

Department of Energy

FY 2014 Congressional Budget Request



Power Marketing Administrations

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

Department of Energy

FY 2014 Congressional

Budget Request



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Southeastern Power Administration
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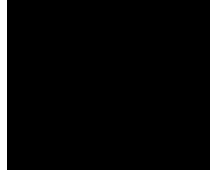
Southeastern Power Administration



Southwestern Power Administration



Western Area Power Administration



Bonneville Power Administration





Southeastern Power Administration



Southwestern Power Administration



Western Area Power Administration



Bonneville Power Administration

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>.

DEPARTMENT OF ENERGY
Appropriation Account Summary
(dollars in thousands – OMB Scoring)

(discretionary dollars in thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request	FY 2014 vs. FY 2012	
				\$	%
Energy and Water Development and Related Agencies					
Energy Programs					
Energy Efficiency and Renewable Energy	1,780,548	1,820,713	2,775,700	+995,152	+55.9%
Electricity Delivery and Energy Reliability	136,178	139,954	169,015	+32,837	+24.1%
Nuclear Energy	760,466	770,075	735,460	-25,006	-3.3%
Race to the Top for Energy Efficiency and Grid Modernization	0	0	200,000	+200,000	N/A
Fossil Energy Programs					
Fossil Energy Research and Development	337,074	494,969	420,575	+83,501	+24.8%
Naval Petroleum and Oil Shale Reserves	14,909	15,000	20,000	+5,091	+34.1%
Strategic Petroleum Reserve	192,704	193,883	189,400	-3,304	-1.7%
Northeast Home Heating Oil Reserve	10,119	10,181	8,000	-2,119	-20.9%
Subtotal, Fossil Energy Programs	554,806	714,033	637,975	+83,169	+15.0%
Uranium Enrichment D&D Fund	472,180	475,070	554,823	+82,643	+17.5%
Energy Information Administration	105,000	105,643	117,000	+12,000	+11.4%
Non-Defense Environmental Cleanup	235,381	236,746	212,956	-22,425	-9.5%
Science	4,934,980	4,903,461	5,152,752	+217,772	+4.4%
Advanced Research Projects Agency - Energy	275,000	276,683	379,000	+104,000	+37.8%
Departmental Administration	126,000	126,772	118,392	-7,608	-6.0%
Inspector General	42,000	42,257	42,120	+120	+0.3%
Advanced Technology Vehicles Manufacturing Loan	6,000	6,037	6,000	0	N/A
Total, Energy Programs	9,428,539	9,617,444	11,101,193	+1,672,654	+17.7%
Atomic Energy Defense Activities					
National Nuclear Security Administration:					
Weapons Activities*	7,214,834	7,557,342	7,868,409	+311,067	+4.1%
Defense Nuclear Nonproliferation	2,300,950	2,409,930	2,140,142	-160,808	-7.0%
Naval Reactors	1,080,000	1,086,610	1,246,134	+166,134	+15.4%
Office of the Administrator	410,000	412,509	397,784	-12,216	-3.0%
Total, National Nuclear Security Administration	11,005,784	11,466,391	11,652,469	+304,177	+2.8%
Environmental and Other Defense Activities					
Defense Environmental Cleanup	5,002,847	5,033,568	5,316,909	+314,062	+6.3%
Other Defense Activities	823,364	828,402	749,080	-74,284	-9.0%
Total, Environmental & Other Defense Activities	5,826,211	5,861,970	6,065,989	+239,778	+4.1%
Total, Atomic Energy Defense Activities	16,831,995	17,328,361	17,718,458	+543,955	+3.2%
Power Marketing Administration					
Southeastern Power Administration	0	0	0	0	N/A
Southwestern Power Administration	11,892	11,965	11,892	0	N/A
Western Area Power Administration	95,978	96,556	95,930	-48	-0.1%
Falcon & Amistad Operating & Maintenance Fund	220	221	420	+200	+90.9%
Colorado River Basins	-23,000	-23,141	-23,000	0	N/A
Transmission Infrastructure Program	0	0	0	0	N/A
Total, Power Marketing Administrations	85,090	85,601	85,242	+152	+0.2%
Subtotal, Energy and Water Development and Related Agencies	26,345,624	27,031,406	28,904,893	+2,216,761	+8.4%
Uranium Enrichment D&D (UED&D) Fund Discretionary	0	0	-463,000	-463,000	N/A
Excess Fees and Recoveries, FERC	-25,534	-27,479	-26,236	-702	-2.7%
Total, Discretionary Funding by Appropriation	26,320,090	27,003,927	28,415,657	+1,753,059	+6.7%

Note: For Weapons Activities, the FY 2014 Request is compared against the FY 2013 Annualized Continuing Resolution level.

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, and including official reception and representation expenses in an amount not to exceed \$1,500, \$7,750,000, 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 \$7,750,000 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 2014 appropriation estimated at not more than \$0: Provided further, That, notwithstanding 31 U.S.C. 3302, up to \$93,284,000 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 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).

Explanation of Change

No changes.

**Southeastern Power Administration
Overview
Appropriation Summary by Program**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Southeastern Power Administration			
Purchase Power and Wheeling (PPW)	114,870	115,573	93,284
Program Direction (PD)	8,428	8,480	7,750
Subtotal, Southeastern Power Administration	123,298	124,053	101,034
Offsetting Collections, PPW	-100,162	-100,775	-78,081
Alternative financing, PPW	-14,708	-14,798	-15,203
Offsetting Collections, Annual Expenses	-8,428	-8,480	-7,750
Total, Southeastern Power Administration	0	0	0

Office Overview and Accomplishments

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 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 improvement. Southeastern contributes to the Administration's efforts to secure America's clean energy future by generating clean hydroelectric power without carbon emissions. Southeastern maintains and upgrades its energy infrastructure to ensure reliable and efficient delivery of Federal power, which is an integral part of the Nation's electrical grid. Southeastern promotes energy efficiency, renewable energy, and sound management of the dispatch and distribution of Federal hydroelectric power resources in the southeastern United States in a safe, affordable, and environmentally friendly manner, while also meeting national utility performance standards and balancing the diverse interests of other water resource users. This budget submission enables Southeastern to promote strategies that enhance energy efficiency and renewable energy technologies, as effective management of hydroelectric resources, combined with promotion of energy efficiency and renewable technologies, contributes to long-term solutions to the economic and environmental challenges associated with electricity demand.

Southeastern contracts to provide power from 22 Federal reservoir projects, operated by the U.S. Army Corps of Engineers (Corps) to over 489 customers comprised of public power utilities and electrical co-ops, at cost based rates.

Within the Southeastern appropriation, there is one program, Operation and Maintenance, which includes two subprograms: Program Direction (PD) and Purchase Power and Wheeling (PPW). Program Direction supports day-to-day agency operation, and PPW supports acquisition of contractually-required transmission services and power purchases. Consistent with the authority provided in the FY 2010 Energy and Water Appropriations, the FY 2014 Budget provides funding for annual expenses (Program Direction) through discretionary offsetting collections derived from power receipts collected to recover those expenses.

Alignment to Strategic Plan

The Department's Strategic Plan outlines one primary objective to which the Power Marketing Administrations (PMAs) align their activities: 1) Deploy the Technologies We Have. The Strategic Plan identified targeted outcomes to achieving these objectives, and Southeastern is responsible for supporting Strategic Plan outcomes through its budget request.

Explanation of Changes

The Department requests \$101.0 million in FY 2014 for SEPA. The FY 2014 request decreases PPW (-\$21.6 M) and decreases PD (-\$0.7M).

Service Area Map



Performance Measures

Program	Southeastern Power Administration		
Performance Goal (Measure)	SEPA System Reliability Performance - NERC - Meet NERC Control Performance Standards (CPS) of CPS1>100 and CPS2>90. CPS1: minute by minute measures a generating system's ability to match supply to changing demand requirements and support desired system frequency (about 60 cycles per second); CPS2: measures systems ability to limit the magnitude of generation and demand imbalances		
Fiscal Year	2012	2013	2014
Target	> 100 CPS1 rating with CSP2>90	> 100 CPS1 rating with CSP2>90	> 100 CPS1 rating with CSP2>90
Result	Met – CPS1=243.1, CPS2=99.9		
Endpoint Target	Ensure the integrity of the nation’s integrated grid by operating in compliance with National Energy Reliability Standards.		

Program	Southeastern Power Administration		
Performance Goal (Measure)	SEPA Repayment of Federal Power Investment Perform - Repay annually to meet required payments as they come due and assure that all aged investments will be replaced on a timely basis now and in the future.		
Fiscal Year	2012	2013	2014
Target	≥ 100 percent	≥ 100 percent	≥ 100 percent
Result	Met - repaid \$22.7 million		
Endpoint Target	Meet legislated cost recovery requirements for timely repayment of Federal investment in maintaining financial integrity of projects/program.		

**Purchase Power and Wheeling
Funding Profile**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Purchase Power			
Replacement Power	37,700	39,065	15,349
Russell Project pumping power	17,910	17,294	17,900
Carters Project pumping power	17,460	17,460	17,500
Jim Woodruff Project support	3,300	3,300	3,300
Wheeling			
Wheeling service charges	33,736	33,690	34,471
Ancillary Services	4,764	4,764	4,764
Total, Purchase Power and Wheeling	114,870	115,573	93,284
Alternative Financing			
Net Billing	-14,708	-14,798	-15,203
Subtotal, Purchase Power and Wheeling	100,162	100,775	78,081
Offsetting Collections Realized	-100,162	-100,775	-78,081
Total, Purchase Power and Wheeling Budget Authority	0	0	0

Public Law Authorizations:

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

Overview

The mission of Purchase Power and Wheeling (PPW) is to provide funding for acquisition of transmission services, ancillary services for the system, pumping energy for the Richard B. Russell and Carters Pumped Storage units, and support of the Jim Woodruff Project. Southeastern must purchase power on the open market when its Federal generating assets cannot provide enough power to fulfill its contracts with its customers.

Additionally, because Southeastern does not own or operate any transmission infrastructure itself, transmission expenses are based on contracts with area transmission providers 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 implemented a plan to repay any PPW expenditures made through the Continuing Fund within one year.

The FY 2014 request uses customer receipts and net billing to pay for PPW expenses 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.

Subprogram Accomplishments and Milestones

The PPW subprogram supports Southeastern's mission to market and deliver reliable, cost-based hydroelectric power and related services. 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.

Hydroelectric power contributes to the reduction of greenhouse gas emissions and fossil fuel usage while reducing our country's dependence on foreign energy supplies. Annually, Southeastern produces an average of 8 billion kilowatt-hours of clean renewable hydroelectric energy. This energy production reduces emissions of carbon dioxide by 8 million tons per year, sulfur dioxide by 13,920 tons per year, and nitrogen oxides by 23,200 tons per year.

Strategic Management

Southeastern will implement the following strategies to meet its goals:

- 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.
- Provide economic benefits to the region by marketing and delivering all available hydropower, 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.

These strategies will result in a well-maintained Federal power system that is in compliance with the Federal Energy Regulatory Commission operating regulations and an expert workforce to operate the system in the most effective and cost-efficient manner possible. In carrying out its mission to market and deliver hydroelectric power, Southeastern coordinates operational activities with North American Electrical Reliability Corporation (NERC), other regional electric reliability councils, the Corps, customers and other stakeholders to provide the most efficient use of Federal assets.

