and because near-term opportunities to install or construct facilities arise as outages occur or as schedules for outages change. For these and other reasons, Transmission Services capital program is fluid and subject to change. Thus, Bonneville is unable to predict with particularity many of the new capital investments in the transmission system. Nonetheless the types of investments can be identified in general. These items may include but are not limited to: arrestor, braking resistor, bus and bus pedestal, circuit breaker, circuit switcher, communication tower, concrete pole, control center mapboard and video wall displays, control house, converter grading capacitors, converter harmonic filters, converter smoothing reactors, converter transformers, current limiting reactor, current limiting resistor, current transformer, digital fault locator, digital cross-connect system (DCS), disconnect switch, engine generator, engineered steel pole, fiber optic cable, fiber terminal, fuel dispensing facility, grounding system, grounding transformer, microwave multiplex transmitter, network management system (NMS), overhead conductor, overhead ground wire, power transformer, radio multiples transmitter, relay, revenue meter, series capacitor, shunt capacitor, shunt reactor, station service transformer, station service inverter, substation dead end tower, substation perimeter fence, switchyard lighting, thyristor, transfer switch, transmission steel tower, voltage regulator, voltage transformer, water/sewer system, wood pole and cross-arm, and other similar items consistent with Bonneville's capitalization policy determinations (such as spacer damper replacements).

Notwithstanding that the capital program for Transmission Service is subject to change, Bonneville has identified several general areas where capital program investment will occur.

Bonneville will continue to fund fiber optic communications facilities needed to meet Bonneville's projected operational needs. To the extent that these investments create temporary periods of excess fiber optic capacity, such dark fiber capacity can be made available to

telecommunications providers and to non-profits to meet public benefit Internet access needs for rural areas and other needs in Bonneville's service area. Bonneville's investments in fiber optics, including the role of the private sector in building fiber optic networks, is consistent with the "Fiber Optic Cable Plan" submitted to Congress on May 24, 2000, accompanying the FY 2000 Energy and Water Development Appropriations Act. In accordance with this plan, when possible, Bonneville will establish partnerships with fiber optic facility and service providers to meet its needs.

In December 2004, the Congress passed and the President signed the Commercial Spectrum Enhancement Act (CSEA, Title II of P.L. 108-494), creating the Spectrum Relocation Fund (SRF) to streamline the relocation of Federal systems from certain spectrum bands to accommodate commercial use by facilitating reimbursement to affected agencies of relocation costs. The Federal Communications Commission has auctioned licenses for reallocated Federal spectrum, which will facilitate the provision of Advanced Wireless Services to consumers. Funds were made available to agencies in FY 2007 for relocation of communications systems operating on the affected spectrum. These funds are mandatory and will remain available until expended, and agencies will return to the SRF any amounts received in excess of actual relocation costs. The estimated BPA cost of this relocation is $48.7 million.

As part of the Homeland Security Presidential Directives, Bonneville has completed a physical security assessment of all critical facilities and is implementing security enhancements at these facilities. These security enhancements increase access control to BPA's facilities and provide video surveillance and monitoring capabilities.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Main Grid	**47,509**	**180,119**	**193,821**

Bonneville's strategic objectives for Main Grid projects are to provide voltage support; provide a reliable transmission system for open access, per NERC criteria; provide for relief of transmission system congestion; and assure compliance with the NERC and Western Electricity Coordinating Council (WECC) reliability standards, and with BPA reliability criteria and guidelines. During this budgeting period, projects are planned that will provide voltage support to major load areas that are primarily west of the Cascade Mountains, and transmission reinforcements to load centers in central Oregon, central Washington, and the Willamette Valley, and provide for transmission access for new generation projects to the load center. Reinforcements along the Interstate-5 corridor are also planned.

- FY 2009: (1) Began environmental analysis and preliminary engineering for the I-5 Corridor Reinforcement project; (2) Continued the construction of the Libby-Troy 115KV transmission line upgrade; (3) Continued the construction for the Olympic Peninsula Reinforcement project; (4) West of McNary Reinforcements Group 1-continued design and procurement of materials and started construction (this project was

(dollars in thousands)

FY 2009	FY 2010	FY 2011

attributed to ARRA); (5) West of McNary Reinforcements Group 2- continued environmental and preliminary design; (6) Began design and ordering materials for the Redmond 230/115 kv bank #2; (7) Central Ferry- Lower Monumental 500 kV Reinforcement (formerly Little Goose Area Reinforcement)- continued environmental review and preliminary design; (8) Continued planning studies to identify and develop plans of service for needed infrastructure additions; (9) Continued planning studies and design to identify projects driven by NERC/ WECC reliability standards; (10) Continued planning studies to identify system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (11) Continued planning studies to relieve transmission system congestion and for integrating potential new generation facilities; and (12) Began planning studies for the NOS.

- FY 2010: (1) Continue environmental analysis and preliminary engineering design for the I-5 Corridor Reinforcement project; (2) Complete construction of the Libby-Troy 115KV transmission line upgrade; (3) Complete construction of the Olympic Peninsula Reinforcement project; (4) West of McNary Reinforcements Group 1 (WOMR 1)- complete design, procurement of materials, and continue construction; (5) West of McNary Reinforcements Group 2 (WOMR 2)- continue environmental review and preliminary design; (6) Complete the design and begin construction for the Redmond 230/115 kv Bank #2; (7) Continue planning studies to identify needed infrastructure additions; (8) Central Ferry- Lower Monumental 500 kV Reinforcement (formerly Little Goose Area Reinforcement)- continue environmental review and preliminary design; (9) Continue planning studies and design to identify projects driven by NERC/ WECC Reliability standards; (10) Continue planning studies to identify system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (11) Continue planning studies to relieve transmission system congestion and for integrating potential new generation facilities; (12) Continue planning studies and design for projects related to the NOS.

- FY 2011: (1) Continue environmental analysis and continue design for the I-5 Corridor Reinforcement project; (2) West of McNary Reinforcements Group 1 (WOMR 1)- continue construction; (3) West of McNary Reinforcements Group 2 (WOMR 2)- complete environmental review and preliminary design; (4) Continue construction for the Redmond 230/115 kv Bank #2; (5) Central Ferry- Lower Monumental 500 kV Reinforcement (formerly Little Goose Area Reinforcement)- continue environmental review and preliminary design; (6) Continue planning studies to identify needed infrastructure additions; (7) Continue planning studies and design to identify projects driven by NERC/ WECC reliability standards; (8) Continue planning studies to identify system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (9) Continue planning studies to relieve transmission system congestion and for integrating potential new generation facilities; (10) Continue planning studies and design for projects related to the NOS.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Area and Customer Services	**8,027**	**32,062**	**6,384**

Bonneville's strategic objective for Area and Customer Service projects is to assure that Bonneville meets any reliability standards and our contractual obligations.

- FY 2009: (1) Continued construction of the SVC at Rogue Substation; (2) Construction of Hooper Springs substation was on hold pending completion of negotiations and agreements between the participants; (3) Continued the construction on the City of Centralia Reinforcement Project; (4) Began the design and material ordering of the Drummond Shunt Capacitors; (5) Began design and material ordering for the Albany-Eugene Rebuild; (6) Began the design and material ordering for the Lebanon 115 kv shunt capacitors; (7) Continued preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.

- FY 2010: (1) Complete construction of the SVC at Rouge Substation; (2) Begin the design and material ordering and start the construction of Hooper Springs substation; (3) Continue the construction on the City of Centralia Reinforcement Project; (4) Complete design and construction of the Drummond Shunt Capacitors; (5) Complete the construction of the Albany-Eugene Rebuild; (6) Complete the construction of the Lebanon 115 kv shunt capacitors; (7) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.

- FY 2011: (1) Complete the construction of Hooper Springs substation; (2) Continue the construction on the City of Centralia Reinforcement Project; (3) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.

Upgrades & Additions	**16,525**	**96,759**	**114,886**

Bonneville's strategic objectives for Upgrades and Additions are to replace older communications and controls with newer technology including fiber optics in order to maintain or enhance the capabilities of the transmission system; to implement special remedial action control schemes to accommodate new generation and mitigate immediate operational and market constrained paths; and to support communications and remedial action schemes, among other proposals.

(dollars in thousands)

FY 2009	FY 2010	FY 2011

During this budget period, BPA will complete design, material acquisition, construction and activation of several fiber optics facilities to provide bandwidth capacity and high-speed data transfers to eventually replace microwave analog radios, which are technologically obsolete and nearing the end of their useful life. Temporarily, in some areas, excess fiber capacity is being offered for a term to telecommunications providers or to public entities such as public utilities, schools, libraries, and hospitals, providing them access to high-speed telecommunication services as a public benefit.

- FY 2009: (1) Continued material acquisition and completed construction for Maple Valley – SnoKing - Snohomish fiber project; (2) Ordered materials and completed construction on the 2 mile taps for Sifton and Kennewick fiber projects; (3) Ordered materials and completed construction on the 1 mile tap for Augspunger fiber project; (4) Began planning for upgrading 2 miles of fiber between Bonneville power house and Bonneville control house; (5) Completed design and construction of seismic upgrade projects; (6) Continued planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (7) Continued planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area; (8) Continued construction of secondary fiber related projects and digital radio system upgrades to improve the operational telecommunication system; (9) Began planning and preliminary design to upgrade the main fiber optic backbone system (# KC and #NC systems); (10) Began planning and technical feasibility studies for upgrade of the Pacific DC Intertie from 3100 to 3800 MW.

- FY 2010: (1) Negotiate and draft agreement(s) for joint use fiber project from SnoKing to Bellingham; (2) Continue planning for upgrading 2 miles of fiber between Bonneville Power House and Bonneville Control House; (3) Continue planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (4) Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area; (5) Continue construction of secondary fiber related projects and digital radio system upgrades to improve the operational telecommunication system; (6) Continue design and begin material procurement and construction to upgrade the main fiber optic backbone system (#KC and #NC systems); (7) Begin planning and preliminary design for VHF Radio System upgrade; (8) Continue planning and technical studies for upgrade of the Pacific DC Intertie from 3100 to 3800 MW

- FY 2011: (1) Complete joint use fiber project from SnoKing to Bellingham; (2) Begin design of upgrading 2 miles of fiber between Bonneville Power House and Bonneville Control House; (3) Continue planning, design, material acquisition and construction of

(dollars in thousands)

FY 2009	FY 2010	FY 2011

special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (4) Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area; (5) Continue construction of secondary fiber related projects and digital radio system upgrades to improve the operational telecommunication system; (6) Continue design and begin material procurement and construction to upgrade the main fiber optic backbone system (#KC and #NC systems); (7) Continue design and construction of the VHF Radio System upgrade; (8) Begin planning and preliminary design to upgrade the Ross-Franklin fiber optic route; (9) Begin design and equipment acquisition for upgrading the Pacific DC Intertie to 3800 MW.

System Replacements	**120,670**	**141,558**	**147,122**

Bonneville's strategic objectives for the Sustain Program are to replace high-risk, obsolete, and maintenance-intensive facilities and equipment and to reduce the chance of equipment failure by (1) replacing high voltage transformers and power circuit breakers which are at or near the end of their useful life; (2) replacing risky, outdated and obsolete control and communications equipment and systems, and includes replacements resulting from legislation; and (3) replacing all other existing high-risk equipment and facilities affecting the safety and reliability of the transmission system.

Non-Electric Replacements:

- FY 2009: (1) Completed non-electric replacements as necessary; (2) Continued seismic upgrades to substations and buildings; (3) Continued the design, material acquisition, and construction for the Access Road Program capital component; (4) Received delivery of two helicopters; (5) Continued design and construction of capital improvements for identified existing facilities.

- FY 2010: (1) Complete non-electric replacements as necessary; (2) Continue seismic upgrades to substation bus risers; (3) Continue the design, material acquisition, and construction for the Access Road Program capital component; (4) Receive delivery of one helicopter; (5) Complete a NEPA review and feasibility study for construction of the Transmission Services Facility, which would be part of the Ross Complex; (6) Continued design and construction of capital improvements for identified existing facilities.

- FY 2011: (1) Continue non-electric replacements as necessary; (2) Continue seismic upgrades to substation bus risers; (3) Continue the design, material acquisition, and construction for the Access Road Program capital component; (4) Begin design and construction of the Transmission Services Facility, which would be part of the Ross Complex,

(dollars in thousands)

FY 2009	FY 2010	FY 2011

based on results of the review and feasibility study; (5) Continued design and construction of capital improvements for identified existing facilities.

Electric Replacements:

- FY 2009: (1) Continued replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using Reliability Centered Maintenance (RCM) criteria. Such replacements include relays, annunciators, oscillographs, metering and replacing and migrating analog to digital technology and Supervisory Control and Data Acquisition (SCADA) equipment; (2) Continued replacement of under-rated and high maintenance substation equipment; (3) Continued replacing spacer dampers on various 500kV lines; (4) Continued replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (5) Continued replacing deteriorating wood pole transmission line structures and insulators with Non-Ceramic Insulators (NCI).

- FY 2010: (1) Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCM criteria. Such replacements include relays, annunciators, oscillographs, metering and various types of communication related equipment replacing and migrating analog to digital technology and SCADA equipment; (2) Continue replacement of under-rated and high maintenance substation equipment; (3) Continue replacing spacer dampers on various 500kV lines; (4) Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (5) Continue replacing deteriorating wood pole transmission line structures, spacer dampers and insulators with NCI; (6) Determine whether to proceed with initiating replacement of Celilo converter control systems and smoothing reactors in its present configuration or do a facility upgrade to a new simplified configuration (pending southern party's system study results)..

- FY 2011: (1) Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCM criteria. Such replacements include relays, annunciators, oscillographs, metering and various types of communication related equipment replacing and migrating analog to digital technology and SCADA equipment; (2) Continue replacement of under-rated and high maintenance substation equipment; (3) Continue replacing spacer dampers on various 500kV lines; (4) Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (5) Continue replacing deteriorating wood pole transmission line structures, spacer dampers and insulators with NCI; (6 Initiate replacement of Celilo converter control systems and smoothing reactors or facility upgrade --- based on outcome of southern party's system studies; (7) Initiate replacement of aging and defective converter transformers.

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Projects Funded in Advance	**184,000**	**77,403**	**77,179**

This category includes those facilities and/or equipment where BPA retains control or ownership but which are funded or financed by a third party or with revenues, either in total or in part. This category also includes investments associated with the CSE Act.

- FY 2009: (1) Continued to integrate various new generation projects into BPA transmission grid in response to Interconnection Requests submitted via the Large and Small Generation Interconnection procedures contained in BPA's Open Access Transmission Tariff; (2) Continued to implement Line/Load Interconnections in accordance with Attachment J of BPA's Open Access Transmission Tariff; (3) Completed planning studies to identify system impacts and needs regarding proposed new generation and line/load projects; (4) Continued environmental cleanup and other work necessary for the sale of BPA facilities; (5) Completed other projects as agreed to with customers; (6) Continued design and started construction for the radio replacements associated with the CSE Act; (7) Completed design, material ordering and began construction of the COI reinforcement project.

- FY 2010: (1) Continue to integrate various new generation and line/load projects into BPA transmission grid per Interconnection Requests via the Open Access Transmission Tariff; (2) Continue planning studies to identify system impacts and needs regarding proposed new generation projects; (3) Perform environmental work and preliminary engineering for several large wind generation interconnection substations; (4) Complete environmental cleanup and other work necessary for the sale of BPA facilities; (5) Complete other projects as agreed to with customers; (6) Continue the design and construction for various radio replacements at accessible sites associated with the CSE Act; (7) Continue construction of the COI reinforcement project.

- FY 2011: (1) Continue to integrate various new generation and line/load projects into BPA transmission grid per Interconnection Requests via the Open Access Transmission Tariff; (2) Continue planning studies to identify system impacts and needs regarding proposed new generation projects; (3) Engineer and begin construction of several large wind generation interconnection substations; (4) Complete environmental cleanup and other work necessary for the sale of BPA facilities; (5) Complete other projects as agreed to with customers; (6) Continue the design and construction for various radio replacements at accessible sites associated with the CSE Act; (7) Continue construction of the COI reinforcement project.

Total, Transmission Services – Capital	**376,731**	**527,901**	**539,392**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Main Grid	
▪ Reflects increase to accommodate new projects associated with updated power flow study results, NERC compliance, and NOS additions.	+13,702
Area & Customer Services	
▪ Reflects decrease in the number of new customer service projects.	-25,678
Upgrades & Additions	
▪ Reflects increase on both system wide controls schemes, fiber projects and communications upgrades, improvements and additions to other transmission facilities, and the addition critical spare transformers at select locations.	+18,127
System Replacements	
▪ Reflects continuing focus on BPA's Transmission Asset Management Sustain Program.	+5,564
Projects Funded in Advance	
▪ Reflects continuing focus of large customer funded projects related to generation integration, much of which is in support of new wind generation integration.	-224
Total Funding Change, Transmission Services - Capital	+11,491

Capital IT & Equipment/Capitalized Bond Premium

Funding Schedule by Activity

	(accrued expenditures) (dollars in thousands)		
Capital IT & Equipment/Capitalized Bond Premium	FY 2009	FY 2010	FY 2011
Capital Information Technologies (IT) & Equipment	31,092	23,723	22,389
Capitalized Bond Premium	0	0	1,500
Total, Capital IT & Equipment/Capitalized Bond Premium	31,092	23,723	23,889

Outyear Funding Schedule

	(accrued expenditures) (dollars in thousands)			
	FY 2012	FY 2013	FY 2014	FY 2015
Total, Capital IT & Equipment/Capitalized Bond Premium	28,782	28,923	29,297	29,884

Description

Capital Information Technologies provides for the acquisition of general and some dedicated special purpose capital information technologies, and acquisition of special-use capital and IT equipment in support of Bonneville's strategic objectives. This category also includes BPA's on-going efforts to facilitate delivery of a highly resilient organization, able to anticipate, withstand and effectively respond to disruptive events affecting it and its partners in the Northwest region. The four main areas of resiliency focus include asset management, emergency management, crisis management and continuity of operations.

As part of a major efficiency effort, BPA continues to move its IT infrastructure to a more efficient architecture. This FY 2011 budget supports, in part, this effort. IT continues to eliminate redundancies in tools and applications, establish an agency-wide IT architecture with standardized IT purchasing criteria, standardize software licensing processes and minimize agency liabilities through stronger contracts, apply continuous improvement practices to IT project management, and implement an agency IT portfolio cost management strategy. The IT estimates in this FY 2011 budget, under Capital Information Technologies and Equipment include all IT functions within the agency except TS grid operations. See the Capital Program – Transmission Services section of this budget for additional discussion of transmission-related IT requirements acquisitions.

Capital equipment provides for the acquisition of general and some dedicated special purchases of capital office furniture and equipment.

Bonneville incurs a bond premium whenever it repays a Treasury bond before the due date. When bonds are refinanced, the bond premiums incurred are capitalized. Historically, Bonneville generally has chosen to finance capitalized bond premiums with bonds issued to the Treasury, as was envisioned in the Transmission System Act of 1974.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
	31,092	**23,723**	**22,389**
Capital Information Technology/Equipment			

Includes enhancements to Bonneville's information technology processes to provide cost effective efficiencies for secure, timely and accurate information. Continue enhancements to Bonneville's Enterprise systems that are designed to link key information systems throughout Bonneville and improve business processes. Current efforts include continued functional process improvements in areas not included in the initial development phase. Acquire capital office furniture and equipment, capital automated data processing (ADP) based administrative telecommunications equipment, ADP equipment (hardware), and support capital software development for certain Bonneville programs.

Capitalized Bond Premium.	**0**	**0**	**1,500**

- Continue to assess financial market and when cost-effective, refinance available bonds as prudent.

Total, Capital IT & Equipment/Capitalized Bond Premium	**31,092**	**23,723**	**23,889**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Capital Information Technology & Equipment	
■ Reflects Enterprise Process Improvement Program (EPIP) efficiencies.	-1,334
Capitalized Bond Premium	
■ Reflects possibility of calling bonds in FY 2011.	+1,500
Total Funding Change, Capital Equipment/Capital Bond Premium	**+166**

Power Services - Operating Expense

Funding Schedule by Activity

Power Services - Operating Expenses	(accrued expenditures) (dollars in thousands) FY 2009	FY 2010	FY 2011
Production	922,760	1,333,534	1,497,395
Associated Projects Costs	295,578	323,306	334,777
Fish & Wildlife	177,369	215,000	236,000
Residential Exchange Program	205,171	265,558	270,087
NW Power & Conservation Council	9,424	9,683	9,934
Conservation and Energy Efficiency	99,444	140,572	141,386
Total, Power Services - Operating Expenses	1,709,746	2,287,653	2,489,579

Outyear Funding Schedule

	(accrued expenditures) (dollars in thousands) FY 2012	FY 2013	FY 2014	FY 2015
Total, Power Services - Operating Expense	3,165,241	3,239,344	3,259,738	2,677,073

Description

Production includes all Bonneville non-Federal debt service (including EN debt), O&M of power system generation resources, including a large nuclear plant, business operations, short- and long-term power purchases, electric utility marketing of power, and oversight of hydro and nuclear projects. BPA develops products and services to meet the needs of Bonneville customers and stakeholders, and acquires resources as needed. This FY 2011 budget includes anticipated expenses for new long-term power purchases to meet the needs of Bonneville customers, that may include no more than 30 MW of waste energy recovery power acquired through a demonstration project testing the effectiveness of a “standard offer” approach to acquiring certified Clean Energy projects as defined in the Energy Independence and Security Act of 2007 (Public Law 110-140 December 19, 2007).

During FY 2009 and 2010, BPA will be developing a long-term resource program to guide future resource acquisitions needed to meet customer loads. This plan is expected to be completed in time for acquisitions to begin as necessary in FY 2011. Once the plan is complete, BPA will modify its budget as needed to reflect expected acquisitions.

EN debt is one of Bonneville’s largest expense components. BPA, in collaboration with EN, is pursuing the refinancing of certain EN bonds as part of an ongoing debt optimization program. Through this program, BPA uses the reductions in debt service for its EN bonds to make advance payments on its Federal debt. Implementation of the refinancing components will be subject to favorable market conditions and interest rate environment.

Bonneville's Power Transacting Risk Management Policy permits the use of power financial instruments to hedge Bonneville's exposure to market price risk and certain index sales contract provisions.

Associated Projects represents funding for operation and maintenance costs for the FCRPS, minor additions, improvements and replacements, and liabilities of the Corps and Reclamation hydroelectric projects in the Pacific Northwest, which serve many purposes. All agencies emphasize efficient power production from existing facilities and improvement of the performance and availability of power generating units. Bonneville pays additional financing costs of the FCRPS facilities through its Interest Expense and Capital Transfer budget programs. Bonneville provides funding for the operations and maintenance costs that are part of the Lower Snake River Compensation Plan (LSRCP) hatcheries. Bonneville is responsible for annual payments to the Confederated Tribes of the Colville Reservation for their claims concerning their contribution to the production of hydropower by the Grand Coulee Dam in accordance with the Settlement Agreement between the United States and the Tribes (April 1994).

Bonneville’s Fish and Wildlife program provides for extensive protection, enhancement, and mitigation of Columbia River Basin fish and wildlife adversely affected by the development and operation of Federal hydroelectric projects on the Columbia River and its tributaries from which Bonneville markets power. Bonneville satisfies a major portion of its fish and wildlife responsibilities by funding projects and activities designed to be consistent with the Council Fish and Wildlife Program (Program) developed pursuant to Section 4(h) of the Northwest Power Act. Through the Program BPA also implements measures to aid in the recovery of fish in the Columbia River and its tributaries, listed as threatened or endangered under the ESA. Bonneville pursues a comprehensive approach to integrate the ESA requirements of the FCRPS biological opinions with the broad resource protection, mitigation and enhancement objectives of the Program.

Bonneville implements these measures addressed to salmon and steelhead recovery required under the ESA as part of the most recent FCRPS Biological Opinions issued in 2006 by the USFWS (2006 BiOp), in May 2008 (2008 BiOp) and July 2008 (Willamette BiOp) by NOAA Fisheries, to address the effects of the operation of the FCRPS on threatened and endangered salmon, steelhead, Kootenai River white sturgeon, and bull trout. The Biological Opinions require the FCRPS Action Agencies to implement actions in the Columbia River Basin that address impacts of the Federal hydrosystem on ESA-listed fish to ensure that operation of the FCRPS does not jeopardize the continued existence of listed species or adversely modify their designated critical habitat.

NOAA Fisheries issued its 2008 FCRPS BiOp in May 2008. It replaces the 2004 BiOp that was challenged and remanded. The new opinion includes, with few modifications, the spill that the Court ordered as temporary injunctive relief in 2006. The 2008 BiOp was developed through a court-ordered collaboration process over the past two years. In addition, in 2008, the FCRPS Action Agencies signed agreements, the Columbia Basin Fish Accords (Fish Accords) with five Northwest Tribes and the states of Idaho and Montana. In 2009, agreements were signed with another tribe, federal agencies, and the State of Washington. The Fish Accords supplement the 2008 BiOp and the Council’s Fish and Wildlife Program and provide firm commitments to mitigation actions and secure funding for the next 10 years.

There has also been litigation directed at the USFWS Biological Opinions for Kootenai River white sturgeon. In 2003, the Corps and BPA reinitiated consultation for the operations at Libby

Dam to address impacts to recently designated critical habitat for the Kootenai River white sturgeon, and to evaluate information that had been developed on Kootenai River white sturgeon and bull trout since the 2000 USFWS BiOp. That consultation was completed in February 2006, but was challenged by environmental groups, the Kootenai Tribe, and the State of Montana in Federal District Court of Montana. This litigation was settled in March 2009 and includes a combination of hatchery, habitat and flow/spill actions subject to modification depending on the results.

Also, NOAA Fisheries and USFWS issued a Biological Opinion on the FCRPS projects in the Willamette Basin in July, 2008. This BiOp includes a combination of hatchery, habitat and operational actions. Additionally, studies will be conducted to determine potential configuration actions to improve productivity of listed stocks.

Bonneville's mitigation and recovery expenditures will focus on activities that benefit Columbia River Basin fish and wildlife resources including projects, following priorities established in Council Sub-basin Plans, designed to:

- increase survival of ESA-listed and non-listed fish at FCRPS dams and reservoirs;
- increase survival of ESA-listed and non-listed fish throughout their life cycle by protecting and enhancing important habitat areas;
- reform hatchery practices that affect ESA-listed populations and use hatcheries to contribute to conservation and recovery of ESA-listed and non-listed fish;
- provide for offsite mitigation projects for habitat, passage, and other improvements that address limiting factors for target species as defined in Sub-basin Plans;
- reduce harvest-related mortality on ESA-listed and non-listed fish and support sustainable fisheries; and
- support a focused and well-coordinated research, monitoring, and evaluation program.