Explanation of Funding Changes

(Dollars in Thousands)

FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
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Purchase Power

The decrease reflects lower pumping energy costs due to improved water condition factors used in calculating PPW estimates and due to fuel and fuel transportation expenses incurred by utilities that provide pumping energy.

76,370 54,049 -22,321

Wheeling

There is a slight increase due to increase in transmission rates.

38,500 39,235 +735

Total, Purchase Power and Wheeling

114,870 93,284 -21,586

Purchase Power and Wheeling Overview

The mission of Purchase Power and Wheeling (PPW) is to provide funding for acquisition of pumping energy, transmission services, and ancillary services for the system for the Richard B. Russell and Carters Pumped Storage units and firming energy for the Jim Woodruff Project. 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 because Southeastern does not own or operate any transmission infrastructure itself.

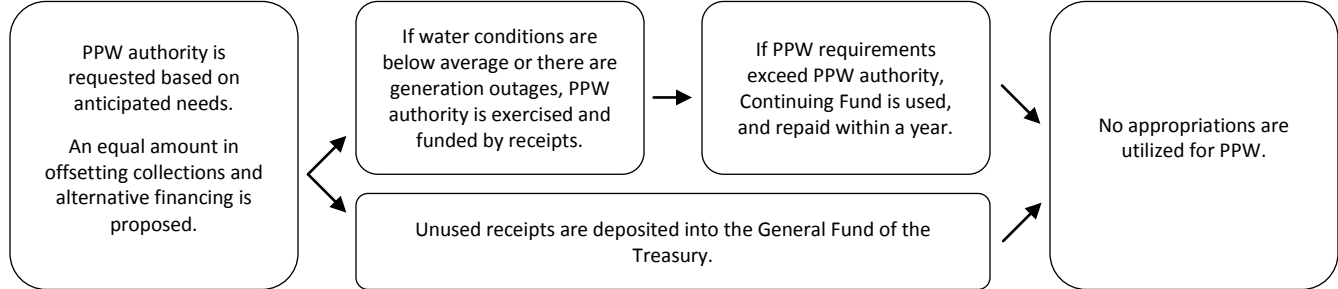
Southeastern must purchase power on the open market when its Federal generating assets cannot provide enough power to fulfill its contracts with its customers. Southeastern has access to a continuing fund for emergency power purchases in excess of PPW authority. Southeastern has a plan implemented to repay PPW expenditures made through the Continuing Fund within one year.

The FY 2014 request uses customer receipts and net billing, which is the offset of PPW expenses owed to a customer against power sales revenue owed to SEPA by that same customer, to pay for purchase power expenses. Southeastern’s Federal appropriation allows customers to fund purchase power expenses in FY 2014 and subsequent years at no cost to the Federal Treasury. Some customers, acting independently or in partnerships, acquire replacement power directly from suppliers. Southeastern will continue to assist its customers by arranging funding for these activities through alternative financing instruments which are any other funding sources other than appropriations, as needed.

Benefits

The PPW subprograms support Southeastern’s mission to market and deliver reliable, cost-based hydroelectric power. This enables Southeastern to 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.

Sequence



Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	No appropriations are requested. This is authority to use offsetting collections and alternative financing only.	0
FY 2013		0
FY 2014		0

**Program Direction
Funding Profile**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Southeastern Power Administration			
Salaries & Benefits	5,630	5,637	5,400
Travel	450	457	400
Support Services	100	102	100
Other Related Expenses	2,248	2,284	1,850
Total, Southeastern Power Administration	8,428	8,480	7,750
Full Time Equivalents	44	46	44

Overview

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

Salaries and Benefits

Funding supports salaries and benefits for 44 FTEs who market Federal hydropower, promote energy efficiency and renewable energy, administrative support, and workloads in cyber-security and operational reliability. These estimates are 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 and overtime.

Travel

Funding supports transportation and per diem expenses incurred for preference customer meetings, relocation expenses for new FTEs, contract negotiations, rate forums, Congressional hearings, site visits, promotion of energy efficiency and renewable energy via workshops, and operations meetings with industry organizations.

Support Services

Funding supports preference customer's efforts to address energy efficiency issues, and promote development of renewable resources in support of the Energy Policy Act of 2005. Also, develops specifications for training programs, prepare program plans, conduct training, and review and evaluate contractors.

Other Related Expenses

Funding provides administrative support for the office, rent, communications, maintenance, contract services, supplies, materials, and equipment and support for cyber and physical security, training expenses for power operator certification, support for installation of electronic hardware and software for the operations center and provides maintenance to integrate real-time data from the control area and provides the data to other transmission operators and NERC.

Explanation of Funding Changes

(Dollars in Thousands)			
FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current	
Salaries and Benefits The decrease reflects payroll cost reduction due to vacancies.	5,630	5,400	-230
Travel The decrease reflects greater use of web-conferencing and internet training.	450	400	-50
Support Services No change.	100	100	-0
Other Related Expenses The decrease reflects anticipated use of prior year balances.	2,248	1,850	-398
Total Funding Change, Program Direction	8,428	7,750	-678

Support Services by Category

(Dollars in Thousands)			
FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current	
Management and Professional Support Services Co-sponsored energy efficiency services and renewable energy acquisition support for municipal and cooperative utilities.	100	100	0
Total, Management and Professional Support Services	100	100	0

Other Related Expenses by Category

(Dollars in Thousands)			
FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current	
Other Related Expenses			
Training	131	100	-31
Communications, Utilities, Misc.	372	310	-62
Equipment	217	200	-17
Maintenance Agreements	142	120	-22
Rent to GSA	405	400	-5
Rent to Others	10	10	0
Tuition	16	15	-1
Contract Services	523	320	-203
Audit of Financial Statements	267	230	-37
Supplies and Materials	123	100	-23
Working Capital Fund	37	40	3
Printing and Reproduction	5	5	0
Total, Other Related Expenses	2,248	1,850	-398

Additional Tables

Revenue and Receipts

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Gross Revenues	262,771	345,278	378,560
Net Billing (Credited as an Offsetting Receipt)	-15,408	-14,798	-15,203
Total Cash Receipts	247,363	330,480	363,357
Use of Offsetting Collections to fund PPW	-53,084	-100,775	-78,081
Use of Offsetting Collections to fund Annual Expenses	-8,428	-8,480	-7,750
Total Receipts, net use of Offsetting Collections	185,851	221,225	277,526
Cumberland Rehabilitation	-25,918	-40,000	-40,000
GA-AL-SC Rehabilitation	-45,239	-20,000	-20,000
Kerr-Philpott Rehabilitation	0	-5,000	-5,000
Jim Woodruff	0	-1,000	-1,000
Accounts Receivable Adj.	-2,260	0	0
Total Proprietary Receipts	112,434	155,225	211,526
Percent of Sales to Preference Customers	99%	99%	99%
Energy Sales and Power Marketed (MWH)	5,409,057	7,886,000	7,886,000

Alternative Financing

(Dollars in Thousands)

2012

	Transmission	Purchase Power	Offsetting Collections	Net Billing	Appropriated Funds
Jim Woodruff System	265	3,300	-3165	-400	0
Kerr-Philpott System	4,220	0	-4,220	0	0
GA-AL-SC System	24,242	73,819	-80,588	-4,411	0
Cumberland System	9,773	0	-185	-9,588	0
	38,500	76,370	-100,162	-14,708	0

2013

	Transmission	Purchase Power	Offsetting Collections	Net Billing	Appropriated Funds
Jim Woodruff System	265	3,300	-2765	-800	0
Kerr-Philpott System	4,061	0	-4,061	0	0
GA-AL-SC System	24,259	73,819	-93,667	-4,411	0
Cumberland System	9,869	0	-282	-9,587	0
	38,454	77,119	-100,775	-14,798	0

2014

	Transmission	Purchase Power	Offsetting Collections	Net Billing	Appropriated Funds
Jim Woodruff System	229	3,300	-2,829	-700	0
Kerr-Philpott System	4,230	0	-4,230	0	0
GA-AL-SC System	24,872	50,749	-70,705	-4,916	0
Cumberland System	9,904	0	-317	-9,587	0
	39,235	54,049	-78,081	-15,203	0

Power Marketed, Wheeled, or Exchanged by Project

Project	State	Plants	Installed Capacity (KW)	FY 2012 Estimated Power (GWH)	FY 2013 Estimated Power (GWH)	FY 2014 Estimated Power (GWH)
<u>Kerr-Philpott System</u>				463 *	463 *	463 *
John H. Kerr	VA-NC	1	204,000			
Philpott	VA	1	14,000			
<u>Georgia-Alabama-South Carolina System</u>				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			
<u>Jim Woodruff Project</u>	FL-GA	1	30,000	237	237	237
<u>Cumberland System</u>				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

System Statistics

	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate
<u>Generating Capacity:</u>			
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
<u>Generating Stations</u>			
Generating Projects (Number)	22	22	22
<u>Available Energy</u>			
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.

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 Administration, \$45,456,000, 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 \$33,564,000 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 2014 appropriation estimated at not more than \$11,892,000: Provided further, That, notwithstanding 31 U.S.C. 3302, up to \$42,000,000 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 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).

Explanation of Change

No change.

**Southwestern Power Administration
Overview
Appropriation Summary by Program**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Southwestern Power Administration			
Program Direction (PD)	31,889	32,084	29,939
Operations and Maintenance (O&M)	14,346	14,434	13,598
Construction (CN)	10,772	10,838	6,227
Purchase Power and Wheeling (PPW)	50,000	50,306	52,000
Subtotal, Southwestern Power Administration	107,007	107,662	101,764
Offsetting Collections, PD (annual expenses)	-25,687	-25,844	-28,267
Offsetting Collections, O&M (annual expenses)	-7,431	-7,477	-5,297
Offsetting Collections, PPW	-40,000	-40,245	-42,000
Alternative Financing, PD	-4,740	-4,769	0
Alternative Financing, O&M	-2,153	-2,166	-2,308
Alternative Financing, CN	-5,104	-5,135	-2,000
Alternative Financing, PPW	-10,000	-10,061	-10,000
Total, Southwestern Power Administration	11,892	11,965	11,892

Public Law Authorizations

P.L. 78-534, Section 5, Flood Control Act of 1944
P.L. 95-91, Section 302, DOE Organization Act of 1977
P.L. 100-71, Supplemental Appropriations Act, 1987
P.L. 101-101, Title III, Continuing Fund (amended 1989)

P.L. 102-486, Section 721, Energy Policy Act of 1992
P.L. 108-137, Appropriations Act, FY 2004
P.L. 111-85, Appropriations Act, FY 2010

Overview

Southwestern Power Administration (Southwestern) meets its public responsibilities consistent with the Flood Control Act of 1944: to market and reliably deliver Federal hydroelectric power, recover 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. Southwestern participates with other water resource users in an effort to balance their diverse interests with power needs, within the broad parameters set by the U.S. Army Corps of Engineers (Corps).

Southwestern markets and delivers power at wholesale rates to 78 municipal utilities, 22 rural electric cooperatives, and 3 government entities in the six states of Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas. In turn, these customers distribute that power to almost nine million end users in the six-state area. In order to integrate the operation of the Federal hydroelectric generating plants and to transmit power from 24 multipurpose Corps dams to customers, Southwestern oper-

ates and maintains 1,380 miles of high-voltage transmission lines, 25 substations/switchyards, and 51 microwave and very high frequency (VHF) 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

Southwestern's marketing efforts and delivery capability provide for recovery of all annual operational costs, including the generating agencies' hydropower related costs, and for repayment of taxpayer investment in the Federal hydropower program.