To the extent possible, Bonneville is integrating the actions implemented in response to the FCRPS BiOps with projects implemented under the Council's Fish and Wildlife Program. Sub-basin plans that include prioritized strategies for mitigation actions will help guide project selection that meets both BPA's ESA and Northwest Power Act responsibilities. In order to address the *in lieu* provision of the Northwest Power Act, which prohibits BPA from funding mitigation that other entities are authorized or requires to undertake, BPA continues its ongoing work with the Council and the regional fish and wildlife managers, customers, and Tribes to review projects to ensure ratepayers fund appropriate mitigation. For example, BPA established a cost sharing MOU with the U.S. Forest Service in 2005 that requires a programmatic 30 percent cost share for FYs 2007-2009 for fish mitigation projects funded by BPA on U.S. Forest Service lands. BPA anticipates extending the MOU beyond 2009 and is in discussions with the U.S. Forest Service on this matter.

The Energy and Water Development Appropriations Act of 1996 added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an Independent Science Review Panel (ISRP) "to review a sufficient number of projects" proposed to be funded through Bonneville's fish and wildlife budget "to adequately ensure that the list of prioritized projects recommended is consistent with the Council's program." The Northwest Power Act further states that "in making its recommendations to Bonneville, the Council shall consider the impact of ocean conditions on fish and wildlife populations and shall determine whether the projects employ cost effective measures to achieve program objectives." Today, most mitigation projects funded by Bonneville

receive ISRP review as part of the Council recommendation process. The Council has shifted to a multi-year project review cycle during which the ISRP will review categories of projects grouped together; e.g., all terrestrial wildlife projects were recently reviewed. The Council plans to complete their cycle in 2011.

The Northwest Power Act created the Residential Exchange Program to extend the benefits of low-cost Federal power to certain residential and small farm power users in the Region. In effect, the program has resulted in cash payments by Bonneville to exchanging utilities, which are required to pass the benefit of the cash payments through in its entirety to eligible residential and small farm customers.

Under the Residential Exchange Program, Bonneville is to "purchase power" offered by an exchanging utility at its "average system cost," which is determined by Bonneville through the application of a methodology limiting the costs that may be included in an exchanging utility's average system cost to the production and transmission costs that an exchanging utility incurs for power. Bonneville is then to offer an identical amount of power for "sale" to the utility for the purpose of resale to the exchanging utility's residential users. In reality, no power has changed hands. Bonneville instead has made cash payments to exchanging utilities in an amount determined by multiplying an exchanging utility's eligible residential load times the difference between the exchanging utility's average system cost and Bonneville's applicable Residential Exchange Rate (which is an adjusted version of the PF Rate), if such rate is lower.

On May 3, 2007, the Court held that the REP Settlement Agreements were inconsistent with the Northwest Power Act and that the settlement costs were improperly allocated in setting the PF rate.

The WP-07 Supplemental rate case responded to the Court's rulings and revised power rates for FY 2009. This rate case also established the amount by which the preference customers were overcharged in FY 2002-2008 due to the REP Settlement Agreements found to be in violation of the Northwest Power Act by the Court. It also determined the approach to recovering those overcharges from the IOUs and returning them to the Preference customers who paid the too-high PF rates. The WP-07 Supplemental ROD, studies and documentation for the WP-07 Supplemental rate case determined the PF Exchange rate for FY 2009, as well as the magnitude of the initial amount to be returned to the Preference customers in FY 2009 for overcharges during FY 2002-2006.

The Council's major activities include the periodic preparation of a Northwest Conservation and Electric Power Plan (a 20-year electric energy demand and resources forecast and energy conservation program) and a Columbia River Basin Fish and Wildlife Program of loss mitigation and resource enhancement actions. The Northwest Power Act directs that expenses of the Council, subject to certain limits based on forecasted Bonneville power sales, shall be included in Bonneville's annual budget to Congress. Funding for the Council is provided by Bonneville and is recovered through Bonneville power rates.

BPA will acquire conservation resources consistent with the Council's Power Plan and act as a catalyst for energy efficiency. Such action will: 1) meet conservation targets; 2) achieve a least cost resource mix; 3) lessen the cost impacts of power purchases; 4) avoid the costs of ramping programs and infrastructure up and down; 5) extend the value of the FCRPS to customers; and 6) build the region's resource portfolio with conservation**.** Bonneville is also exploring how best

to integrate demand-side management, distributed generation, and other leading edge technologies (i.e., Energy Web and Smart Grid applications) into its generation and transmission planning processes.

Detailed Justification

	(dollars in thousands)		
	FY 2009	FY 2010	FY 2011
Production	**922,760**	**1,333,534**	**1,497,395**

- Power Purchases: Includes purchased power to cover power supply obligations as well as balancing the hydro system. These purchases can be made in the form of long-term purchases to meet supply obligations based on long-term planning requirements or they can be made within the year due to the monthly shape of the loads and the monthly shape of the hydro electric generation. Also, purchases can be made within the month and within the day to fill shortages due to fluctuations in the hydro system and load changes.

- Power Scheduling/Marketing: Schedule and market (buy/sell) electric energy with Bonneville customers and the Pacific Northwest's interconnected utilities. Scheduling includes PS's implementation of physical and memo power schedules and associated transmission schedules, implementation of Electronic Tagging (ETag) in accordance with NERC and in accordance with FERC, implementation of electronic scheduling and the Columbia Grid as it evolves.

- Trojan: Decommissioning activities are complete and the Trojan operating license has been terminated by the NRC. BPA's 30 percent share of the operation and maintenance costs for the Independent Spent Fuel Storage Installation facility continues.

- Columbia Generating Station (formerly WNP-2): Continue to acquire full capability of Columbia Generating Station (CGS). CGS is on a 24-month fuel and outage cycle. A maintenance and refueling outage is planned for the spring of FY 2011.

- WNP-1/WNP-3: Continue to fulfill contractual obligations for WNP-1 and WNP-3.

- Long Term Power Purchases and Wheeling: Continue to acquire 100 percent of the following wind projects: Foote Creek II (2 MW) and IV (17 MW), Condon (50 MW) and Klondike I (24 MW). BPA continues to purchase 15 MW of Foote Creek I, 90 MW of the Stateline wind project, and 50 MW of the Klondike III wind project. Wind purchases now total 248 MW. BPA also continues to purchase a share of the output from the Solar Ashland Project.

Generation and Oversight:

FY 2009: Provided oversight of all signed contracts including oversight of large thermal generating plants from which Bonneville purchases capability to ensure that all Bonneville approval rights are protected; coordinated, communicated, and administered agreements, issues, and programs between Bonneville and the project owners. Continued to provide wind resource integration services for customer wind generation.

FY 2010: Continue to provide oversight of all contracts signed to date. Pursue cost-effective means to mitigate capacity demands associated with interconnecting large amounts of wind into the BPA system. Pursue acquisition of additional cost-effective renewable generation to meet load growth. Continue to provide oversight on the wind resource integration services currently purchased by public power customers and offer additional renewable resource shaping services to such customers using wind generation to serve their load.

FY 2011: Continue to provide oversight of all contracts signed to date. Pursue cost-effective means to mitigate capacity demands associated with interconnecting large amounts of wind into the BPA system. Pursue acquisition of additional cost-effective renewable generation to meet load growth. Continue to provide oversight on the wind resource integration services currently purchased by public power customers and offer additional renewable resource shaping services to such customers using wind generation to serve their load.

Associated Project Costs	**295,578**	**323,306**	**334,777**

- Support FCRPS project costs and work to strengthen interagency and regional relationships to improve project performance, supporting functions, and to better understand project resource requirements and costs. This helps to maintain FCRPS reliability and system performance, as well as to attain BPA's strategic business objectives.

- Bureau of Reclamation:
  FY 2009: Continued direct funding Reclamation O&M power activities.
  FY 2010: Continue direct funding Reclamation O&M power activities.
  FY 2011: Continue direct funding Reclamation O&M power activities.

- Corps of Engineers:
  FY 2009: Continued direct funding Corps O&M power activities.
  FY 2010: Continue direct funding Corps O&M power activities.
  FY 2011: Continue direct funding Corps O&M power activities.

Fish and Wildlife	**177,369**	**215,000**	**236,000**

- Specific project solicitation recommendations were made by the Council in late 2006 followed by BPA review and funding decisions completed in early 2007 for the period FY 2007 through 2009. BPA, in coordination with the Council, reviews all on-going projects and reaffirms many project-specific commitments in 2008 through both Biological Opinions and Fish Accords. These decisions were based upon the management objectives and priorities in the Program and Sub-basin Plans as well as an integration of ESA responsibilities as described in the NOAA Fisheries and U.S. Fish and Wildlife Service's FCRPS Biological Opinions. Coordination continues among BPA, Council, Federal resource management agencies, states, tribes and others to plan for additional projects to fill specific gaps in BPA's mitigation portfolio through targeted solicitations.

- Anadromous Fish: Continue implementing both ongoing and new projects that support ESA-listed species and other measures called for under the 2008 FCRPS BiOps and the Fish Accords. Prioritize projects that address the factors that limit mitigation success as identified in the Sub-basin Plans and that fulfill BPA's responsibility for mitigation of the FCRPS. Implement and develop activities that protect and enhance tributary and estuary habitat; improve mainstream habitat on an experimental basis; reduce potentially harmful hatchery practices on ESA-listed populations; and contribute to sustainable fisheries. These activities have been selected in response to the Northwest Power Act section 2(6) to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries."

- Resident Fish: Implement activities to determine the impacts of the FCRPS on lamprey and bull trout and mitigate for those impacts, and promote the reproduction and recruitment of Kootenai River white sturgeon. These activities have been selected in response to the 2006 BiOp, the Fish Accords, and the Northwest Power Act purpose to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries."

- Continue mitigation using resident fish to offset anadromous fish losses (substitution); mitigate for reservoir operation impacts to resident fish; and continue to refine, quantify, and delineate the difference between the two. Those resident fish habitat acquisition projects that meet BPA's Capitalization Policy will be funded under the capital portion of Bonneville's Fish and Wildlife budget.

- Wildlife: Use existing Bonneville policies to continue the current effort to mitigate wildlife in a manner consistent with Council's 2009 Fish and Wildlife Program. These activities have been selected in response to the Northwest Power Act requirement to protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries. Those wildlife acquisition projects that meet BPA's Capitalization Policy will be funded under the capital portion of Bonneville's Fish and Wildlife budget and credited at a ratio of one unit of credit for every habitat unit lost to a dam.

Residential Exchange Program	**205,171**	**265,558**	**270,087**

- Includes forecasted REP costs for FYs 2009-2011.

Northwest Power and Conservation Council	**9,424**	**9,683**	**9,934**

- Continue support of the Council activities, as directed under the Northwest Power Act, including regional power plan development and maintenance, and fish and wildlife program activities.

Conservation and Energy Efficiency	**99,444**	**140,572**	**141,386**

- Continue close-out of the legacy conservation resource acquisition contracts, which support Bonneville's contractual obligation to serve customer load growth.

- Provide credible, unbiased information, and technical and financial support to conservation purposes. As an agency with independent responsibilities based on its authorizing legislation, Bonneville has a statutory responsibility to encourage and support the development of conservation in the Pacific Northwest. Bonneville is participating with other regional entities to support market transformation and development activities that meet the needs of Bonneville customers and create business opportunities for the private sector in the Pacific Northwest. Toward that end, BPA has been helping create a delivery infrastructure to ensure conservation savings are installed efficiently and effectively throughout the region.

Total, Power Services – Operating Expense	**1,709,746**	**2,287,653**	**2,489,579**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Production	
■ Primarily reflects increases in power purchases.	+163,861
Associated Project Costs	
■ Reflects changes to security, biological opinion requirements, non-routine extraordinary maintenance, WECC/NERC compliance activities, and improvements, replacements, and minor additions at the projects.	+11,471
Fish and Wildlife	
■ Reflects funding associated with Biological Opinions, Fish Accord commitments and Northwest Power Act activities.	+21,000
Residential Exchange	
■ Reflects forecast of public exchange costs.	+4,529
Northwest Power and Conservation Council	
■ Small increase reflects continuing Council program activities.	+251
Conservation and Energy Efficiency	
■ Small increase reflects normal program adjustments.	+814
Total Funding Change, Power Services - Operating Expense	**+201,926**

Transmission Services - Operating Expense

Funding Schedule by Activity

Transmission Services - Operating Expense	(accrued expenditures) (dollars in thousands) FY 2009	FY 2010	FY 2011
Engineering	32,678	44,671	49,752
Operations	116,626	145,399	147,583
Maintenance	151,859	151,997	157,350
Total, Transmission Services - Operating Expense	301,163	342,067	354,685

Outyear Funding Schedule

	(accrued expenditures) (dollars in thousands) FY 2012	FY 2013	FY 2014	FY 2015
Total, Transmission Services - Operating Expense	369,407	382,133	393,582	387,219

Description

This activity provides for the transmission system services of engineering, operations, and maintenance for Bonneville's electric transmission system, consisting of over 15,238 circuit miles (24,523 circuit kilometers) of lines, 259 substations, and the associated power system control and communication facilities, with an invested cost of more than $6.0 billion. Primary strategies of this program are: 1) maintain the safety and reliability of the transmission system; 2) increase the focus on meeting customers' needs; 3) optimize the transmission system; and 4) provide open and nondiscriminatory transmission access; and 5) improve Bonneville's cost effectiveness.

Detailed Justification

	(dollars in thousands) FY 2009	FY 2010	FY 2011
Engineering	**32,678**	**44,671**	**49,752**

Continue efforts to identify best methods for improving system reliability and maintenance practices, and continue cost reduction efforts by identifying opportunities for low-cost reinforcement and voltage support of the existing transmission system.

(dollars in thousands)

FY 2009	FY 2010	FY 2011

- Asset Management: Continue deploying the Asset Management approach to sustain the existing assets and expanding the system to meet Agency objectives. Prepare for certification to Publicly Available Specifications (PAS)-55 over three to five years.

- R&D: Conduct research focused on technologies related to business challenges BPA faces including reliability, energy efficiency, and integration of renewable energy resources. Technologies of interest are identified in BPA's Technology Roadmaps. A portfolio of research is selected every year through BPA's Portfolio Decision Framework.

- Technical Support: Provide technical support activities, such as transmission system planning and studies to optimize portions of the system. Provide support for non-wires solutions studies and pilot projects.

- Capital-to-Expense Adjustments: Conduct annual analysis of Bonneville's outstanding capital work orders to assess whether they should be expensed. As obsolete inventory is identified and disposed of, it is expensed.

- Regulatory Fees: Western Electricity Coordinating Council (WECC) dues based on the load of WECC members as a proportion of the total load within the WECC area. Includes membership in Columbia Grid.

- Reimbursable Transactions: Enter into written agreements with Federal and non-Federal entities that have work or services to be performed by Bonneville staff at the expense of the benefiting entities. The projects must be beneficial, under agreed upon criteria, to Bonneville operations and to the Federal or non-Federal entity involved or otherwise be aligned with or supportive of BPA's strategic objectives. Additionally, these activities generally contribute to more efficient or reliable construction of the Federal transmission system or otherwise enhance electric service to the region.

- Leased and Other Costs: Includes leases and other costs of financing transmission, delivery and voltage support facilities when such arrangements are operationally feasible and cost effective to deliver power. Capitalized leases enable BPA to continue to invest in infrastructure to support a safe and reliable system for the transmission of power. Other costs included are the accrued interest costs associated with Large Generator Interconnection Agreements (LGIA).

Operations	**116,626**	**145,399**	**147,583**

- FY 2009: Continued to operate within parameters of regional transmission authorities. Supported new compliance activities related to the reliability of the transmission system including cyber security. Developed facilities, policies, procedures and implementing systems to support the integration of high levels of wind generation into the transmission grid. Prepared for increased complexity of power system operations and dispatching including congestion management and outage scheduling as well as increased complexities in transmission scheduling. Addressed succession planning issues across key functions. Continued development and implementation of business systems and tools.

- FY 2010: Continue to operate within parameters of regional transmission authorities. Continue support of increased compliance activities related to the reliability of the transmission system including cyber security. Continue developing facilities, policies, procedures and implementing systems to support the integration of high levels of wind generation into the transmission grid. Continue preparation for increased complexity of power system operations and dispatching including congestion management and outage scheduling as well as increased complexities in transmission scheduling. Continue to address succession planning issues across key functions. Continue development and implementation of business systems and tools.

- FY 2011: Continue to operate within parameters of regional transmission authorities. Continue support of compliance activities related to the reliability of the transmission system including cyber security. Further expand facilities and refine policies and procedures and implementing systems to support the integration of high levels of wind generation into the transmission grid. Continue preparation for increased complexity of power system operations and dispatching including congestion management and outage scheduling as well as increased complexities in transmission scheduling. Continue to address succession planning issues across key functions. Continue development and implementation of business systems and tools.

- Substation Operations: Perform operations functions necessary to provide electric service to customers and to protect the Federal investment in electric equipment and other facilities. Includes equipment adjustments, switching lines and equipment during emergencies or maintenance, isolating damaged equipment, restoring service to customers, and inspecting equipment, reading meters, etcetera.

- Power System Dispatching and Supporting Functions: Perform central dispatching, control, and monitoring of the electric operation of the Federal transmission system. Also includes load, frequency and voltage control of Federal generating plants, and coordinating long and short term outages of system equipment. In addition, provides technical engineering support of dispatching function and provides all technical and systems support for Dittmer Control Center (DCC) and Munro Control Center (MCC) power system control centers.

- Marketing and Sales: Provide management and direction of transmission rates, and provide business strategy in marketing of transmission and ancillary products and services of Transmission Services. Involve customers and constituents in the process of product and rate development. Maintain accurate and complete historical records of current and past transmission agreements. Provide guidance for current and future transmission contract negotiations. Provide financial analysis of market strategies. Monitor and report on the financial health of Transmission Services. Support cost management by effective reporting and analysis of current expenditures. Ensure official budget submittals reflect current management financial strategies and adequately fund transmission programs.

- Transmission Scheduling: Provide open access to the Federal transmission system consistent with the Open Access Transmission Tariff. Schedule and market transmission capacity to Bonneville customers. Manage the reservations and scheduling of all transmission services associated with the Open Access Transmission Tariff. Update practices, policies and systems to accommodate large amounts of wind generation.

Maintenance	**151,859**	**151,997**	**157,350**

In all aspects of maintenance, Bonneville is continuing the use of Reliability Centered Maintenance (RCM) practices. The use of RCM practices is focused on improving system reliability, increasing availability and meeting new and existing compliance regulations. In addition BPA is deploying Asset Management to optimize maintain/replace decision making. Maintenance costs are expected to increase as Bonneville addresses the aging transmission system, meeting Reliability Standards including Vegetation Management, and environmental constraints associated with construction, enhancement, and maintenance of the system. The Bonneville transmission system encompasses 15,238 circuit miles on over 8,500 right-of-way miles (many of these miles are through rugged, inaccessible terrain).

- FY 2009: Continued to refine RCM practices in all of Bonneville's O&M regions. Implemented processes for monitoring and tracking compliance activities related to the reliability of the transmission system. Continued to improve performance meeting System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) targets. Continued efforts to achieve the SAIFI and SAIDI targets of no control chart violations for circuit importance categories 1-2 (highest importance), and not more than one violation for category 4. Control charts are statistically based graphs that illustrate variability in performance. Continued to improve availability performance by utilizing more efficient and cost-effective maintenance work practices and outage coordination. Used recruitment incentives to ensure succession of the current work force and remain competitive as an employer in the utility industry. Assured a safe work environment through safety awareness and improved work practices. Increased outage scheduling planning to increase customer satisfaction. Continued high levels of vegetation management and increased access road work to provide reliable access to facilities and ensure environmental compliance. Deployed new technologies such as Light Detection and Ranging (LiDAR) to reliably and cost effectively manage vegetation.

- FY 2010: Continue to refine RCM practices and deploy asset management in all of Bonneville's O&M districts. Continue refining processes and procedures for monitoring and tracking compliance activities related to the reliability of the transmission system. Continue to improve performance to meet SAIFI and SAIDI targets as explained above. Continue to improve system availability performance through new maintenance procedures and work practices. Develop work practices and procedures for implementation of a new specialty crew using bare-handing practices for maintenance of high-voltage transmission lines. Continue increased emphasis on replacement of line hardware (life extension programs for insulators, connectors, dampers & fiber optic cable hardware). Continue to prepare for the impact of an expected high attrition rate among Bonneville's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage scheduling and coordination planning to increase customer satisfaction and system availability. Increase emphasis on non-electric facilities to compensate for years of deferral. Continue high emphasis of vegetation management, implementation of an aggressive access road management plan to maintain roads at a level that minimizes response time, increases reliability, and ensures environmental compliance. Continue improving environmental stewardship.

- FY 2011: Continue to improve performance to meet SAIFI and SAIDI targets as explained above. Continue refining processes and procedures for monitoring and tracking compliance activities related to the reliability of the transmission system. Continue to improve system availability performance through new maintenance procedures and work practices. Continue to develop and implement work practices and procedures for implementation of a new specialty crew using bare-handing practices for maintenance of high-voltage transmission lines. Continue increased emphasis on replacement of line hardware (life extension programs for insulators, connectors, dampers & fiber optic cable hardware). Continue to prepare for the impact of an expected high attrition rate among Bonneville's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage-scheduling planning and coordination to increase customer satisfaction and system availability. Maintain vegetation management levels to ensure system reliability. Continue access road work to provide reliable access to facilities and ensure environmental compliance. Continue improving environmental stewardship.

- Transmission Line Maintenance: Maintain and repair 15,238 circuit miles (24,523 km) of high voltage transmission lines, of which over 7,617 km (4,734 circuit miles) are 500-kV transmission EHV (extra-high voltage), for which maintenance is two and one-half times more labor-intensive than maintenance of lower transmission voltages, although more efficient in transmission of power. This responsibility includes maintaining transmission rights-of-way to ensure system reliability, safety, and environmental compliance. Adopt work practices that improve system availability, reliability, and compliance.

- Right-of-Way Maintenance: Maintain and manage vegetation from over 8,500 of Bonneville's right-of-way miles. This responsibility includes vegetation management, danger tree management, and access road maintenance to ensure system reliability, safety, and environmental compliance. Adopt procedures and processes that improve system availability, reliability, environmental compliance, and reliability compliance. Continue to deploy new technologies such as LiDAR to reliably and cost effectively manage vegetation.

- Substation Maintenance: Maintain and repair the transmission system power equipment located in Bonneville's 259 substations. Work includes inspections, diagnostic testing and predictive and condition based maintenance.

- System Protection Maintenance: Maintain relaying metering and remedial action scheme equipment used to control and protect the electrical transmission system and to meter energy transfers for the purpose of revenue billing. Additionally, field-engineering services provide technical advice and assure the correct operation of power system relaying and special control systems used to support interregional energy transmission capabilities.

- Power System Control Maintenance: Test, repair, and provide field engineering support of Bonneville's highly complex equipment, communications, and control systems, including seven major microwave systems, fiber optic systems, and other critical communications and control equipment that support the power system.

- Non-Electric Plant Maintenance: Maintain and manage Bonneville's non-electric facilities. Includes site, building, and building utility maintenance; custodial services; station utility; and other maintenance service activities, as well as, facilities asset management on Bonneville-owned or Bonneville-leased non-electric facilities.

- Maintenance Standards and Engineering: Establish, monitor, and update system maintenance standards, policies, and procedures, and review and update long-range plans for maintenance of the electric power transmission system.

Total, Transmission Services - Operating Expense	**301,163**	**342,067**	**354,685**

Explanation of Funding Changes

	FY 2011 vs. FY 2010 ($000)
Engineering	
■ Reflects emphasis on system reliability improvements, research and development, and an increase in lease payments.	+5,081
Operations	
■ Reflects continued emphasis on reliability compliance activities, wind integration activities, security, and control center systems support.	+2,184
Maintenance	
■ Primarily reflects implementation of the facilities asset management plans, implementation of a new bare-handing crew, NERC/WECC compliance activities related to land rights and vegetation management, continuing maintenance program activities, including system protection, right-of-way, line maintenance, and performance improvements.	+5,353
Total Funding Change, Transmission Services – Operating Expense.	**+ 12,618**

Interest, Pension and Post-retirement Benefits - Operating Expense and Capital Transfers

Funding Schedule by Activity

	(accrued expenditures) (dollars in thousands)		
Interest, Pension and Post-retirement Benefits	FY 2009	FY 2010	FY 2011
BPA Bond Interest (Net)	113,333	66,827	106,536
BPA Appropriation Interest	35,356	32,979	27,538
Corps of Engineers Appropriation Interest	158,025	163,461	150,195
Lower Snake River Comp Plan Interest	16,450	16,450	16,450
Bureau of Reclamation Appropriation Interest	43,367	43,367	43,306
Subtotal, Interest – Operating Expense	366,531	323,084	344,025
Pension and Post-retirement Benefits	32,706	30,894	31,157
Total, Interest, Pension and Post-retirement Benefits	399,237	353,978	375,182

Outyear Funding Schedule

	(accrued expenditures) (dollars in thousands)			
	FY 2012	FY 2013	FY 2014	FY 2015
Total, Interest, Pension and Post-retirement Benefits	415,944	461,942	509,327	550,510

Operating Expense

Description

Interest expense provides for the payment of interest due on Federal debt. This consists of capital investment in FCRPS hydroelectric generating and transmission facilities of Bonneville, the Corps and Reclamation. Investments were financed by Congressional appropriations and Bonneville borrowings from the Treasury. Bonneville repays Federal debt through its power sales and transmission services revenues.

Since receiving Treasury borrowing authority in 1974 under the Transmission System Act, all Bonneville borrowing has been at market rates. As of Oct 1, 1996, all of Bonneville's repayment obligations on FCRPS appropriated investment (Corps and Reclamation FCRPS investment and Bonneville investment) financed with appropriations prior to the Transmission System Act that were unpaid as of Sept 30, 1996, were restructured and assigned new current-market interest rates. The Bonneville Appropriations Refinancing Act of 1996 called for resetting (reducing) the unpaid principal of FCRPS appropriations and reassigning (increasing) interest rates. New principal amounts were established as of the beginning of FY 1997 at the present value of the principal and annual interest payments Bonneville would make to the Treasury for these obligations in the absence of the legislation,

plus $100 million. The new principal amounts were assigned new interest rates based on the Treasury yield curve rates prevailing at the end of FY 1996. Bonneville's outstanding repayment obligations on appropriations at the end of FY 1996 were $6.7 billion with a weighted average interest rate of 3.4 percent. The refinancing reduced the principal amount to $4.1 billion with a weighted average interest rate of 7.1 percent. Implementation of the refinancing took place in 1997 after audited actual financial data was available. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the Bonneville Appropriations Refinancing Act to Treasury for their review and approval. Treasury approved the implementation calculations in July 1997. The Act also calls for all future FCRPS appropriations to be assigned prevailing Treasury yield curve interest rates.

Interest estimates are a direct function of costs of Treasury borrowing to Bonneville, repayment status of outstanding FCRPS investments, and projected additions to FCRPS plant in service. These estimates may change over time depending on forecasted market conditions. The interest cost estimates include the impact of Bonneville's appropriation refinancing legislation.