Hydroelectric power contributes to the reduction of greenhouse gas emissions and fossil fuel usage while reducing our country's dependence on foreign energy supplies. Annually, Southwestern produces an average of 5,570 gigawatt-hours of clean renewable hydroelectric energy. This energy production reduces emissions of carbon dioxide by 4.7 million tons per year, sulfur dioxide by 13,900 tons per year, and nitrogen oxides by 6,200 tons per year. Without the clean renewable hydropower from

Southwestern, 8.9 million barrels of fuel oil, 2.7 million tons of coal, or 54.5 billion cubic feet of natural gas would be depleted each year.

Southwestern's appropriation consists of four subprograms: Operations and Maintenance; Construction; Purchase Power and Wheeling; and Program Direction. Consistent with the authority provided in the 2010 Energy and Water Appropriations, the FY 2014 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.

Accomplishments

In FY 2012, Southwestern achieved three significant accomplishments:

- 1) Transmission Reliability and Availability:
 - a) Completed 100 percent of the Southwestern North American Electric Reliability Corporation (NERC) Reliability Standard required mitigation plans.
 - b) Incurred no involuntary curtailments of firm load originating on Southwestern's system.
 - c) Participated in the development of all Southwest Power Pool/Regional Transmission Organization (SPP RTO) identified reliability upgrades to the Southwestern Federal transmission system and implemented identified upgrades subject to requisite outage availability, hydro system conditions, Federal procurement regulations, availability of necessary materials, and budgetary authority.
 - d) Ensured that Southwestern's transmission lines were not impacted by storm-related or sabotage-forced outages and were available for service at least 98% of the time.
- 2) Implemented a 5.4% rate increase on the Integrated Power System to ensure full cost recovery.
- 3) Based on actual FY 2012 generation, Southwestern's hydropower saved 5.8 million barrels of oil and prevented emissions of 3.0 million tons of greenhouse gases.^a

^a Emission savings computed using 2000-2009 data from U.S. Energy Information Administration (EIA), assuming a 50/50 Coal/Natural Gas Mix as representative of replacement energy for hydropower in Southwestern's area. Fuel savings based on thermal conversion factors from EIA's Annual Energy Review-2010.

Explanation of Changes

Southwestern requests a net appropriation of \$11.9 million for FY 2014. This funding request is the same as the FY 2012 budget; however, the Communication funding in the Construction Subprogram has been shifted to Transmission upgrades. No funding is being requested for the Communications activity; Southwestern's focus is on completing the Spectrum Relocation Project.

Alignment to Strategic Plan

Southwestern supports the Department's Strategic Goal to Transform Our Energy Systems and has one primary objective: Deploy the Technologies We Have. Southwestern offers experience in power generation and transmission activities, and can demonstrate and deploy new technologies and capabilities into the electric grid. Southwestern also provides opportunities for transmitting and integrating renewable generated electricity into its electric systems.

Strategic Management

In meeting the challenges of operating and maintaining a high voltage transmission system, Southwestern will use 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 and provide power at the lowest possible cost.
- Maintain and modernize systems and infrastructure to increase the reliability, efficiency, and use of Federal assets. This will be accomplished through the use of appropriations, Federal power receipts; alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances).^b
- Conduct annual power repayment studies to ensure power rates are sufficient to repay all annual operating costs and the Federal investment with interest.

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

- Meet Southwestern's limited 1200-hour peaking power contractual obligations with necessary purchase 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 periods of below-average hydropower generation.
- Operate the transmission system efficiently to support the Nation's integrated power grid.
- Meet requirements for Southwestern's compliance with the latest NERC standards.

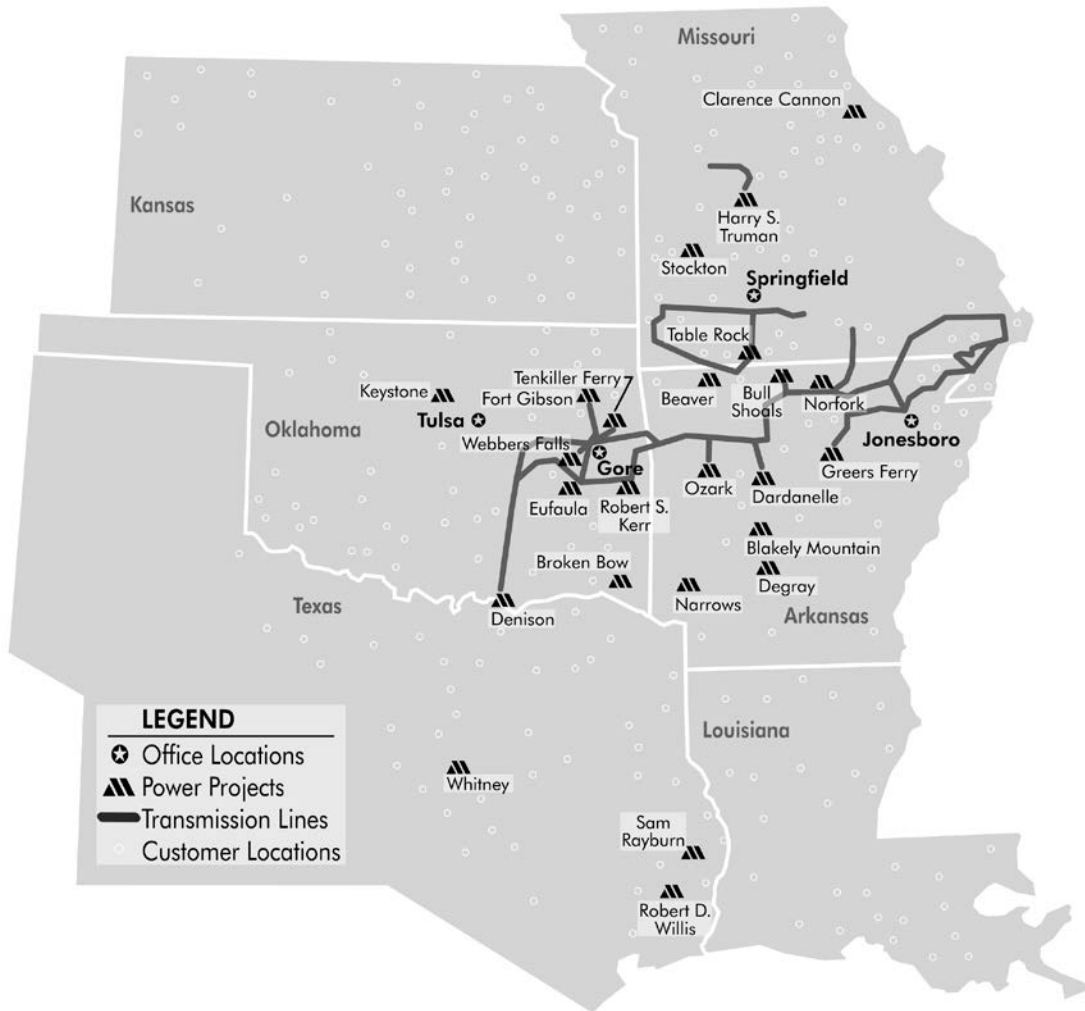
External factors that present the adverse impacts to the overall achievement of the programs' strategic goals include weather, natural disasters, NERC operating standards, industry deregulation, changing electric industry organizational structure, interconnections, open access, the lack of adequate funding resources, and other unforeseen requirements. More specifically:

- The bulk of Southwestern's transmission infrastructure is approximately 60 years old and is in constant need of repair and replacement.
- Industry efforts to improve the reliability of the Nation's power grid are placing more requirements on our workforce to implement mandatory reliability standards.
- Southwestern is competing with the rest of the electric utility industry to attract and retain the quality workforce needed to provide a reliable power supply and transmission services as our highly skilled workforce retires.

Program	Southwestern Power Administration		
Performance Goal (Measure)	Southwestern - System Reliability Performance – North American Electric Corporation (NERC) Rating – 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.		
Fiscal Year	2012	2013	2014
Target	CPS1>100, CPS2>90	CPS1>100, CPS2>90	CPS1>100, CPS2>90
Result	Met – CPS1=173.53, CPS2=99.80		
Commentary on 2012 Results	The result for CPS1 is lower than in previous years due to the fact that SPP RTO and NERC changed the way CPS1 is calculated, in addition Southwestern deliberately lowered its regulation responsiveness in order to conserve water during the drought. However, Southwestern’s result was still above the requirement of 100.		
Endpoint Target	Southwestern ensures the integrity of the Nation’s integrated grid by operating in compliance with National Energy Reliability Standards.		

Program	Southwestern Power Administration		
Performance Goal (Measure)	Southwestern - Repayment of the Federal Power Investment - Ensure unpaid investment (UI) is equal to or less than the allowable unpaid investment (AUI) in accordance with DOE Order RA 6120.2.		
Fiscal Year	2012	2013	2014
Target	<=\$1,336 million dollars AUI	<=\$1,373 million dollars AUI	<=\$1,467 million dollars AUI
Result	Met – \$411 million* UI		
Commentary on 2012 Results	*Pending audit completion		
Endpoint Target	Continue to meet repayment of Federal investment, thereby achieving and maintaining financial integrity.		

Service Area Map



**Operations and Maintenance
Funding Profile by Subprogram and Activities**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Operations and Maintenance (O&M)			
Power Marketing	602	602	200
Operations	4,094	4,138	4,058
Maintenance	7,930	7,974	7,153
Capitalized Moveable Equipment	1,720	1,720	2,187
Subtotal, Operations and Maintenance	14,346	14,434	13,598
Offsetting Collections (annual expenses)	-7,431	-7,477	-5,297
Alternative Financing	-2,153	-2,166	-2,308
Total, Operations and Maintenance	4,762	4,791	5,993

Overview

The activities of the Operations and Maintenance (O&M) subprogram are critical components in maintaining the reliability of the Federal power system, which is 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. The Energy Policy Act (EPACT), the National Energy Policy (NEP), and the Department of Energy (DOE) reinforce the importance of renewable hydroelectric energy by emphasizing its significant contribution to the Nation's past, current, and future energy supply and identifying Southwestern's important role meeting electricity demand by supplying cost-based hydroelectric power to its customers. These entities 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 the North American Electric Reliability Corporation (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 its 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 for achieving energy security for present and future generations.

Southwestern's planned O&M 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 infrastructure to ensure the reliability of the Federal power system.

Benefits

- Operates a reliable Federal power system in an efficient, cost-effective, and environmentally sound manner while meeting national utility performance standards and balancing the diverse interests of other water resource users.
- Delivers reliable power to customers.
- Provides regional power restoration assistance to other non-hydropower generation sources during power grid emergencies.
- Providing economic benefits to the region.

(Dollars in Thousands)

Explanation of Funding AND/OR Program Changes

Power Marketing

• Power Marketing: The decrease reflects completion of the Line Sag Survey.
Operations

• Communications: The decrease reflects a slight reduction in hardware up-grades.

• Environmental, Safety, and Health: The increase reflects a slight escalation in funding for grounding and drainage.

• Other Transmission: The decrease reflects a reduction in physical security equipment.