Bonneville has been paying its unfunded liability of the Civil Service Retirement System (CSRS) and post-retirement benefits into the General Fund of the Treasury (receipt account 892889) since FY 1998. These payments are consistent with the FY 2001 Administration's budget which assumed Bonneville would prospectively cover the full unfunded liability that accrues in fiscal years after FY 1997 of the Civil Service Retirement and Disability Fund (Disability Fund), the Employees Health Benefits Fund (Health Fund), and the Employees Life Insurance Fund (Insurance Fund) that it had not covered prior to FY 1998. Cost estimates include pension and post-retirement benefits for Bonneville and the power-related portion of the Corps, Reclamation, and USFWS.

Capital Transfers

Funding Schedule by Activity

Capital Transfers	(accrued expenditures) (dollars in thousands) FY 2009	FY 2010	FY 2011
BPA Bond Amortization /1	393,460	140,319	160,000
Reclamation Appropriation Amortization	0	850	0
BPA Appropriation Amortization	9,889	74,905	124,707
Corps Appropriation Amortization	28,670	243,755	102,163
Total, Capital Transfers	432,019	459,829	386,870

Outyear Funding Schedule

	(accrued expenditures) (dollars in thousands) FY 2012	FY 2013	FY 2014	FY 2015
Total, Capital Transfers	332,261	197,364	150,700	90,958

/1 BPA "Bond(s)" in this FY 2011 budget refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines BPA bonds as all bonds, notes, and other evidences of indebtednesses issued and sold to the U.S. Treasury.

Description

This activity conveys funds to the Treasury for repayment of certain FCRPS costs not included in the Associated Project Costs budget. Since capital transfers are cash transactions, they are not considered budget obligations.

BONNEVILLE POWER ADMINISTRATION
TOTAL OBLIGATIONS/OUTLAYS
Current Services
(in millions of dollars)
FISCAL YEAR

FB 25-Jan-10

BP-1 SUMMARY	**2009**		**2010**		**2011**		**2012**	**2013**	**2014**	**2015**
1,3/	**Oblig.**	**Outlays**	**Oblig.**	**Outlays**	**Oblig.**	**Outlays**	**Oblig.**	**Oblig.**	**Oblig.**	**Oblig.**
1 Residential Exchange Program	205	205	266	266	270	270	219	219	219	227
2 Power Services 2/	1,219	1,219	1,658	1,658	1,832	1,832	1,910	2,030	2,048	2,069
3 Transmission Services	494	494	792	792	817	817	896	820	789	816
4 Conservation & Energy Efficiency	117	117	174	174	181	181	226	228	229	225
5 Fish & Wildlife	205	205	285	285	296	296	292	298	304	312
6 Interest/ Pension 4/	399	399	354	354	375	375	416	462	509	551
7 Associated Project Cost - Capital	140	140	159	159	172	172	180	191	192	196
8 Capital Equipment	31	31	24	24	22	22	27	27	28	30
3 Planning Council	9	9	10	10	10	10	10	10	10	11
10 Misc. Accounting Adjs.	0	0	0	0	0	0	0	0	0	0
11 Projects Funded in Advance	184	184	77	77	77	77	78	78	78	59
12 Capitalized Bond Premiums	0	0	0	0	2	2	2	2	2	0
13 Misc. Accounting Adjs.	0	0	0	0	0	0	0	0	0	0
TOTAL OBLIGATIONS/ OUTLAYS 3/	**3,003**	**3,003**	**3,799**	**3,799**	**4,054**	**4,054**	**4,256**	**4,365**	**4,408**	**4,496**

REVENUES AND REIMBURSEMENTS

Current Services

(in millions of dollars)

FISCAL YEAR

	BP-1 SUMMARY	2009		2010		2011		2012	2013	2014	2015
		Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
13	Revenues 5/	2,704	2,704	3,806	3,809	4,111	4,111	4,188	4,297	4,339	4,447
14	Project Funded in Advance	184	184	77	77	77	77	78	78	78	59
15	**TOTAL**	**2,888**	**2,888**	**3,883**	**3,886**	**4,188**	**4,188**	**4,266**	**4,375**	**4,417**	**4,506**
	BUDGET AUTHORITY (NET) 6/	**579**		**276**		**371**		**501**	**559**	**584**	**662**
16	**OUTLAYS (NET) 6,7/**		**234**		**(10)**		**(10)**	**(10)**	**(10)**	**(10)**	**(10)**

The accompanying notes are an integral part of this table.

1/ This FY 2011 budget includes capital and expense estimates based on IPR 2 forecasted data for FYs 2010-2015 and consistent with estimates from the 2010 final transmission and power rate cases.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

2/ Power Services includes Fish & Wildlife, Residential Exchange Program, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.

3/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of current-law funding estimates.

4/ See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

5/ Revenues, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming rate adjustment mechanisms, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, causing the same Net Outlay result. Adjustments for depreciation and 4(h)(10)(C) credits of the NW Power Act are also assumed.

6/ BPA received $49 million of additional budget authority in FY 2007 to accommodate the work necessary to relocate the radio spectrum consistent with the Commercial Spectrum Enhancement Act (P.L. 108-494). In subsequent years, per the assumed expenditures developed as part of BPA's work plans, outlays for the work performed are assumed.

7/ Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses. Actual Net Outlays are volatile and are reported in Report on Budget Execution and Budgetary Resources (SF-133). Estimated Net Outlays could change due to changing market conditions, streamflow variability, and ongoing changes in the electric industry.

EXPENSED OBLIGATIONS/OUTLAYS 1,4/
Current Services
(in millions of dollars)
FISCAL YEAR

BP-2	2009		2010		2011		2012	2013	2014	2015
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
1 Residential Exchange Program	205	205	266	266	270	270	219	219	219	227
2 Power Services 2/	1,218	1,218	1,657	1,657	1,832	1,832	1,910	2,030	2,048	2,069
3 Transmission Services	301	301	342	342	355	355	369	382	394	387
4 Conservation & Energy Efficiency	99	99	141	141	141	141	178	180	181	177
5 Fish & Wildlife	177	177	215	215	236	236	242	248	254	262
6 Interest/ Pension 3/	399	399	354	354	375	375	416	462	509	551
7 Planning Council	9	9	10	10	10	10	10	10	10	11
8 TOTAL EXPENSE	2,408	2408	2985	2985	3219	3219	3344	3531	3615	3684
10 Projects Funded in Advance	184	184	77	77	77	77	78	78	78	59

CAPITAL OBLIGATIONS/OUTLAYS
Current Services
(in millions of dollars)
FISCAL YEAR

BP-2 continued	**2009**		**2010**		**2011**		**2012**	**2013**	**2014**	**2015**
	Oblig.	**Outlays**	**Oblig.**	**Outlays**	**Oblig.**	**Outlays**	**Oblig.**	**Oblig.**	**Oblig.**	**Oblig.**
Conservation & Energy Efficiency	18	18	33	33	40	40	48	48	48	48
11 Transmission Services	193	193	450	450	462	462	527	438	395	429
12 Associated Project Cost	140	140	159	159	172	172	180	191	192	196
13 Fish & Wildlife	28	28	70	70	60	60	50	50	50	50
14 Capital Equipment	31	31	24	24	22	22	27	27	28	30
15 Capitalized Bond Premiums	0	0	0	0	2	2	2	2	2	0
16 **TOTAL CAPITAL INVESTMENTS \5**	**410**	**410**	**736**	**736**	**758**	**758**	**834**	**756**	**715**	**753**
17 **TREASURY BORROWING AUTHORITY TO FINANCE CAPITAL OBLIGATIONS 4/**	**385**		**736**		**758**		**834**	**756**	**715**	**753**

The accompanying notes are an integral part of this table.

1/ This FY 2011 budget includes capital and expense estimates based on IPR 2 forecasted data for FYs 2010-2015 and consistent with estimates from the 2010 final transmission and power rate cases.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

2/ Power Services includes Fish & Wildlife, Residential Exchange Program, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.

3/ See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

4/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of current-law funding estimates.

CURRENT SERVICES
(in millions of dollars)

	CAPITAL TRANSFERS	**FISCAL YEAR**						
	Amortization:	**2009 Pymts**	**2010 Pymts**	**2011 Pymts**	**2012 Pymts**	**2013 Pymts**	**2014 Pymts**	**2015 Pymts**
20	BPA Bonds	393	140	160	118	10	47	70
21	Reclamation Appropriations	0	1	0	0	44	0	0
22	BPA Appropriations	10	75	125	168	66	22	0
23	Corps Appropriations	29	244	102	47	77	81	21
24	**TOTAL CAPITAL TRANSFERS**	**432**	**460**	**387**	**333**	**197**	**150**	**91**
			STAFFING					
25	**FULL-TIME EQUIVALENT (FTE)**	**3,021**	**3,100**	**3,100**	**3,100**	**3,100**	**3,100**	**3,100**

The accompanying notes are an integral part of this table.

The cumulative amount of actual advance amortization payments as of the end of FY 2009 is $2,536 million.

PROGRAM & FINANCING SUMMARY

Current Services

(in millions of dollars)

Identification Code: 89-4045-0-3-271

		2009	2010	2011	2012	2013	2014	2015
Program by activities:								
	Operating expenses:							
0.01	Power Services	923	1,335	1,498	1,556	1,666	1,675	1,683
0.02	Residential Exchange Program	205	266	270	219	219	219	227
	Associated Project Costs:							
0.05	Bureau of Reclamation	78	87	96	105	107	110	114
0.06	Corps of Engineers	178	191	192	201	207	213	220
0.07	Colville Settlement	18	21	22	22	23	23	24
0.19	U.S. Fish & Wildlife Service	21	24	24	26	27	27	28
0.20	Planning Council	9	10	10	10	10	10	11
0.21	Fish & Wildlife	177	215	236	242	248	254	262
0.23	Transmission Services	301	342	355	369	382	394	387
0.24	Conservation & Energy Efficiency	99	141	141	178	180	181	177
0.25	Interest	367	323	344	384	429	475	515
0.26	Pension and Health Benefits 1/	33	31	31	32	33	34	35
0.91	**Total operating expenses 2/**	**2,409**	**2,986**	**3,219**	**3,344**	**3,531**	**3,615**	**3,683**
	Capital investment:							
1.01	Power Services	140	159	172	180	191	192	196
1.02	Transmission Services	193	450	462	527	438	395	429
1.03	Conservation & Energy Efficiency	18	33	40	48	48	48	48
1.04	Fish & Wildlife	28	70	60	50	50	50	50
1.05	Capital Equipment	31	24	22	27	27	28	30
1.06	Capitalized Bond Premiums	0	0	2	2	2	2	0
1.07	**Total Capital Investment 3/**	**410**	**736**	**758**	**834**	**756**	**715**	**753**
1.08	Misc. Accounting Adjustments							
2.01	Projects Funded in Advanced	184	77	77	78	78	78	59
10.00	**Total obligations 4/**	**3,003**	**3,799**	**4,054**	**4,256**	**4,365**	**4,408**	**4,495**

The accompanying notes are an integral part of this table.

1/ See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

2/ Assumes expense obligations, not accrued expenses.
Power Services includes Fish & Wildlife, Residential Exchange Program, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.

3/ Assumes capital obligations, not capital expenditures.

4/ This FY 2011 budget includes capital and expense estimates based on IPR 2 forecasted data for FYs 2010-2015 and consistent with estimates from the 2010 final transmission and power rate cases.

For purposes of this table, this FY 2011 budget reflects, for FY 2009, actual third party financing expense only for PFIA.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

Refer to 16 USC Chapters 12B, 12G, 12H, and BPA's other organic laws, including P.L. 100-371, Title III, Sec. 300, 102 Stat. 869, July 18, 1988 regarding BPA's ability to obligate funds.

Program and Financing (continued)
Current Services
(in millions of dollars)

		2009	2010	2011	2012	2013	2014	2015
	Financing:							
21.90	Unobligated balance available, start of year. 5/	38	26	15	2	0	0	0
24.40	Unobligated balance available, end of year.5/	26	15	2	0	0	0	0
39.00	**Budget authority (gross)**	**3,431**	**4,159**	**4,559**	**4,767**	**4,934**	**4,981**	**5,168**
	Budget Authority:							
67.10	Permanent Authority: Authority to borrow from Treasury (indefinite) 6/	385	736	758	834	756	714	753
	Spending authority from off-setting collections	2,888	3,883	4,188	4,266	4,375	4,417	4,506
69.47	Portion applied to debt reduction	(440)	(460)	(367)	(333)	(197)	(150)	(91)
69.90	**Spending authority from offsetting collections (adjusted)**	**2,337**	**3,423**	**3,801**	**3,933**	**4,178**	**4,267**	**4,415**
71.00	Total obligations	3,003	3,799	4,054	4,256	4,365	4,408	4,495
87.00	Outlays (gross)	3,122	3,799	4,054	4,256	4,365	4,408	4,495
	Adjustments to budget authority and outlays:							
	Deductions for offsetting collections:							
88.00	Federal funds	(30)	(90)	(90)	(90)	(90)	(90)	(90)
88.40	Non-Federal sources	(2,860)	(3,796)	(4,102)	(4,176)	(4,285)	(4,327)	(4,416)
88.90	Total, offsetting collections	(2,888)	(3,886)	(4,192)	(4,266)	(4,375)	(4,417)	(4,506)
89.00	**Budget authority (net)**	**579**	**276**	**371**	**501**	**559**	**584**	**662**
90.00	**Outlays (net) 7/**	**234**	**(10)**	**(10)**	**(10)**	**(10)**	**(10)**	**(10)**

The accompanying notes are an integral part of this table.

5/ Reflects estimated cost for radio spectrum fund.

6/ The Permanent Authority: Authority to borrow (indefinite) from Treasury amounts reflect both BPA's capital program financing needs and either the use of, or creation of, deferred borrowing. Deferred borrowing in created when, as a cash and debt management decision, BPA uses cash from revenues to liquidate capital obligations in lieu of borrowing from Treasury. This temporary use of cash on hand instead of borrowed funds creates the ability in future years to borrow money, when fiscally prudent.

The FY 1989 Energy and Water Development Appropriations Act (P.L. 100-371, 7/19/88, 102 Stat. 869) clarified that BPA has authority to incur obligations in excess of Treasury borrowing authority and cash in the BPA fund.

7/ Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses. Actual Net Outlays are volatile and are reported in Report on Budget Execution and Budgetary Resources (SF-133). Estimated Net Outlays could change due to changing market conditions, streamflow variability, and ongoing changes in the electric industry.

Revenues, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming rate adjustment mechanisms, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, causing the same Net Outlay result. Adjustments for depreciation and 4(h)(10)(C) credits of the NW Power Act are also assumed.

This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of current-law funding estimates.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of TREASURY BORROWING
CURRENT SERVICES
(in millions of dollars)

BP-4A

	Fiscal Year							
	2009				**2010**			
	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out-Standing	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out-Standing
Start-of-Year: Total	1,511	1,317	2,410	2,186	1,526	1,332	2,425	2,130
Plus: Annual Increase								
Cum.-Annual Treasury Borrowing	409	409	409		736	736	736	
Treasury Borrowing (Cash)				338				736
Less:								
BPA Bond Amortization	394	394	394	394	140	140	140	140
Net Increase/(Decrease):	15	15	15	(56)	596	596	596	596
Cum.-End-of-Year: Total	1,526	1,332	2,425	2,130	2,122	1,928	3,021	2,726
Total Remaining Treasury Borrowing Amount				5,570				4,974
Total Legislated Treasury Borrowing Amount				7,700				7,700

The accompanying notes are an integral part of this table.
In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

In this FY 2011 budget, BPA "bond(s)" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines "bonds" as all bonds, notes, and other evidences of indebtednesses issued and sold by BPA to the U.S. Treasury.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

BPA reserve financing of $15 million annually is assumed as part of TS capital-PFIA for FYs 2009-2015.

The cumulative amount of actual advance amortization payments as of the end of FY 2009 is $2,536 million.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of TREASURY BORROWING
CURRENT SERVICES
(in millions of dollars)

BP-4B

	Fiscal Year							
	2011				**2012**			
	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out-Standing	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out-Standing
Start-of-Year: Total	2,122	1,928	3,021	2,726	2,721	2,527	3,620	3,325
Plus: Annual Increase								
Cum.-Annual Treasury Borrowing	759	759	759		834	834	834	
Treasury Borrowing (Cash)				759				834
Less:								
Total BPA Bond Amortization	160	160	160	160	118	118	118	118
Net Increase/(Decrease):								
Total	599	599	599	599	716	716	716	716
Cum.-End-of-Year: Total	2,721	2,527	3,620	3,325	3,437	3,243	4,336	4,041
Total Remaining Treasury Borrowing Amount				4,375				3,659
Total Legislated Treasury Borrowing Amount				7,700				7,700

The accompanying notes are an integral part of this table.
In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

In this FY 2011 budget, BPA "bond(s)" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines "bonds" as all bonds, notes, and other evidences of indebtednesses issued and sold by BPA to the U.S. Treasury.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

BPA reserve financing of $15 million annually is assumed as part of TS capital-PFIA for FYs 2009-2015.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of TREASURY BORROWING
CURRENT SERVICES
(in millions of dollars)

BP-4C

	Fiscal Year							
	2013				**2014**			
	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out-Standing	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out-Standing
Start-of-Year: Total	3,437	3,243	4,336	4,041	4,182	3,988	5,081	4,786
Plus: Annual Increase								
Cum.-Annual Treasury Borrowing	755	755	755		714	714	714	
Treasury Borrowing (Cash)				755				714
Less:								
Total BPA Bond Amortization	10	10	10	10	47	47	47	47
Net Increase/(Decrease):								
Total	745	745	745	745	667	667	667	667
Cum.-End-of-Year: Total	4,182	3,988	5,081	4,786	4,849	4,655	5,748	5,453
Total Remaining Treasury Borrowing Amount				2,914				2,247
Total Legislated Treasury Borrowing Amount				7,700				7,700

The accompanying notes are an integral part of this table.

In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

In this FY 2011 budget, BPA "bond(s)" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines "bonds" as all bonds, notes, and other evidences of indebtednesses issued and sold by BPA to the U.S. Treasury.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

BPA reserve financing of $15 million annually is assumed as part of TS capital-PFIA for FYs 2009-2015.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of TREASURY BORROWING
CURRENT SERVICES
(in millions of dollars)

BP-4D

	Fiscal Year 2015			
	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out-Standing
Start-of-Year: Total	4,849	4,655	5,748	5,453
Plus: Annual Increase				
Cum.-Annual Treasury Borrowing	753	753	753	
Treasury Borrowing (Cash)				753
Less:				
Total BPA Bond Amortization	70	70	70	70
Net Increase/(Decrease):				
Total	683	683	683	683
Cum.-End-of-Year: Total	5,532	5,338	6,431	6,136
Total Remaining Treasury Borrowing Amount				1,564
Total Legislated Treasury Borrowing Amount				7,700

The accompanying notes are an integral part of this table.

In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

In this FY 2011 budget, BPA "bond(s)" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines "bonds" as all bonds, notes, and other evidences of indebtednesses issued and sold by BPA to the U.S. Treasury.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

BPA reserve financing of $15 million annually is assumed as part of TS capital-PFIA for FYs 2009-2015.

BONNEVILLE POWER ADMINISTRATION
POTENTIAL THIRD PARTY FINANCING TRANSPARENCY
(in millions of dollars)

BP-5

		Fiscal Year						
Transmission Services - Capital		**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Main Grid	Requirements	15	180	194	328	237	196	180
Area & Customer Services	Requirements	8	32	6	7	8	19	15
Upgrades & Additions	Requirements	17	97	115	72	61	65	63
System Replacements	Requirements	121	142	147	120	131	115	171
Projects Funded in Advance	Requirements	184	77	77	78	78	78	59
Total, Transmission Services - Capital	Requirements	**345**	**528**	**539**	**605**	**515**	**473**	**488**
Federal and Non-Federal Funding								
Projects Funded in Advance	Sources	184	77	77	78	78	78	59
Treasury Borrowing Authority	Sources	161	451	462	527	437	395	429
Scenario								
Third Party Financing	Scenario	120	33	33	101	66	50	52
Alternate Treasury Borrowing Authority	Scenario	NA	418	429	426	371	345	377

The accompanying notes are an integral part of this table.
The table above shows both the potential use of Treasury borrowing authority for transmission capital projects based on this FY 2011 budget and the use adjusted for potential third-party financing to fund appropriate capital expenditures when feasible in lieu of Treasury borrowing. Estimates included in this FY 2011 budget are uncertain and may change due to revised capital investment plans, access to capital strategic decisions, changing economic conditions, and an evolving financial market environment. The estimates of third-party financing included in the table show a reduction in the use of Treasury borrowing and do not reflect the actual notional third party financing commitment BPA may enter into in that particular year. The difference of reduction in use of Treasury borrowing and the actual notional third party financing commitment is primarily due to the difference in the timing of financing transactions between Treasury and third-party financing for capital projects with multi-year construction schedules.

Bonneville's Third Party Financing for Transmission Services consists primarily of lease-purchase agreements, which are capitalized leases that enable BPA to acquire the use of transmission facilities over time. BPA also undertakes the construction and installation of facilities from funds that customers advance to BPA for construction of BPA-owned facilities that assist the customers in obtaining necessary transmission service from BPA. These customers receive monetary payment credits in bills for transmission services from BPA up to the amount of funds advanced to BPA, plus interest.

BPA's historical Third Party Financing amounts may vary over time due to re-assignment of certain lease-purchase agreements to Treasury Financing.

BPA Status of Treasury Borrowing with Potential Third Party Financing Scenario

With the potential use of third party financing assumed in the scenario above, BPA's total remaining Treasury Borrowing Amount would be extended to the following amounts. See BP-4 BPA Status of Treasury Borrowing- Current Services.

	Fiscal Year						
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Start-of-Year: Total Bonds Outstanding	2,186	2,130	2,693	3,259	3,874	4,553	5,170
Plus:							
Treasury Borrowing (Cash)	338	736	759	834	755	714	753
Less:							
Potential Third Party Financing	NA	33	33	101	66	50	52
BPA Bond Amortization	394	140	160	118	10	47	70
Net Increase/(Decrease) Bonds Outstanding:	(56)	563	566	615	679	617	631
Cum.-End-of-Year: Total	2,130	2,693	3,259	3,874	4,553	5,170	5,801
Total Remaining Treasury Borrowing Amount	5,570	5,007	4,441	3,826	3,147	2,530	1,899
Total Legislated Treasury Borrowing Amount	7,700	7,700	7,700	7,700	7,700	7,700	7,700

TREASURY PAYMENTS

(in millions of dollars)

		FISCAL YEAR						
		2009	2010	2011	2012	2013	2014	2015
A.	**INTEREST ON BONDS & APPROPRIATIONS**							
	Bonneville Bond Interest							
1	Bonneville Bond Interest (net)	91	67	107	157	214	263	306
2	AFUDC [1/]	23	21	23	25	20	16	16
	Appropriations Interest							
3	Bonneville	35	33	28	19	6	2	0
4	Corps of Engineers [2/]	158	163	150	148	149	155	153
5	Lower Snake River	16	16	16	16	16	16	16
6	Bureau of Reclamation [3/]	43	43	43	43	43	40	40
7	**Total Bond and Approp. Interest**	**366**	**343**	**367**	**408**	**448**	**492**	**531**
B.	**ASSOCIATED PROJECT COST**							
8	Bureau of Reclamation Irrigation Assistance	7	0	0	1	60	54	122
9	Bureau of Rec. O & M [4/]	1	0	0	0	0	0	0
10	Corps of Eng. O & M [4/]	6	0	0	0	0	0	0
11	L. Snake River Comp. Plan O & M [4/]	0	0	0	0	0	0	0
12	**Total Assoc. Project Costs**	**14**	**0**	**0**	**1**	**60**	**54**	**122**
C.	**CAPITAL TRANSFERS**							
	Amortization							
13	Bonneville Bonds [6/]	393	140	160	118	10	47	70
14	Bureau of Reclamation Appropriations	0	1	0	0	44	0	0
15	Corps of Engineers Appropriations	29	244	102	47	77	81	21
16	Lower Snake River Comp. Plan	0	0	0	0	0	0	0
17	Bonneville Appropriations	10	75	125	168	66	22	0
	Total Capital Transfers	**432**	**460**	**387**	**333**	**197**	**150**	**91**
D.	**OTHER PAYMENTS**							
18	Unfunded CSRS Liability [5/]	33	31	31	32	33	34	35
21	**TOTAL TREASURY PAYMENTS**	**845**	**834**	**785**	**774**	**738**	**730**	**779**

The accompanying notes are an integral part of this table.

1/ This interest cost is capitalized and included in BPA's Transmission System Development, System Replacments, and Associated Projects Capital programs. AFUDC is financed through the sale of bonds.

2/ Includes interest on construction funding for Corp of Engineers (Corps) fish bypass facilities at Corps dams in the Columbia River Basin, including Lower Monumental, Ice Harbor, and The Dalles.

3/ Includes payments paid by Reclamation to Treasury on behalf of Bonneville.

4/ Costs for power O&M is funded directly by Bonneville as follows (in millions)

FISCAL YEAR	2009	2010	2011	2012	2013	2014	2015
Bureau of Reclamation	78	87	96	105	107	110	114
Corps of Engineers	178	191	192	201	207	213	220
Subtotal Bureau and Corps	256	278	288	306	314	323	334
Lower Snake River Comp. Plan	21	24	24	26	27	27	28
Total	277	302	312	332	341	350	362

5/ See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

6/ In this FY 2011 budget, BPA "bond(s)" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines "bonds" as all bonds, notes, and other evidences of indebtednesses issued and sold by BPA to the U.S. Treasury.

Does not include Treasury bond premiums on refinanced Treasury bonds.