Maintenance

• Substation Maintenance: The decrease reflects a reduction in relay replacements and instrument transformers.

• Transmission Line Maintenance: The increase reflects a slight escalation for parts and materials, equipment, and fuel.

Capitalized Moveable Equipment

• Capitalized Moveable Equipment: The increase reflects the replacement of one additional offroad heavy equipment utility truck to be used on the transmission line.

Total, Operations and Maintenance

FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
602	200	-402
2,953	2,947	-6
835	896	+61
306	215	-91
6,747	5,904	-843
1,183	1,249	+66
1,720	2,187	+467
14,346	13,598	-748

**Power Marketing
Overview**

The Power Marketing activity funds technical and economic studies to support Southwestern’s transmission planning, water resources, and communications 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.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Conduct studies for transmission planning, line sag survey, water resources, communications, and maintenance activities. Funding also required for Southwestern’s participation in the SPP RTO.	602
FY 2013	Studies and funding for participation in the SPP RTO will continue.	602
FY 2014	Studies and funding for participation in the SPP RTO will continue. Reduction reflects the completion of the line sag survey.	200

Operations Overview

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

This subactivity funds telemetering improvements, technical support to protect cyber infrastructure, Supervisory Control and Data Acquisition/Energy Management System maintenance agreements, an e-tagging system that electronically schedules power for customers, load forecasting, digital test equipment, the 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 aging 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.

Environmental, Safety, and Health

This subactivity funds environmental activities including waste disposal/clean-up of oil and polychlorinated biphenyl contaminants from old circuit breakers and transformers, grounding and drainage, cultural resource reviews, 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.

Other Transmission

This subactivity funds physical security, field utility costs, and day-to-day power expenses of the dispatch center.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	The Operations activity funds communications activities, environmental, safety and health, security and day to day expenses related to the dispatch of power.	4,094
FY 2013	The Other Transmission subactivity has increased efforts in physical security requirements.	4,138
FY 2014	The Operations activity funds communications activities, environmental, safety and health, security and day to day expenses related to the dispatch of power. Decrease reflects completion of security system upgrades.	4,058

Maintenance Overview

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 based on analysis derived from age of equipment, risk of failure, life cycle of equipment, and field crew evaluation. Internal and external factors include obsolescence of technology and unavailability 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 Strategic Goal of deploying the technologies we have to transform our energy systems. The maintenance activity includes two subactivities:

Substation Maintenance

This subactivity funds one auto-transformer, power circuit breakers, disconnect switches, instrument transformers, protective relays and related equipment, computer aided drafting and design, revenue meters, vehicle maintenance, fuel, and other equipment to reliably perform general maintenance projects. Southwestern maintains the Federal power system in compliance with the regional electric reliability council and 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.

Transmission Line Maintenance

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 replaced is derived from internal maintenance information system criteria. 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 plan in meeting the goals of the EPACK, NEP, NERC, and DOE’s Strategic Plan to maintain a reliable transmission system.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	This activity continues the replacement of aging poles, hardware, and substation equipment including an auto-transformer.	7,930
FY 2013	This activity continues the replacement of aging poles, hardware, and substation equipment including an auto-transformer.	7,974
FY 2014	This activity continues the replacement of aging poles, hardware, and substation equipment including an auto-transformer. The decrease reflects a reduction in relay replacements and instrument transformers.	7,153

**Capitalized Moveable Equipment
Overview**

This activity funds the replacement of vehicles, tractor-trailers, and heavy equipment used for the 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 lines exceeds the General Services Administration (GSA) and DOE guidelines. These vehicles and equipment exceed their useful lives and require high levels of maintenance. The vehicle cost estimates are derived from GSA pricing schedules.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	The number and types of vehicles and equipment being replaced change on a yearly basis. In order to reduce costs, Southwestern has adopted a policy that far exceeds the GSA and DOE replacement guidelines. All of Southwestern's vehicles are special purpose. The increase reflects the replacement of one additional offroad heavy equipment utility truck.	1,720
FY 2013		1,720
FY 2014		2,187

Construction
Funding Profile by Subprogram and Activities

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Construction			
Transmission System	10,772	10,838	6,227
Subtotal, Operations and Maintenance	10,772	10,838	6,227
Alternative Financing	-5,104	-5,135	-2,000
Total, Construction	5,668	5,703	4,227

Overview

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 the NERC and as a participant in the National electrical grid while avoiding transmission infrastructure deterioration. The Energy Policy Act, the National Energy Policy, 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 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’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 infrastructure necessary to maintain the reliability of the Federal power system.

Subprogram Accomplishments:

In FY 2012 Southwestern achieved the following significant accomplishments:

- 1) Completed a 22 mile rebuild of the 161 kV line from Idalia to Asherville. This transmission line was identified as a reliability concern due to thermal overloading of the line during contingency conditions. Rebuilding the line with a larger conductor has increased its capacity by 63 percent.
- 2) Completed survey of Southwestern’s transmission lines using air based Light Detection and Ranging (LiDAR) system. The survey is part of a project to more accurately identify the thermal operating capabilities of Southwestern's transmission lines. Analysis of the survey data will be used to comply with NERC Alert requirements.

Benefits

- Enables operation of the Federal electric power grid in a safe and reliable manner as required by NERC.
- Strengthens electric transmission system reliability and the Nation’s integrated transmission infrastructure.
- Increases capacity on transmission lines, where practical, which will accommodate increased loads in Southwestern’s service area.

(Dollars in Thousands)

Explanation of Funding AND/OR Program Changes

Communication Equipment

The decrease reflects not replacing any towers or radios in FY 2014 and placing emphasis on the spectrum replacement project, for which no appropriations are requested.

Transmission Upgrades

The increase reflects additional funding needed to replace between approximately 20 to 30 miles of transmission line.

Total, Construction

FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
6,049	0	-6,049
4,723	6,227	+1,504
10,772	6,227	-4,545

Transmission System Overview

This activity funds all construction projects that require expansion of, or additions to, existing facilities. Southwestern ensures system reliability by replacing aging equipment and removing constraints that limit power flows. The projects outlined below 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. System age, risk of equipment failure, life cycles, obsolescence of technology, unavailability of spare parts, budget constraints, cost, and demand for more capacity are also considered in these budgeting decisions. These variables are assessed and incorporated into Southwestern's ten-year construction plan. The transmission system activity contains three subactivities:

Communications Equipment

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 increase the reliability of communications with the generating plants and substations. The communication system provides for the transfer of voice and data traffic to allow monitoring and control of power system generation and transmission assets.

Spectrum Relocation

The Commercial Spectrum Enhancement Act of 2004 (CSEA, Title II of P.L. 108-494) created 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 \$37.8 million in spectrum relocation funds, as approved by the Office of Management and Budget, and as reported to the Congress. An additional \$5.0 million has been reserved for contingencies. 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. Spectrum relocation activities were funded from spectrum auction proceeds; thus, no funding is requested in this subactivity.

Transmission Upgrades

This subactivity funds transmission system upgrades. Much of the conductor and static wire on Southwestern's transmission lines is reaching or has exceeded its 45-year service life. With this assumed service life, approximately 20 to 30 miles of transmission line, including the conductor, static wire and structures, will need to be replaced each year. As we replace the conductor, we will use the opportunity to increase line capacity where practical to accommodate increased loads in the region.

Funding and Activity Schedule

Fiscal Year	Line Item	Funding (Dollars in Thousands)
FY 2012	Microwave Tower and Radio Replacements/Additions	6,049
FY 2013	Microwave Tower and Radio Replacements/Additions	6,049
FY 2014		0

Fiscal Year	Line Item	Funding (Dollars in Thousands)
FY 2012	Transmission Line Structures/Conductor/Static Wire Replacement	4,723
FY 2013	Transmission Line Structures/Conductor/Static Wire Replacement	4,789
FY 2014	Transmission Line Structures/Conductor/Static Wire Replacement	6,227

**Purchase Power and Wheeling
Funding Profile by Subprogram and Activities**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Purchase Power and Wheeling			
System Support	46,500	46,806	48,500
Other Contractual Services	3,500	3,500	3,500
Subtotal, Purchase Power and Wheeling	50,000	50,306	52,000
Offsetting Collections (PPW)	-40,000	-40,245	-42,000
Alternative Financing Needed	-10,000	-10,061	-10,000
Total, Purchase Power and Wheeling	0	0	0

Overview

In supporting the Secretary’s Strategic Goal to *Transform Our Energy Systems*, Southwestern markets and delivers Federal hydropower at the lowest cost-based rates possible, consistent with sound business practices to over 100 wholesale customers in a six-state area. In turn, Southwestern’s customers distribute that power to almost nine million end users in a six-state area. Southwestern’s marketing efforts and delivery capability provide for recovery of annual operating costs, including the generating agencies’ hydropower related costs, and repayment of taxpayer investment in the Federal hydropower program.

The Purchase Power and Wheeling (PPW) subprogram provides for the purchase of energy to meet peaking power contractual obligations and the delivery of Federal power. Southwestern’s power sales contracts provide for 1200-hours of peaking power per year, representing only a portion of its customers’ firm load requirements. The customers provide their own resources and/or purchases for the remainder of their firm loads. Southwestern must purchase power when the generating projects cannot produce our 1200-hour contract obligations. Above average purchases are required in times of severe drought or instances of multiple project outages that limit our power production. Purchases of power are generally made on the open spot market and with public entities. Delivery of purchase power to our system is made via the Southwest Power Pool Regional Transmission Organization or our own transmission system. All such power purchases are blended with the available Federal hydroelectric power to provide a more beneficial and reliable product

while ensuring repayment of the Federal investment plus interest.

Southwestern’s budget request for the Purchase Power and Wheeling subprogram reflects anticipated needs to ensure adequate funding to fulfill its 1,200-hour peaking power contractual obligations based on volatile market prices, limited availability of energy banks, and all but the most severe hydrological conditions. 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 hydropower generation falls significantly below normal due to severe drought conditions, Southwestern will utilize the Continuing Fund for emergency PPW expenses.

The activities of the PPW subprogram provide for the purchase of energy to fulfill limited peaking power contractual obligations to ensure the marketability of the Federal resource and repayment of the Federal investment. This subprogram also provides for wheeling services that deliver Federal power to optimize the operation of the hydroelectric facilities marketed by Southwestern. The Energy Policy Act, the National Energy Policy, and the North American Electric Reliability Corporation reinforce the importance of domestic, renewable hydroelectric energy. They emphasize the ongoing significant contribution of hydroelectric energy to the Nation’s past, present, and future energy supply and identify Southwestern’s important role in meeting electricity demand by supplying cost-based hydroelectric power to its customers. This subprogram enhances the reliability of the electrical transmission grid.

Subprogram Accomplishments

In FY 2012 Southwestern achieved several significant accomplishments, including:

- Continued firm clean renewable hydropower resource;
- Provided a reliable cost-based power and related services; and
- Ensured cost recovery and repayment of the Federal investment.

Explanation of Funding AND/OR Program Changes

System Support

The increase in system support reflects anticipated needs based on projected increase in market prices.

Other Contractual Services

No change.