OBJECT CLASSIFICATION STATEMENT
(in millions of dollars) 1/

IDENTIFICATION CODE: 89-4045-0-3-271
DIRECT OBLIGATIONS

		ESTIMATES		
		2009	**2010**	**2011**
11.1	Full-time permanent	209	298	312
11.3	Other than full-time permanent	44	71	75
11.5	Other personnel compensation	10	10	11
11.9	**Total personnel compensation**	**263**	**379**	**398**
12.1	Civilian personnel benefits	16	29	31
13.0	Benefits for former personnel	26	31	32
21.0	Travel and transportation of persons	14	20	20
22.0	Transportation of things	1	2	2
23.1	Rental payments to GSA	1	1	1
23.2	Rents, other	0	0	0
23.3	Communication, utilities & misc. charges	19	34	36
25.1	Consulting Services	320	487	482
25.2	Other Services	1307	1,411	1,534
25.3	Purchases from Government Accounts	0	0	0
25.4	O&M of Facilities	0	0	0
25.5	R & D Contracts	8	8	8
26.0	Supplies and materials	135	483	529
31.0	Equipment	0	0	0
32.0	Lands and structures	52	52	60
41.0	Grants, subsidies, contributions	266	89	91
43.0	Interest and dividends	575	773	830
99.0	**Total obligations**	**3,003**	**3,799**	**4,054**

Estimate of Proprietary Receipts
(in millions of dollars)

	Fiscal Year						
	2009	2010	2011	2012	2013	2014	2015
Reclamation Interest	43	43	43	43	43	40	40
Reclamation Amortization	0	1	0	0	44	0	0
Reclamation O&M	1	0	0	0	0	0	0
Reclamation Irrig. Assist.	7	0	0	1	60	54	122
Revenues Collected by Reclamation Distributed in Treasury Account (credit)	-13	-7	-7	-7	-7	-7	-7
Colville Settlement (credit)	-5	-5	-5	-5	-5	-5	-5
Total 1/ Reclamation Fund	**33**	**32**	**31**	**32**	**135**	**82**	**150**
Corps O&M	6						
CSRS	33	31	31	32	33	34	34
Total 2/ Repayments on misc.costs	**39**	**31**	**31**	**32**	**33**	**34**	**34**

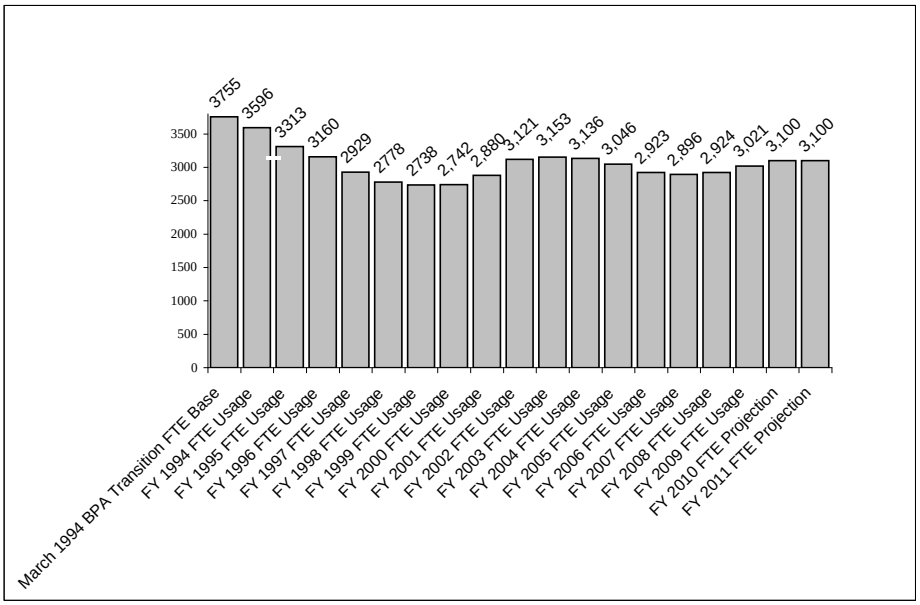
1/ Includes amortization of appropriations and irrigation assistance, and interest costs for Reclamation. The cost of power O&M for Reclamation is no longer included in Proprietary Receipts due to Direct Funding by Bonneville. Represents transfer to Account #895000.26

2/ The costs of power O&M for the Corps and Lower Snake Comp. Plan are no longer included in Proprietary Receipts due to Direct Funding by Bonneville. Represents transfers to Account #892889, Repayments on misc. recoverable costs, not otherwise classified. Costs for power O&M is funded directly by Bonneville as follows (in millions)

	2009	2010	2011	2012	2013	2014	2015
Bureau of Reclamation	78	87	96	105	107	110	114
Corps of Engineers	178	191	192	201	207	213	220
Lower Snake River Comp. Plan	21	24	24	26	27	27	28

See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

BONNEVILLE FTE
(revised December 2009)



BPA has utilized the following number of VSIPs: 190 in FY 1994, 240 in FY 1995, 137 in FY 1996, 135 in FY 1997, 121 in FY 1998, 81 in FY 1999, 43 in FY 2000, 12 in FY 2001, 0 in FY 2002, 80 in FY 2003, 0 in FY 2004, 98 in 2005, 35 in FY 2006, 37 in FY 2007, and 31 in FY 2008.

BPA continues to assume various authorities, including the use of VSIPs and VERA to help achieve BPA planning levels.

Actual FTE data is consistent with DOE personnel reports.

FTE outyear data are estimates and may change.

BONNEVILLE POWER ADMINISTRATION

FISH AND WILDLIFE COSTS [1/]

COST ELEMENT	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CAPITAL INVESTMENTS [2/]										
BPA FISH AND WILDLIFE	13.9	16.5	6.1	11.6	8.5	12.2	36.3	36.2	26.9	27.8
ASSOCIATED PROJECTS (FEDERAL HYDRO)	47.0	6.2	8.8	68.4	75.9	53.8	360.0	60.4	37.3	135.7
TOTAL CAPITAL INVESTMENTS	60.9	22.7	14.9	80.0	84.4	66.0	396.3	96.6	64.2	163.5
PROGRAM EXPENSES										
BPA DIRECT FISH AND WILDLIFE PROGRAM	108.2	101.1	137.1	140.7	137.9	135.8	137.9	139.5	148.9	178.1
SUPPLEMENTAL MITIGATION PROGRAM EXPENSES [3/]		2.9	7.1	6.5	7.8	0.0	0.0	0.0	0.0	0.0
REIMBURSABLE/DIRECT-FUNDED PROJECTS [4/]										
O & M LOWER SNAKE RIVER HATCHERIES	12.4	12.7	14.9	15.1	17.3	17.2	20.1	19.3	19.4	20.8
O & M CORPS OF ENGINEERS	19.7	23.1	28.2	30.3	32.3	32.5	31.8	32.9	34.4	34.3
O & M BUREAU OF RECLAMATION	1.8	3.0	3.8	3.1	3.9	3.9	4.5	3.9	4.3	4.5
OTHER (NW POWER AND CONSERVATION COUNCIL)	3.7	3.7	4.0	4.0	3.7	4.3	4.3	4.2	4.1	4.7
SUBTOTAL (REIMB/DIRECT-FUNDED)	37.6	42.5	50.9	52.6	57.2	57.9	60.7	60.3	62.2	64.3
TOTAL OPERATING EXPENSES	**145.8**	**146.5**	**195.1**	**199.8**	**202.9**	**193.7**	**198.6**	**199.7**	**211.1**	**242.4**
PROGRAM RELATED FIXED EXPENSES [5/]										
INTEREST EXPENSE	48.4	49.1	48.5	49.9	53.3	56.4	53.4	76.0	76.9	78.7
AMORTIZATION EXPENSE	16.1	16.8	17.2	17.4	17.5	17.4	17.4	22.9	24.4	24.6
DEPRECIATION EXPENSE	11.8	12.3	12.5	13.2	14.6	15.9	16.7	14.0	14.9	16.7
TOTAL FIXED EXPENSES	**76.3**	**78.2**	**78.2**	**80.5**	**85.4**	**89.7**	**87.5**	**112.9**	**116.2**	**120.0**
GRAND TOTAL PROGRAM EXPENSES	**222.1**	**224.7**	**273.3**	**280.3**	**288.3**	**283.4**	**286.1**	**312.6**	**327.3**	**362.4**
FOREGONE REVENUES AND POWER PURCHASES										
FOREGONE REVENUES	193.1	115.9	12.6	79.2	21.7	182.1	397.4	282.6	273.5	142.8
BPA POWER PURCH. FOR FISH ENHANCEMENT	64.8	1,389.6	147.8	171.1	191.0	110.8	168.2	120.7	274.9	240.3
TOTAL FOREGONE REVENUES AND POWER PURCHASES	**257.9**	**1,505.5**	**160.4**	**250.3**	**212.7**	**292.9**	**565.6**	**403.3**	**548.5**	**383.1**
TOTAL PROGRAM EXPENSES, FOREGONE REVENUES, & POWER PURCHASES	**480.0**	**1,730.2**	**433.7**	**530.6**	**501.0**	**576.3**	**851.7**	**715.9**	**875.8**	**745.5**
CREDITS										
4(h)(10)(C) credits earned	(50.4)	(336.6)	(66.4)	(73.6)	(77.0)	(57.7)	(76.4)	(66.1)	(100.5)	(99.5)
FISH COST CONTINGENCY FUND [6/]	-	(246.5)	-	(78.7)	-	-	-	-	-	-
TOTAL CREDITS	**(50.4)**	**(583.1)**	**(66.4)**	**(152.3)**	**(77.0)**	**(57.7)**	**(76.4)**	**(66.1)**	**(100.5)**	**(99.5)**

1/ For purposes of this presentation, this financial information has been made publicly available by BPA in April 2009 and is consistent with the financial system of record used in preparation of the audited financial statements for the respective period reported.

2/ Capital Investments include both BPA's direct Fish and Wildlife Program capital investments, funded by BPA's Treasury borrowing, and "Associated Projects", which include capital investments at the Corps and Reclamation projects, funded by appropriations and repaid by BPA.

3/ Includes High Priority and Action Plan Expenses and other supplemental programs.

4/ Reimbursable/Direct-Funded Projects includes the portion of costs BPA pays to or on behalf of other entities that is determined to be for fish and wildlife purposes.

5/ Fixed Expenses include depreciation and interest on investment on the Corps projects, and amortization and interest on the investments associated with BPA's direct Fish and Wildlife Program.

6/ The Fish Contingency Fund was exhausted in 2003

GENERAL PROVISIONS

[SEC. 301. None of the funds appropriated by this Act may be used to prepare or initiate Requests For Proposals (RFPs) for a program if the program has not been funded by Congress.**]**

[SEC. 302. None of the funds appropriated by this Act may be used—

(1) to augment the funds made available for obligation by this Act for severance payments and other benefits and community assistance grants under section 4604 of the Atomic Energy Defense Act (50 U.S.C. 2704) unless the Department of Energy submits a reprogramming request to the appropriate congressional committees; or

(2) to provide enhanced severance payments or other benefits for employees of the Department of Energy under such section; or

(3) develop or implement a workforce restructuring plan that covers employees of the Department of Energy.**]**

SEC. **[**303**]***301*. The unexpended balances of prior appropriations provided for activities in this Act may be available to the same appropriation accounts for such activities established pursuant to this title. Available balances may be merged with funds in the applicable established accounts and thereafter may be accounted for as one fund for the same time period as originally enacted.

SEC. **[**304**]***302*. None of the funds in this or any other Act for the Administrator of the Bonneville Power Administration may be used to enter into any agreement to perform energy efficiency services outside the legally defined Bonneville service territory, with the exception of services provided internationally, including services provided on a reimbursable basis, unless the Administrator certifies in advance that such services are not available from private sector businesses.

SEC. **[**305**]***303*. When the Department of Energy makes a user facility available to universities or other potential users, or seeks input from universities or other potential users regarding significant characteristics or equipment in a user facility or a proposed user facility, the Department shall ensure broad public notice of such availability or such need for input to universities and other potential users. When the Department of Energy considers the participation of a university or other potential user as a formal partner in the establishment or operation of a user facility, the Department shall employ full and open competition in selecting such a partner. For purposes of this section, the term "user facility" includes, but is not limited to:

(1) a user facility as described in section 2203(a)(2) of the Energy Policy Act of 1992 (42 U.S.C. 13503(a)(2));

(2) a National Nuclear Security Administration Defense Programs Technology Deployment Center/User Facility; and

(3) any other Departmental facility designated by the Department as a user facility.

SEC. **[**306**]***304*. Funds appropriated by this or any other Act, or made available by the transfer of funds in this Act, for intelligence activities are deemed to be specifically authorized by the Congress for purposes of section 504 of the National Security Act of 1947 (50 U.S.C. 414) during fiscal year **[**2010**]** *2011* until the enactment of the Intelligence Authorization Act for fiscal year **[**2010**]** *2011*.

SEC. **[**307**]***305*. Of the funds made available by the Department of Energy for activities at Government-owned, contractor-operated laboratories funded in this Act or subsequent Energy and Water Development Appropriations Acts, the Secretary may authorize a specific amount, not to exceed 8 percent of such funds, to be used by such laboratories for laboratory directed research and

development: *Provided*, That the Secretary may also authorize a specific amount not to exceed 4 percent of such funds, to be used by the plant manager of a covered nuclear weapons production plant or the manager of the Nevada Site Office for plant or site directed research and development.

SEC. **[**308**]***306*. (a) In any fiscal year in which the Secretary of Energy determines that additional funds are needed to reimburse the costs of defined benefit pension plans for contractor employees, the Secretary may transfer not more than 1 percent from each appropriation made available in this and subsequent Energy and Water Development Appropriation Acts to any other appropriation available to the Secretary in the same Act for such reimbursements.

[(b) Where the Secretary recovers the costs of defined benefit pension plans for contractor employees through charges for the indirect costs of research and activities at facilities of the Department of Energy, if the indirect costs attributable to defined benefit pension plan costs in a fiscal year are more than charges in fiscal year 2008, the Secretary shall carry out a transfer of funds under this section.**]**

(**[**c**]***b*) In carrying out a transfer under this section, the Secretary shall use each appropriation made available to the Department in that fiscal year as a source or the transfer, and shall reduce each appropriation by an equal percentage, except that appropriations for which the Secretary determines there exists a need for additional funds for pension plan costs in that fiscal year, as well as appropriations made available for the Power Marketing Administrations, the title XVII loan guarantee program, and the Federal Energy Regulatory Commission, shall not be subject to this requirement.

(**[**d**]***c*) Each January, the Secretary shall report to the Committees on Appropriations of the House of Representatives and the Senate on the state of defined benefit pension plan liabilities in the Department for the preceding year.

(**[**e**]***d*) This transfer authority does not apply to supplemental appropriations, and is in addition to any other transfer authority provided in this or any other Act. The authority provided under this section shall expire on September 30, 2015.

(**[**f**]***e*) The Secretary shall notify the Committees on Appropriations of the House of Representatives and the Senate in writing not less than 30 days in advance of each transfer authorized by this section.