Total, Purchase Power and Wheeling

(Dollars in Thousands)

FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
46,500	48,500	+2,000
3,500	3,500	0
50,000	52,000	+2,000

Purchase Power and Wheeling Overview

Southwestern's budget request for the Purchase 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. PPW includes two subactivities:

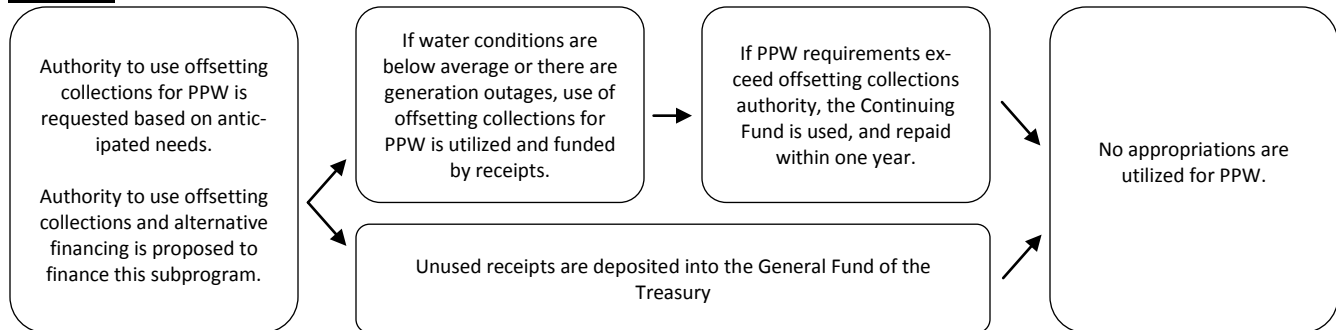
System Support

This activity funds purchase power requirements of the hydroelectric power system needed to fulfill all 1200-hour contractual peaking power obligations with customers. System support requirements depend on the conditions of the hydroelectric power system which is affected by weather, volatile market prices, and limited availability of energy banks. In prior years, inadequate funding for PPW and hydrological fluctuations 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. In FY 2008, Southwestern requested, and Congress approved, an increase in its authority to use Federal power receipts (offsetting collections). The use of this authority will be dependent upon the hydrological conditions realized during the fiscal year. Under average conditions, less than half of the authority requested will be used. Since the rates charged to its customers are based on full cost recovery, Southwestern has a built-in incentive to minimize expenditures for purchase power. This authority ensures 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.

Other Contractual Services

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 is derived from contractual wheeling 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 2014 funding request reflects the projected cost for wheeling services based on contractual pricing and delivery terms.

Sequence



Benefits

- Market and deliver power at the lowest cost-based rates possible, consistent with sound business practices.
- Repay the American taxpayers' investments in the Federal power system.
- Repay the costs of operation of the Federal hydropower system with revenues from power customers.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	No appropriations are requested. This is authority to use offsetting collections and alternative financing only.	0
FY 2013	No appropriations are requested. This is authority to use offsetting collections and alternative financing only.	0
FY 2014	No appropriations are requested. This is authority to use offsetting collections and alternative financing only.	0

**Program Direction
Funding Profile by Category**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Southwestern Power Administration			
Salaries and Benefits	22,233	22,297	22,686
Travel	1,050	1,299	1,251
Support Services	2,745	2,765	3,004
Other Related Expenses	5,861	5,723	2,998
Subtotal, Southwestern Power Administration	31,889	32,084	29,939
Offsetting Collections (annual expenses)	-25,687	-25,844	-28,267
Alternative Financing	-4,740	-4,769	0
Total, Southwestern Power Administration	1,462	1,471	1,672
Full Time Equivalents	174	194	194

Overview

The Program Direction subprogram ensures continued reliability of the Federal power system by utilizing Federal staffing resources and associated funds required to provide overall direction and execution of Southwestern’s O&M Program.

The Program Direction subprogram provides compensation and all related expenses for 194 Federal personnel who market, deliver, operate, maintain and administrate Southwestern’s high voltage interconnected power system and associated facilities. Southwestern will utilize available programs, and develop new programs to hire and train the next generation of engineers and power system dispatchers to address the shortage of these valuable resources as a result of nationwide retirements, and the ever expanding demands on the electric utility industry, such as compliance with the

standards of theNERC. 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.

Accomplishments

In FY 2012, Southwestern achieved the following accomplishments:

- 1) Received the Utility Safety Award for attaining a low accident frequency rating from the American Public Power Association.
- 2) Received recognition for outstanding performance in Veteran hiring from the Department of Energy.
- 3) Achieved 100 percent compliance in completing continuing education requirements for accounting and acquisition, and mandatory certifications for NERC.

Salaries and Benefits

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, projected 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.

The FY 2014 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. By the end of FY 2014, approximately 41 percent of Southwestern’s staff will be eligible for retirement. Southwestern will continue 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 Human Capital Management Workforce Plan.

Travel

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 lines, 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.

Support Services

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.

Other Related Expenses

This activity funds rental space, facility security, the financial audit, services of the Power Marketing Liaison Office, the 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 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.

(Dollars in Thousands)

FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
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Explanation of Funding Changes

Salaries and Benefits

The increase reflects cost of living adjustment, survey-based wage determinations, union-negotiated and Administratively Determined pay adjustments, planned promotions, and within grade increases.

22,233 22,686 +453

Travel

The increase reflects travel required for industry related issues.

1,050 1,251 +201

Support Services

The increase reflects inflationary increase per negotiated contract.

2,745 3,004 +259

Other Related Expenses

The decrease reflects planned completion of the Financial Management System upgrade.

5,861 2,998 -2,863

Total Funding Change, Program Direction

31,889 29,939 -1,950

Support Services by Category

Management Support Services
Reports and Analyses Management and General Administrative Support
Total, Management Support Services

(Dollars in Thousands)

FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
2,745	3,004	+259
2,745	3,004	+259

Other Related Expenses by Category

Other Related Expenses
Rent to Others
Communication, Utilities, Misc.
Printing and Reproduction
Other Services
Training
Power Marketing Liaison
Financial Audit
Supplies and Materials
Equipment
Working Capital Fund
Total, Other Related Expenses

(Dollars in Thousands)

FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
715	815	+100
225	215	-10
85	80	-5
3,425	641	-2,784
231	200	-31
140	75	-65
450	442	-8
220	200	-20
200	150	-50
170	180	+10
5,861	2,998	-2,863

Revenues and Receipts

	FY 2012 Actual	FY 2013 Estimate ^a	FY 2014 Estimate
Gross Revenues			
Sale and Transmission of Electric Energy	176,514	217,200	219,600
Total, Gross Revenues	<u>176,514</u>	<u>217,200</u>	<u>219,600</u>
Alternative Financing Credited as an Offsetting Receipt, Net Billing/Bill Crediting	-66,429	-59,600	-60,100
Offsetting Collections, Annual Expenses (Net Zero)	-34,926	-33,321	-33,564
Offsetting Collections Realized, Purchase Power and Wheeling	-40,000	-40,245	-42,000
Adjustments not otherwise Classified	-2,499	0	0
Continuing Fund Usage	<u>0</u>	<u>0</u>	<u>0</u>
Total Proprietary Receipts	<u>32,660</u>	<u>84,034</u>	<u>83,936</u>
Percent of Sales to Preference Customers	100.0%	100.0%	100.0%
Energy Sales from Power Marketed (billions of kilowatt hours)	5.4	5.4	5.4

^a Amounts reflect Annualized CR amounts for Annual Expenses (Net Zero) and Offsetting Collections Realized, Purchase Power and Wheeling.

System Statistics

	FY 2012 Actual	FY 2013 Estimate	FY 2014 Estimate
Generating Capacity (kilowatts)			
Installed Capacity	2,173,800	2,173,800	2,173,800
Peak Capacity	2,052,538	2,052,500	2,052,500
Generating Stations			
Generating Projects (Number)	24	24	24
Substations/Switchyards (Number)	25	25	25
Substations/Switchyards (kVA Capacity)	1,026,900	1,026,900	1,026,900
Available Energy (Megawatt-hours)			
Energy Generated	3,627,824	5,079,000	5,223,500
Energy Received	521,071	206,500	193,700
Total, Energy Available for Marketing	4,148,895	5,285,500	5,417,200
Transmission Lines (Circuit-Miles)			
161-KV	1,117	1,117	1,117
138-KV	164	164	164
69-KV	99	99	99
Total, Transmission Lines	1,380	1,380	1,380

Power Marketed, Wheeled, or Exchanged by Project

	State	Number of Plants	Installed Capacity (kW)	FY 2012 Actual En- ergy Deliv- ered (GWh)	FY 2013 Estimated Energy De- livered (GWh)	FY 2014 Estimated Energy De- livered (GWh)
Power Marketed						
Interconnected System	Missouri	4	463,200	1,467	1,946	1,996
	Arkansas	9	1,037,100	809	978	1,003
	Oklahoma	7	514,100	848	1,088	1,116
	Texas	2	100,000	363	412	423
	Louisiana	0	0	230	311	318
	Kansas	0	0	327	398	409
Subtotals		22	2,114,400	4,044	5,133	5,265
Isolated:						
Robert D. Willis Project						
Sam Rayburn Project						
50% to Texas		2	59,400	26	76	76
50% to Louisiana		0	0	26	76	76
Subtotals		2	59,400	52	152	152
Total, Power Marketed		24	2,173,800	4,096	5,285	5,417
Power Wheeled/Exchanged						
Wheeled (MW)				905	1,221	1,226
Exchanged (GWh)				1	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; \$299,919,000, to remain available until expended, of which \$292,019,000 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 \$203,989,000 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 2014 appropriation estimated at not more than \$95,930,000, of which \$88,030,000 is derived from the Reclamation Fund: Provided further, That notwithstanding 31 U.S.C. 3302, up to \$230,738,000 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, including the cost of voluntary participation in state greenhouse gas programs: 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).

Explanation of Change

The second to the last proviso, related to making purchase power and wheeling expenditures, is amended to expressly include voluntary participation in state greenhouse gas (GHG) programs in order to sufficiently address the potential that state GHG participation costs may be interpreted as a tax for which voluntary payments by Western would not be deemed permissible because appropriated funds are not available for the payment of state and local taxes absent a waiver of sovereign immunity.

The proviso related to Western's contribution to the Utah Mitigation and Conservation Program included in the FY 2013 proposed appropriation language is removed. Western's contribution to the Utah Mitigation and Conservation Program ended in FY 2013 as legislated in Title II, Sec 214 of Public Law 108-137.

**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, \$5,330,671, 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 \$4,910,671 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 2014 appropriation estimated at not more than \$420,000: Provided further, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred: Provided further, That, for fiscal year 2014 and thereafter, the Administrator of the Western Area Power Administration may accept funds contributed by United States power customers of the Falcon and Amistad Dams for deposit into the Falcon and Amistad Operating and Maintenance Fund, and such funds shall be available for the purpose for which contributed in like manner as if said sums had been specifically appropriated for such purpose: Provided further, That any such funds shall be available without further appropriation and without fiscal year limitation for use by the Commissioner of the United States Section of the International Boundary and Water Commission for the sole purpose of operating, maintaining, repairing, rehabilitating, replacing, or upgrading the hydroelectric facilities at these Dams in accordance with agreements reached between the Administrator, Commissioner, and the power customers.

Explanation of Change

The FY 2014 budget allows for U.S. customer(s) of the Falcon and Amistad Dams to contribute funds for use by the International Boundary and Water Commission (IBWC) in fulfilling their duties in accordance with agreements between Western, IBWC and the power customers. The change will allow work to be accomplished using customer advances, a funding mechanism used throughout Western under the Contributed Funds Act, 43 USC 395. As drafted, the legislation will provide permanent contributed funds authority

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Western Area Power Administration

Overview

Appropriation Summary by Program

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Western Area Power Administration			
Construction, Rehabilitation, Operation and Maintenance (CROM)			
Operation and Maintenance	72,863	73,309	82,843
Construction and Rehabilitation	110,459	111,125	122,437
Purchase Power and Wheeling	471,535	474,421	407,109
Program Direction	205,247	206,503	217,709
Utah Mitigation and Conservation	3,375	3,396	0
Subtotal, CROM-Gross Program	863,479	868,754	830,098
Alternative Financing	-266,207	-267,836	-293,349
Offsetting Collections from Colorado River Dam Fund	-4,821	-4,851	-6,092
Offsetting Collections, annual Operation and Maintenance and Program Direction	-189,932	-191,094	-203,989
Offsetting Collections, Purchase Power and Wheeling	-306,541	-308,417	-230,738
Total, CROM	95,978	96,556	95,930
Falcon and Amistad Operating and Maintenance Fund	4,169	4,194	6,196
Offsetting Collections, annual Operation and Maintenance	-3,949	-3,973	-4,911
Alternative Financing	0	0	-865
Total, Falcon and Amistad	220	221	420
Colorado River Basins Power Marketing Fund (CRBPMF)	220,397	221,746	180,844
Offsetting Collections	-243,397	-244,887	-203,844
Total, CRBPMF	-23,000	-23,141	-23,000
Transmission Infrastructure Program (TIP) Fund (TIP)	50,098	204,278	30,259
Offsetting Collections	-50,098	-204,278	-30,259
Total, TIP	0	0	0
Total, Western Area Power Administration	73,198	73,636	73,350

Public Law Authorizations

P.L. 57-161, "The Reclamation Act of 1902"
P.L. 78-534, "Flood Control Act of 1944"
P.L. 95-91, "Department of Energy Organization Act" (1977)
P.L. 102-486, "Energy Policy Act of 1992"
P.L. 66-389, "Sundry Civil Appropriations Act" (1922)
P.L. 76-260, "Reclamation Project Act of 1939"
P.L. 80-790, "Emergency Fund Act of 1948"
P.L. 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)
P.L. 70-642, "Boulder Canyon Project Act" (1928)
P.L. 75-756, "Boulder Canyon Project Adjustment Act" (1940)
P.L. 98-381, "Hoover Power Plant Act of 1984"
P.L. 75-529, "The Fort Peck Project Act of 1938"
P.L. 84-484, "The Colorado River Storage Project Act of 1956"
P.L. 90-537, "The Colorado River Basin Project Act of 1968"

P.L. 103-236, "Foreign Relations Authorization Act, Fiscal Years 1994 and 1995"

The Act of June 18, 1954 (68 Stat. 255)

P.L. No 111-5, "American Recovery and Reinvestment Act of 2009"

Program Overview

The Department of Energy leads a critical effort to transform the Nation's energy system and secure U.S. leadership in clean energy technologies. Western Area Power Administration (Western or WAPA), in conjunction with the U.S. Army Corps of Engineers, U.S. Bureau of Reclamation and the Department of State's International Boundary and Water Commission, strongly supports this effort in managing the multipurpose operation of the Federal Power Program and maintaining and enhancing its high-voltage, integrated transmission system to reliably deliver renewable energy.

Western's mission in the marketing and delivery of reliable, cost-based Federal hydroelectric power and related services spans a 1.3-million-square-mile area serving a diverse group of nearly 700 wholesale customers, including municipalities, cooperatives, public utility and irrigation districts, Federal and state agencies and Native American tribes. In turn, Western's customers provide service to millions of retail consumers.

Western's base program is funded through three appropriation accounts: 1) the Construction, Rehabilitation, Operation and Maintenance Account (CROM); 2) Falcon and Amistad Operating and Maintenance Fund; and 3) Colorado River Basins Power Marketing Fund (CRBPMF). Within these three accounts, there are eight subprograms; five in the CROM Account, one in the Falcon and Amistad Operating and Maintenance Fund and two in CRBPMF.

The FY 2014 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.

American Recovery and Reinvestment Act (Recovery Act) of 2009:

The Recovery Act expanded Western's role in furthering efforts to diversify America's energy supply and modernize energy infrastructure by providing permanent borrowing authority of up to \$3.25 billion from the U.S. Treasury to finance the development of transmission lines to facilitate the delivery of power generated by new renewable energy resources.

The Act also provided Western \$10 million in nonreimbursable appropriations as the initial source of program operating funds to support implementation of activities authorized. As of 2012 fiscal year end, all \$10 million has been fully obligated. Reimbursable, advance funding agreements with project sponsors are currently required prior to initiating efforts to evaluate the technical and financial merits of all potential projects to ensure the full cost of services delivered are paid by project beneficiaries. Additional revenue from project sponsors supports ongoing development of TIP projects and funds the overhead and administrative costs of the program.

Western is not requesting any new annual appropriated funds for this program.

Accomplishments

In FY 2012, Western met its power marketing and contractual power delivery obligations with continued high marks for reliability.

Revenues collected from customers to recover the costs of the Federal Power Program were sufficient to provide for Western's FY 2012 annual expenses for the power systems in the CROM, CRBPMF, and the Falcon and Amistad Operating and Maintenance Fund.

Net mandatory receipts returned to Treasury in FY 2012 reached \$300 million.

Within our authorities, Western continues to partner with customers who provide alternative financing to complement appropriated resources when needed to fund critical mission annual or capital activities.

Alignment to Strategic Plan

Western contributes to the Department's efforts to transform the Nation's energy system and secure U.S. leadership in clean energy technologies in promoting the development of higher capacity, more expansive U.S. energy infrastructure to support the development and delivery of renewable resources. Specifically, Western is maintaining and modernizing facilities to ensure flexible and reliable operations to accommodate industry change, interconnections and increasing interest in renewable resources, while partnering with industry to expand infrastructure to deliver developing sources of renewable energy as envisioned in the Recovery Act.

Strategic Management

To effectively address ongoing challenges and industry trends in operating and maintaining a high voltage transmission system, Western will:

- Maintain and modernize systems and infrastructure to increase the reliability, efficiency, value and use of Federal assets.
- Meet the increasing demands on maintenance for aging infrastructure from transmission growth and evolving transmission and regulatory reliability compliance standards.
- Operate the transmission system efficiently to support the Nation's integrated power grid.
- Manage power delivery costs.
- Continue to provide open access to Western's transmission system to further industry restructuring and to support local and regional utilities in the delivery of electricity to their customers.

The following external factors present the strongest impacts to the overall achievement of Western's strategic goal:

- Western's transmission infrastructure continues to age, despite an ongoing replacement program.
- Many of the best sites for renewable generating sources – wind, solar and biomass – are located in parts of the West and Midwest that are not near load centers, and 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.
- Western's highly skilled technical workforce continues to age as we compete within the electric utility industry to attract and retain the caliber of workforce needed to provide reliable power supply and transmission services.

Explanation of Changes

The FY 2014 request prioritizes the Operation and Maintenance activities of Western, including the capital components of that program and the associated Program Direction requirements. The day-to-day Operation and Maintenance activities are critical to Western's delivery of power to customers.

The FY 2014 Request for Construction and Rehabilitation appropriations place continued emphasis on securing substantial alternative customer financing for needed investments in the transmission system infrastructure.

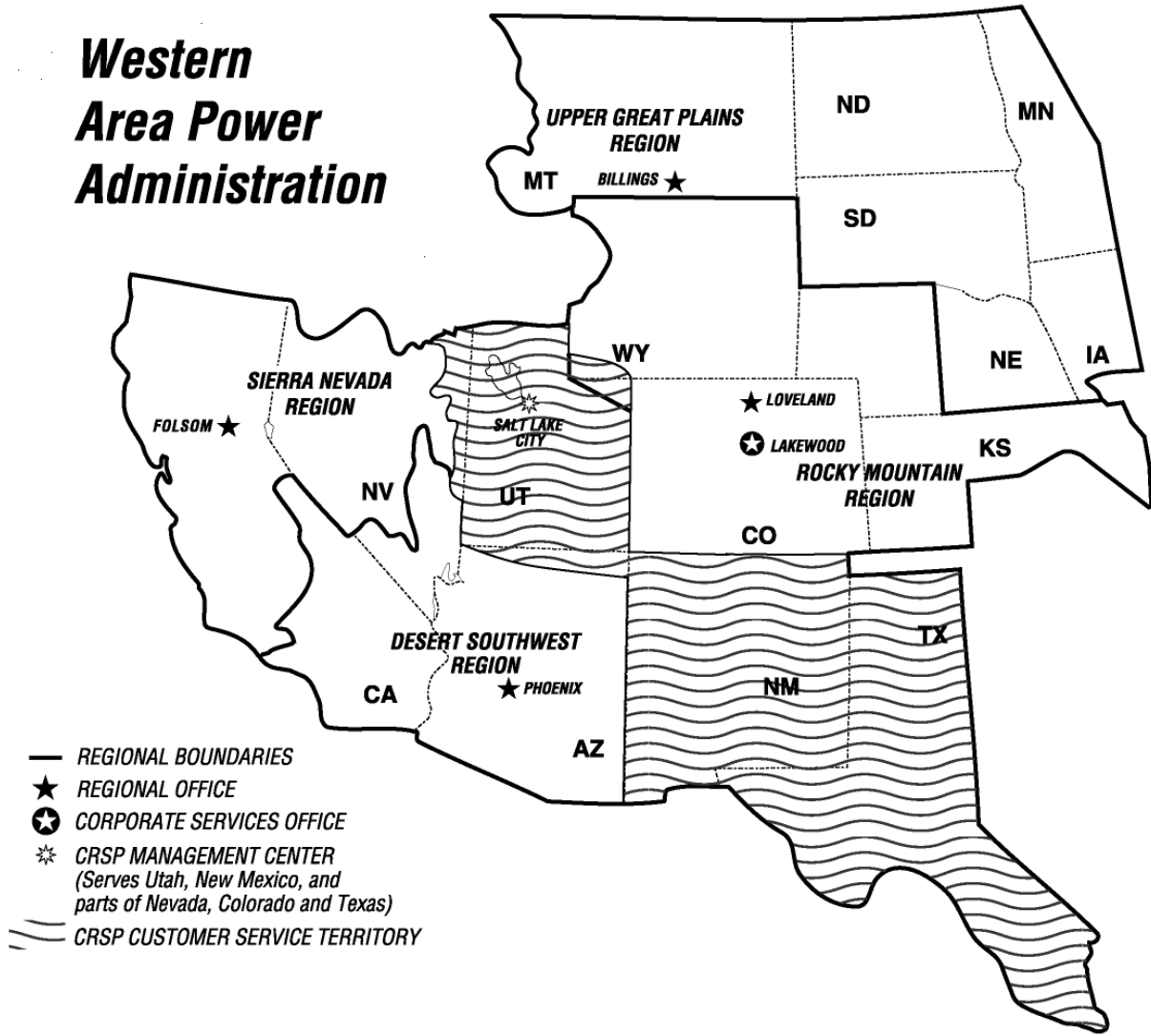
Note: FY 2013 was the final year of Western's contribution to the Utah Reclamation Mitigation and Conservation Account, as legislated in Title II, Sec. 214 of Public Law 108-137.