[SEC. 309. (a) Subject to subsection (b), no funds appropriated or otherwise made available by this Act or any other Act may be used to record transactions relating to the increase in borrowing authority or bonds outstanding at any time under the Federal Columbia River Transmission System Act (16 U.S.C. 838 et seq.) referred to in section 401 of division A of the American Recovery and Reinvestment Act of 2009 (Public Law 111-5; 123 Stat. 140) under a funding account, subaccount, or fund symbol other than the Bonneville Power Administration Fund Treasury account fund symbol.

(b) Funds appropriated or otherwise made available by this Act or any other Act may be used to ensure, for purposes of meeting any applicable reporting provisions of the American Recovery and Reinvestment Act of 2009 (Public Law 111-5; 123 Stat. 115), that the Bonneville Power Administration uses a fund symbol other than the Bonneville Power Administration Fund Treasury account fund symbol solely to report accrued expenditures of projects attributed by the Administrator of the Bonneville Power Administration to the increased borrowing authority.

(c) This section is effective for fiscal year 2010 and subsequent fiscal years.**]**

[SEC. 310. Section 1702 of the Energy Policy Act of 2005 (42 U.S.C. 16512) is amended by adding at the end the following new subsection:

"(k) WAGE RATE REQUIREMENTS.—All laborers and mechanics employed by contractors and subcontractors in the performance of construction work financed in whole or in part by a loan guaranteed under this title shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code. With respect to the labor standards in this subsection,

the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.".**]**

[SEC. 311. None of the funds made available by this Act may be used to make a grant allocation, discretionary grant award, discretionary contract award, Other Transaction Agreement, or to issue a letter of intent totaling in excess of $1,000,000, or to announce publicly the intention to make such an award, including a contract covered by the Federal Acquisition Regulation, unless the Secretary of Energy notifies the Committees on Appropriations of the Senate and the House of Representatives at least 3 full business days in advance of making such an award or issuing such a letter: *Provided*, That if the Secretary of the Department of Energy determines that compliance with this section would pose a substantial risk to human life, health, or safety, an award may be made without notification and the Committees on Appropriations of the Senate and the House of Representatives shall be notified not later than 5 full business days after such an award is made or letter issued.**]**

[SEC. 312. (a) ULTRA EFFICIENT VEHICLES.—Section 136 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17013) is amended—

(1) in subsection (a)—

(A) in paragraph (1), by inserting "an ultra efficient vehicle or" after "means"; and

(B) by adding at the end the following new paragraph:

"(5) ULTRA EFFICIENT VEHICLE.—The term `ultra efficient vehicle' means a fully closed compartment vehicle designed to carry at least 2 adult passengers that achieves—

"(A) at least 75 miles per gallon while operating on gasoline or diesel fuel;

"(B) at least 75 miles per gallon equivalent while operating as a hybrid electric-gasoline or electric-diesel vehicle; or

"(C) at least 75 miles per gallon equivalent while operating as a fully electric vehicle.";

(2) in subsection (b)—

(A) by inserting ", ultra efficient vehicle manufacturers," after "automobile manufacturers";

(B) in paragraph (1)—

(i) by striking "or" at the end of subparagraph (A);

(ii) by striking "and" at the end of subparagraph (B) and inserting "or"; and

(iii) by adding at the end the following new subparagraph:

"(C) ultra efficient vehicles; and"; and

(C) in paragraph (2), by inserting ", ultra efficient vehicles," after "qualifying vehicles";

(3) in subsection (g), by inserting "or are utilized primarily for the manufacture of ultra efficient vehicles" after "20 years"; and

(4) in subsection (h)(1)(B), by striking "automobiles" the first place it appears and inserting "ultra efficient vehicles, automobiles,".

(b) RECONSIDERATION OF PRIOR APPLICATIONS.—The Secretary of Energy shall reconsider applications for assistance under section 136 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17013) that were—

(1) timely filed under that section before January 1, 2009;

(2) rejected on the basis that the vehicles to which the proposal related were not advanced technology vehicles; and

(3) related to ultra efficient vehicles.**]**

[SEC. 313. (a) Except as provided in subsection (b), none of the funds appropriated or otherwise made available by this title for the Strategic Petroleum Reserve may be made available to any person that as of the enactment of this Act—

(1) is selling refined petroleum products valued at $1,000,000 or more to the Islamic Republic of Iran;

(2) is engaged in an activity valued at $1,000,000 or more that could contribute to enhancing the ability of the Islamic Republic of Iran to import refined petroleum products, including—

(A) providing ships or shipping services to deliver refined petroleum products to the Islamic Republic of Iran;

(B) underwriting or otherwise providing insurance or reinsurance for such an activity; or

(C) financing or brokering such an activity; or

(3) is selling, leasing, or otherwise providing to the Islamic Republic of Iran any goods, services, or technology valued at $1,000,000 or more that could contribute to the maintenance or expansion of the capacity of the Islamic Republic of Iran to produce refined petroleum products.

(b) The prohibition on the use of funds under subsection (a) shall not apply with respect to any contract entered into by the United States Government before the date of the enactment of this Act.

(c) If the Secretary determines a person made ineligible by this section has ceased the activities enumerated in (a)(1)-(3), that person shall no longer be ineligible under this section.**]**

[SEC. 314. Section 132 of the Energy and Water Development Appropriations Act of 2006 (119 Stat 2261) is amended—

(1) in subsection (a)(3), by striking "Corps of Engineers" and inserting "Southwestern Power Administration";

(2) by adding at the end of subsection (a) the following new paragraph:

"(5) PAYMENT TO NON-FEDERAL LICENSEE.—Southwestern Power Administration shall compensate the licensee of Federal Energy Regulatory Commission Project No. 2221 pursuant to paragraph (3) using receipts collected from the sale of Federal power and energy related services. Pursuant to paragraph (6), Southwestern Power Administration will begin collecting receipts in the Special Receipts and Disbursement account upon the date of enactment of this paragraph. Payment to the licensee of Federal Energy Regulatory Commission Project No. 2221 shall be paid as soon as adequate receipts are collected in the Special Receipts and Disbursement Account to fully compensate the licensee, and in accordance with paragraph (2), such payment shall be considered non-reimbursable.";

(3) by adding at the end of subsection (a) the following new paragraph:

"(6) The Southwestern Power Administration shall compensate the licensee of Federal Energy Regulatory Commission Project No. 2221 in annual payments of not less than $5,000,000, until the licensee of Federal Energy Regulatory Commission Project No. 2221 is fully compensated pursuant to paragraph (3). At the end of each fiscal year subsequent to implementation, any remaining balance to be paid to the licensee of Project No. 2221 shall accrue interest at the 30-year U.S. Treasury bond rate in effect at the time of implementation of the White River Minimum Flows project.";

(4) by adding at the end of subsection (a) the following new paragraph:

"(7) ESTABLISHMENT OF SPECIAL RECEIPT AND DISBURSEMENT ACCOUNTS.—There is established in the Treasury of the United States a special receipt account and corresponding disbursement account to be made available to the Administrator of the Southwestern Power Administration to disburse pre-collected receipts from the sale of federal power and energy and related services. The accounts are authorized for the following uses:

"(A) Collect and disburse receipts for purchase power and wheeling expenses incurred by Southwestern Power Administration to purchase replacement power and energy as a result of implementation of the White River Minimum Flows project.

"(B) Collect and disburse receipts related to compensation of the licensee of Federal Energy Regulatory Commission Project No. 2221.

"(C) Said special receipt and disbursement account shall remain available for not more than 12 months after the date of full compensation of the licensee of Federal Energy Regulatory Commission Project No. 2221."; and

(5) by adding at the end of subsection (a) the following new paragraph:

"(8) TIME OF IMPLEMENTATION.—For purposes of paragraphs (3) and (4), `time of implementation' shall mean the authorization of the special receipt account and corresponding disbursement account described in paragraph (7).". **]**

SEC. 307. (*a*) *Section 1801 of the Atomic Energy Act of 1954 (42 U.S.C. 2297g) is amended in subsection (b)(2) by striking "amounts contained within the Fund" and inserting "assessments collected pursuant to section 1802 of the Atomic Energy Act of 1954 (42 U.S.C. 2297g-1) as amended".*

(*b*) *Section 1802 of the Atomic Energy Act of 1954 (42 U.S.C. 2297g-1) is amended:*

(*1*) *in subsection (a):*

(*A*) *by* striking *"$518,233,333" and inserting "$663,000,000"; and*

(*B*) *by* striking *"on October 24, 1992" and inserting "with fiscal year 2012".*

(*2*) *in subsection (c):*

(*A*) *by* inserting *"(1)" before "The Secretary";*

(*B*) *by* inserting *after "utilities": ", only to the extent provided in advance in appropriation Acts";*

(*C*) *by striking "$150,000,000" and inserting "$200,000,000";*

(*D*) *by* inserting *"beginning in fiscal year 2012" after "adjusted for inflation";*

(*E*) *by striking "(1)" and inserting "(A)";*

(*F*) *by striking "(2)" and inserting "(B)";*

(*G*) *by adding a new paragraph 2, ",(2) Amounts authorized to be collected pursuant to this section shall be deposited in the Fund and credited as offsetting receipts."*

(*3*) *in subsection (d), by striking "for the period encompassing 15 years after the date of the enactment of this title" and inserting "through fiscal year 2026"; and*

(*4*) *in subsection (e):*

(*A*) *in paragraph (1), by striking "15 years after the date of the enactment of this title" and inserting "September 30, 2026";*

(*B*) in *paragraph (2), by striking "$2,250,000,000" and inserting "$3,000,000,000"; and*

(*C*) in *paragraph (2) by inserting "beginning in fiscal year 2012" after "adjusted for inflation".*

SEC. 308. The Secretary shall collect up to $200,000,000 in assessments pursuant to section 1802 of the Atomic Energy Act of 1954 (42 U.S.C. 2297g-1), as amended by this Act.

SEC. 309. For an additional amount for the "Other Defense Activities" account, $11,891,755, to increase the Department's acquisition workforce capacity and capabilities: Provided, That such funds may be transferred by the Secretary to any other account in the Department to carry out the purposes provided herein: Provided further, That such transfer authority is in addition to any other transfer authority provided in this Act: Provided further, That such funds shall be available only to supplement and not to supplant existing acquisition workforce activities: Provided further, That such funds shall be available for training, recruitment, retention, and hiring additional members of the acquisition workforce as defined by the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 401 et seq.): Provided further, That such funds shall be available for information technology in support of acquisition workforce effectiveness or for management solutions to improve acquisition management.

SEC. 310. Not to exceed 5 per centum, or $100,000,000, of any appropriation, whichever is less, made available for Department of Energy activities funded in this Act or subsequent Energy and Water Development and Related Agencies Appropriation Acts may hereafter be transferred between such

appropriations, but no appropriation, except as otherwise provided, shall be increased or decreased by more that 5 per centum by any such transfers, and any such proposed transfers shall be submitted to the Committee on Appropriations of the House and Senate. (Energy and Water Development and Related Agencies Appropriations Act, 2010.)

SEC. 501. None of the funds appropriated by this Act may be used in any way, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913.

SEC. 502. To the extent practicable funds made available in this Act should be used to purchase light bulbs that are "Energy Star" qualified or have the "Federal Energy Management Program" designation.

[SEC. 503. Title IV of division A of the American Recovery and Reinvestment Act of 2009 (Public Law 111-5) is amended by adding at the end of the title, the following new section 411:

"SEC 411. Up to 0.5 percent of each amount appropriated to the Department of the Army and the Bureau of Reclamation in this title may be used for the expenses of management and oversight of the programs, grants, and activities funded by such appropriation, and may be transferred by the Head of the Federal Agency involved to any other appropriate account within the department for that purpose: *Provided*, That the Secretary will provide a report to the Committees on Appropriations of the House of Representatives and the Senate 30 days prior to the transfer: *Provided further*,That funds set aside under this section shall remain available for obligation until September 30, 2012.".**]**

[SEC. 504. (a) DEFINITIONS.—In this section:

(1) *ADMINISTRATIVE* EXPENSES.—The term "administrative expenses" has the meaning as determined by the Director under subsection (b)(2).

(2) *AGENCY*.—The term "agency"—

(A) means an agency as defined under section 1101 of title 31, United States Code, that is established in the executive branch and receives funding under this Act; and

(B) shall not include the District of Columbia government.

(3) *DIRECTOR*.—The term "Director" means the Director of the Office of Management and Budget.

(b) ADMINISTRATIVE EXPENSES.—

(1) IN *GENERAL*.—All agencies shall include a separate category for administrative expenses when submitting their appropriation requests to the Office of Management and Budget for fiscal year 2011 and each fiscal year thereafter.

(2) *ADMINISTRATIVE* EXPENSES DETERMINED.—In consultation with the agencies, the Director shall establish and revise as necessary a definition of administration expenses for the purposes of this section. All questions regarding the definition of administrative expenses shall be resolved by the Director.

(c) BUDGET SUBMISSION.—Each budget of the United States Government submitted under section 1105 of title 31, United States Code, for fiscal year 2011 and each fiscal year thereafter shall include the amount requested for each agency for administrative expenses.**]**

[SEC. 505. None of the funds made available in this Act may be transferred to any department, agency, or instrumentality of the United States Government, except pursuant to a transfer made by, or transfer authority provided in this Act or any other appropriation Act.**]**

SEC. **[**506**]***503*. **[**Specific projects contained in**]** *To the extent that* the report of the Committee on Appropriations of the House of Representatives accompanying this Act **[**(H. Rept. 111-203) **]** *includes specific projects* that are considered congressional earmarks for purposes of clause 9 of rule XXI of the Rules of the House of Representatives, *such projects,* when intended to be awarded to a for-profit entity, shall be awarded under a full and open competition. *(Energy and Water Development and Related Agencies Appropriations Act, 2010.)*

Southeastern Power Administration

Southwestern Power Administration

Western Area Power Administration

Bonneville Power Administration