Performance Measures

Program	Western Area Power Administration		
Performance Goal (Measure)	WAPA - System Reliability Performance - NERC Rating - WAPA - System Reliability Performance - NERC Rating - System Reliability Performance: Attain acceptable North American Electric Reliability Corporation (NERC) ratings for the following Control Performance Standards (CPS) measuring the balance between power generation and load: 1) CPS1 measures generation/load balance and support system frequency on 1-minute intervals (rating>100); and 2) CPS2 limits any imbalance magnitude to acceptable levels (rating>90).		
Fiscal Year	2012	2013	2014
Target	> 100 CPS1 rating with CPS2>90	> 100 CPS1>100, CPS2>90	> 100 CPS1 rating with CPS2>90
Result	Met – CPS1=165.73, CPS2=92.11		
Endpoint Target	Ensure the integrity of the Nation’s integrated grid by operating in compliance with National Energy Reliability Standards		

Program	Western Area Power Administration		
Performance Goal (Measure)	WAPA - Repayment of Investment Performance - Ensure unpaid investment (UI) is equal to or less than the allowable unpaid investment (AUI) in accordance with DOE Order RA 6120.2 and Reclamation Law.		
Fiscal Year	2012	2013	2014
Target	≤ 8.692 billion dollars UI	≤ 8.594 billion dollars UI	≤ 8.667 billion dollars UI
Result	Met - 6.166		
Endpoint Target	Continue to meet legislated cost recovery requirements for timely repayment of Federal investment in maintaining financial integrity of projects/program.		

Western Area Power Administration



**Operation and Maintenance
Funding Profile by Subprogram and Activity**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Operation and Maintenance			
Regular Operation and Maintenance	39,573	39,815	42,680
Replacements and Additions	33,290	33,494	40,163
Total, Operation and Maintenance	72,863	73,309	82,843
Alternative Financing	-4,600	-4,628	-5,500
Use of Receipts from Colorado River Dam Fund	-1,033	-1,040	-945
Offsetting Collections	-33,323	-33,527	-35,796
Total, Operation and Maintenance (Budget Authority)	33,907	34,114	40,602

Overview

The 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 that would impede power flows.

Benefits

- Replacement and upgrading of existing electrical system infrastructure to sustain reliable power delivery to our customers.
- Support a stable and reliable interconnected power system.

- Contain annual maintenance expenses.
- Retain the value of our assets.

Subprogram Accomplishments

In FY 2012, Western continued to implement the Operation Consolidation Project within the Rocky Mountain and Desert Southwest Regions. This consolidation has improved efficiencies and assisted in controlling Western and customer costs by consolidating tool sets and facilities between these two regions. Western is also studying other operation areas for potential efficiencies and cost reductions for future implementation.

Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

	FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
Regular Operation and Maintenance			
• The increase in regular O&M is attributed to an increase in planned purchases for annually funded/non-capitalized equipment for planned maintenance activities.	39,573	42,680	+3,107
Replacements and Additions			
• The increase in replacements and additions is due to an increase in transmission line (+\$10.2 million) purchases and a slight increase to communication equipment (+\$0.8 million). These increases are offset by decreases to maintenance and substation equipment (-\$2.0 million) and capitalized moveable equipment (-\$2.1 million).	33,290	40,163	+6,873
Total, Operation and Maintenance	72,863	82,843	+9,980

**Regular Operation and Maintenance
Overview**

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 only; excludes whole line replacements), instrument transformers, meters, relays, etc. The request includes approximately \$945 thousand for activities in the Boulder Canyon Project, funded directly through receipts from the Colorado River Dam Fund and \$6.1 million for appropriated O&M capital expenses for Western’s Salinity and Levee non-reimbursable power systems.

The continuing maintenance of Western’s transmission system at or above industry standards supports DOE and Western missions 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. This request also includes approximately \$148 thousand for appropriated O&M annual expenses that are required to fund Western’s Salinity and Levee non-reimbursable power systems.

Benefits

- Western’s Regular O&M activity 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 sale.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Regular O&M activity continues to ensure reliable electric power in a safe, cost-effective manner.	39,573
FY 2013	Regular O&M activity continues to meet mission requirements.	39,815
FY 2014	Regular O&M activity continues to meet mission requirements.	42,680

Replacements and Additions Overview

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. Cost estimates are based on an analysis of system operation/maintenance requirements and concerns, customer-coordinated work plans, actual costs of recent similar projects, and bottom-up budgeting techniques. Planned activity is detailed by category below.

Electrical Equipment

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. 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 is also included. Also included in this request is funding for Western's wood pole replacement program. This is a continuing program to replace aging wood transmission line structures, line hardware, and repair damaged conductors and static wires. Many of Western's wood transmission line structures were built in the 1950's and 1960's, with the facilities reaching ages in excess of recommended lifespans. Due to age, woodpecker damage, vibratory fatigue, and general deterioration, the system requires constant maintenance upgrades and repairs in order to eliminate the weak links and improve the reliability to our customers.

Communications Equipment

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 Western's needs. The staged movement to narrow-band communications for UHF radios as directed by the National Telecommunications and Information Administration (NTIA) continues. Western's communication systems are currently made up of approximately 9 percent fiber optics, 79 percent fixed radio, and 12 percent mobile radio. Western currently has 1,246 radio frequency authorizations for fixed radio bands, of which 248, or 20 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 supervisory control and data acquisition (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.

Spectrum Relocation Equipment

The Commercial Spectrum Enhancement Act (CSEA, Title II of P.L. 108-494) of 2004, created the Spectrum Relocation Fund (SRF) to streamline the relocation of Federal systems from specific radio spectrum bands. These spectrum bands will accommodate commercial users and the SRF will facilitate reimbursement to affected agencies for 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 are underway. Western received \$108.2 million for this effort. This amount 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 including 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. The phased replacement of 2 GHz radio systems continues in FY 2011, with a small amount carrying over into FY 2012. 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 FY 2014. The funding for the Spectrum Fund is mandatory and will remain available until expended, and Western Area Power Administration/
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Operation and Maintenance

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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

The majority of these funds will be used to purchase and lease the fleet of standard and specialized vehicles required for Western’s O&M activities. Although Western prefers to lease its vehicles from GSA, GSA cannot always provide the necessary specialized vehicles, especially in the Upper Great Plains Region and the Desert Southwest Region, where they must be equipped for extreme weather and terrain conditions. In these instances, Western is forced to purchase its specialized vehicles. All sedans, vans, SUVs, and light trucks are leased from GSA. Western uses 733 vehicles, 429 (59 percent) of which are leased from GSA. Western replaces government-owned vehicles according to the Federal Management Regulations guidelines, the same guidelines used by GSA. Other capitalized movable equipment in this estimate includes 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’s service area; information technology equipment such as server and router replacements, firewalls, cyber security upgrades, encryptors for the operation offices, LAN upgrades, network equipment replacements, storage upgrades, upgrades to Western’s power system simulator equipment for training purposes, auto-CAD workstation replacements, 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.

Benefits

- 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 distributions. Removing environmental hazards and replacement of aged equipment eliminates safety hazards for the public and Western’s personnel.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Western’s O&M replacement and additions activities include replacement and upgrading of existing system infrastructure to sustain reliable power deliver to Western’s customers, to support a stable and reliable interconnected power system, and to retain the value of our assets.	33,290
FY 2013	Continued replacement and additions activities to ensure reliable electric power delivery.	33,494
FY 2014	Continued replacement and additions activities to ensure reliable electric power delivery.	40,163

**Construction and Rehabilitation
Funding Profile by Subprogram and Activity**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Construction and Rehabilitation			
Transmission Lines and Terminal Facilities	67,087	67,498	76,146
Substations	36,125	36,336	38,353
Other	7,247	7,291	7,938
Subtotal, Construction and Rehabilitation	110,459	111,125	122,437
Alternative Financing	-93,313	-93,884	-105,678
Total, Construction and Rehabilitation (Budget Authority)	17,146	17,241	16,759

Overview

The Construction and Rehabilitation (C&R) subprogram supports the Department of Energy and Western’s missions by emphasizing the replacement and upgrade of the electrical system infrastructure, including communications and control systems which are crucial to system reliability and bring increased connectivity, flexibility, and capability to the power grid.

Financing of the FY 2014 C&R budget, planned at \$122.4 million, will continue to rely heavily on stakeholder participation in alternative financing methods. Approximately 86 percent of the program funding, or \$106 million, will be required from customers. Historically, Western’s experience suggests alternative customer financing capability for C&R peaks at about \$50 million per year. Significant partnering efforts will be required to secure the necessary financing.

The FY 2014 appropriated program decreases from FY 2012 by two percent, or \$0.4 million. The total FY 2014 C&R program requirements exceed the FY 2012 level by 11 percent, or \$12 million. The increase reflects greater demands on the electrical infrastructure in Western’s service areas; in particular, the growth of communities and industry in the northern plains region. The demands are leading to replacement and upgrade of Western’s original designs and components in order to continue to provide reliable power delivery in the areas we serve, as well as greater operational flexibility to get more out of the systems in place.

The C&R subprogram contributes to attaining or exceeding performance standards established by the North American Electric Reliability Corporation (NERC) and the Western Electricity Coordinating Council (WECC) by reducing the risk of equipment failure, unplanned outages, and possible local and regional power system disruptions.

C&R subprogram activities also 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 additional costs of emergency “breakdown maintenance,” and by preventing outages which could impact power deliveries, purchase power costs, and power revenues.

The C&R subprogram contributes to public safety by avoiding or minimizing the dangers involved in unplanned outages and downed transmission lines. The subprogram also minimizes Western’s exposure to unsafe conditions by reducing the hazards associated with worn or aging equipment, combating obsolescence, and replacing deteriorated wood poles which present a serious climbing hazard to linemen.

The 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. When conditions change, Western shifts 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 more than 17,000 circuit-miles, about half of which are supported by wood poles. Western is continually testing, treating, and replacing individual wood poles and hardware to extend the life and delay the need for replacing an entire transmission line. As a result, much of Western's system is beyond its design life but still performing.

Western's transmission system has more than 300 substations. 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 circuit breakers is 40 years and 35 years, respectively. Western has maintenance programs in place to get the most out of its high-value transformers safely and reliably. Like the transmission lines, many of the transformers are operating reliably well beyond their design life.

While replacement of the transmission and substation equipment is systematically planned over multiple 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 cost savings and increased efficiencies for all participants.

Western is initiating a formalized asset management program to capture data more uniformly and systematically on condition, consequences of failure data, and other relevant asset information. The improvements to Western's current asset management practices will provide for more risk-informed decisions and allow greater transparency to stakeholders in the allocation of limited resources.

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 other personnel costs and related expenses for 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 capitalized. In rare cases where a C&R project is abandoned, associated costs may be expended. Unless otherwise provided by law, all C&R costs are recovered from ratepayers, not taxpayers, with interest over the useful life of the asset providing revenue stream to the U.S. Treasury.

Benefits

- Promotes firm clean renewable hydropower resource.
- Provides reliable power delivery and strengthens the grid.
- Costs are borne by the beneficiaries, and not the taxpayer.
- Protects employee and public safety.
- Ensures long-term cost recovery and repayment of the Federal investment.

Subprogram Accomplishments

In FY 2012, Western made progress on several reliability concerns, including:

- Sacramento area voltage support
- Northern Colorado area voltage support
- Pick-Sloan Missouri Basin reliability needs
- Desert Southwest region infrastructure

Explanation of Funding Changes

(Dollars in Thousands)

FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
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Transmission Lines and Terminal Facilities

The 13 percent increase continues ongoing projects and initiates new activities to promote reliability of Western’s system, primarily in the growing northern plains states. The appropriations requested provide for just 3 percent, or \$2 million of the \$76 million requirement. Alternative customer financing of \$74 million will be sought to fund the majority of this activity.

67,087 76,146 +9,059

Substations

Program level funding increases substation rehabilitation and reliability work about 6 percent higher than the FY 2012 level. Within the FY 2014 Request, appropriations provide for just 20 percent, or \$8 million of the \$38 million requirement. The Request will support continuing activities at the Gila, Edgeley, Rugby, and Rapid City substations, and initiate new rehabilitation work at several substations in Nebraska, South Dakota, Wyoming, and Colorado. Alternative customer financing of \$30 million will be sought to support ongoing work at several substations, including the critical Mead Substation in Nevada and the VT Hanlon Substation in South Dakota.

36,125 38,353 +2,228

Other

The requirement for Other C&R activities increases \$0.7 million from FY 2012. Within the FY 2014 Request, appropriations of \$7 million provide for continued communication upgrade efforts, construction of a critical maintenance facility in South Dakota, initiation of new requirements to ensure facilities ‘as-built’, rather than ‘as designed’ are in compliance with reliability requirements, and assessment of opportunities to increase capacity to maximize existing right-of-ways and facilities. Alternative customer funding of \$1 million will be sought to address cleanup requirements at decommissioned facilities.

7,247 7,938 +691

Total, Construction and Rehabilitation

110,459 122,437 +11,978

Transmission Lines and Terminal Facilities Overview

Western's transmission infrastructure was primarily constructed in the 1940s-1960s. Thousands of miles of transmission line already exceed their design life. For FY 2014, there is continued focus on replacement and upgrade of deteriorating or inadequate infrastructure across Western's service area using non-appropriated alternative financing, with increasing emphasis on deteriorating transmission lines in the Parker-Davis systems in Arizona. In addition, activities are underway to address voltage support problems in the Colorado front-range, and growing loads in the Pick-Sloan Missouri Basin service territory. 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 Transmission Lines and Terminal Facilities activity is broken into two sub activities:

Continuing Work

Appropriations - This activity funds the continuation of modifications and rehabilitation of Western's transmission lines (TL) to ensure power system reliability and stability. The FY 2014 Request includes \$1.1 million for the following ongoing rehabilitation work:

- Elverta (California) – Realignment of the O'Banion-Elverta #2, and the Elverta-Roseville #2 transmission lines with each other to insure that one of the lines servicing load and providing generation will be in service during an east or west bus outage at Elverta substation. Under the current configuration, a catastrophic event at Elverta substation could trigger a larger scale power outage and/or load diversion event within the greater Sacramento and western Placer counties. The realignment improves long term reliable service and transfer capability, conforms to applicable mandatory NERC and WECC reliability standards, and avoids the potential for significant service interruptions to residential and industrial customers.
- Shasta-Flanagan-Keswick (California) – Replace the existing conductor on the 8.7 mile, 61-year old Shasta-Flanagan-Keswick 230-kV transmission line with a larger, higher capacity conductor and replace the associated substation equipment necessary to accommodate the increase in power flows. The reconductoring allows for maximum hydro-power generation at the Shasta Powerplant during periods of high energy demand and high power flows. Without reconductoring, a remedial action scheme must be deployed under demanding operating conditions that would idle two of the Shasta generator units and lead to increased purchase power costs for Western's customers.
- Rapid City-Rapid City DC Tie (South Dakota) – Construct 8 miles of 115-kV transmission line from Rapid City DC Tie to Rapid City Substation to correct transmission deficiencies reducing reliability in the growing Rapid City area.

Alternative Financing - Western will pursue alternative financing from its customers to fund the following on-going transmission line rehabilitation efforts estimated at \$10.9 million in FY 2014:

- Flatiron-Estes (Colorado) – Rebuild the 16.7 mile, 60-year old, 115-kV transmission line from Estes to Flatiron Substation and coordinate right-of-way with the Estes-Pole Hill transmission line for improved maintenance and vegetation management. The transmission structures are unsafe due to core rot and cracking. A failure would critically overload the Mary's Lake transformer supporting the Granby-Mary's Lake transmission line; a very limited capacity alternative for service in the Estes Switchyard.
- Lovell-Yellowtail (Wyoming) – Rebuild a 15-mile section each of the Lovell-Yellowtail No. 1 and No. 2 115-kV transmission lines on the Crow Reservation. The rebuild of the 55- and 45-year old lines, respectively, are needed to improve reliability and system capability. Inspections show an increasing percentage of deteriorating structures. This project also includes renewing the right-of-way for Lovell-Yellowtail #2 line.

Rehabilitation Starts

Appropriations - This activity funds transmission line and terminal facility rehabilitation starts to address additional system reliability risks and operational problems. The FY 2014 Request includes \$0.7 million in appropriations providing for:

- Black Point-Mesa (Arizona) – Re-route a half mile section of the 60-year old 161-kV transmission line to preserve a historic, culturally sensitive area at Black Point-Mesa and improve reliability and public safety in the area. Many of the deteriorating wood poles have signs of dry rot and need to be replaced.
- Wildcat-Mitchell Rural (Nebraska) - Construct 115/34.5-kV double circuit between existing Wildcat and new Mitchell Rural substations to provide operational flexibility and mitigate low voltage issues affecting the Platte Valley area.

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Construction, Rehabilitation, Operation and Maintenance/
Construction and Rehabilitation

- Alcova-Spence-Raderville (Wyoming) - Rebuild existing 45-mile 115-kV transmission line from Alcova to Raderville, and build a second 230-kV circuit from Alcova to Spence Substation to accommodate loads associated with energy related industrial projects.

Alternative Financing - Western will pursue alternative financing from its customers to fund the following new transmission line rehabilitation efforts estimated at \$63.5 million in FY 2014:

- Coolidge-Valley Farms (Arizona) – Rebuild the 115-kV transmission line built in early 1940s that reaches from central Arizona to the southeast part of the state and feeds the Bureau of Indian Affairs and multiple regional utilities. The bulk of wood H-frame structures are past their engineered lifespan and are exhibiting condition-related deterioration such as advanced external shell rot, weathering and large cracks. Shell rot introduces reliability and safety concerns due to reduction of the amount of wood available to bear the load of the conductors and hardware.
- ED5-Saguaro Northern (Arizona) – Rebuild the 17-mile northern section of the 115-kV transmission line. Built in 1948, supported by wood H-frame structures, the line runs through southern Arizona. The wood structures are past their engineered lifespan and are exhibiting condition-related deterioration consistent with age and low desert environment. Replacement and upgrade will increase reliability of service and decrease cost of maintenance.
- Headgate Rock-Bouse (Arizona) – Rebuild an 18.5-mile section of the more than 70-year old Headgate-Bouse 161-kV transmission line to improve reliability and safety, and reduce maintenance costs.
- Headgate Rock-Parker (Arizona) – Rebuild a 13-mile section of the more than 60-year old Headgate-Parker 161-kV transmission line to improve reliability and safety, and reduce maintenance costs.
- Big Bend-Lower Brule (South Dakota) – Construction of a new 2.5-mile 230-kV transmission line between Big Bend Dam and the proposed Lower Brule Substation. The transmission line is required to improve reliability for West Central Electric’s 69-kV system near Reliance, SD. West Central is unable to support loads when service is lost from Ft. Thompson.
- EJ Manning-Rasmussen (South Dakota) – Construct 15 miles of 115-kV transmission line and install 230/115-kV transformer at Rasmussen Substation to mitigate low voltage problems and remove the Sioux Falls-Gavins Point loop as a critical contingency.
- Oahe-Ash Street (South Dakota) – Construct 7 miles of 115-kV transmission line to serve city of Pierre, SD. Addition of this line and other planned improvements at Oahe power plant allow removal of existing under voltage load shedding required by N-2 conditions.
- Garrison-Beulah-Halliday (North Dakota) – Upgrade the 56-mile Garrison-Beulah-Halliday transmission line to 115-kV to provide for reliability concerns in Western’s eastern Montana and western North Dakota service area.
- Halliday-Killdeer-Charlie Creek (North Dakota) – Upgrade the 40-mile Halliday-Killdeer-Charlie Creek transmission line to 115-kV to provide for reliability concerns in Western’s eastern Montana and western North Dakota service area.
- Williston-Richland (Montana/North Dakota) – Upgrade the 45-mile Williston-Richland transmission line to 115-kV to provide for reliability concerns in Western’s eastern Montana and western North Dakota service area.
- Casper PPL-Glendo South (Wyoming) – Upgrade 28 miles of 64-year old wood pole H-frame 115-kV transmission line to 230-kV from PacifiCorp’s Casper Substation to Western’s Dave Johnston Tap. Pole testing has identified deteriorated structures. Relatively frequent outages on this line section will continue without re-investment.

Benefits

- Promotes firm clean renewable hydropower resource.
- Provides reliable power delivery and strengthens the grid.
- Protects employee and public safety.
- Ensures long-term cost recovery and repayment of Federal investment.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Continue rehabilitation and construction required on Western transmission lines and terminal facilities to cost-effectively market and deliver clean-renewable Federal hydropower and promote a strong record of reliability and safety.	67,087
FY 2013	Continue rehabilitation and construction required on Western transmission lines and terminal facilities to cost-effectively market and deliver clean-renewable Federal hydropower and promote a strong record of reliability and safety.	67,498
FY 2014	Continue rehabilitation and construction required on Western transmission lines and terminal facilities to cost-effectively market and deliver clean-renewable Federal hydropower and promote a strong record of reliability and safety. (Net budget authority requested is \$1,785,000 and alternative customer financing sought is \$74,361,000).	76,146

Substations Overview

Western owns and operates more than 300 substations across its 15-state service territory. Many of these facilities were designed and constructed more than 50 years ago. This activity funds the construction, replacement, or upgrade of the substations and its components necessary to sustain reliable power delivery and support a stable, flexible interconnected power grid. 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 Substations activity is divided into two sub activities – Continuing Work and Rehabilitation Starts:

Continuing Work

Appropriations - This activity funds the continuation of construction, modifications, and rehabilitation of Western's substations to ensure power system reliability and stability. The FY 2014 Request includes \$5.4 million in appropriations to continue the following ongoing rehabilitation work:

- Gila Substation (Arizona) – Rebuild the 1940s vintage Gila 34.5-kV/69-kV Switchyard that provides station power and service to the Yuma Area Irrigation District pumping loads. The advanced age of this equipment is impacting system reliability. Aging symptoms include broken disconnects, oil leaks, and disintegrating foundations. Over 10,000 gallons of oil reside in the old transformers and circuit breakers at the facility which sits immediately adjacent to an irrigation canal. Rebuilding the facility is necessary to ensure reliability, safety, and to reduce possible hazards to the environment.
- Edgeley Substation (North Dakota) – Replace the aging 1952 transformer KY1A at Edgeley Substation and add equipment for improved protection, reliability, and operating flexibility. The investment will provide for 10 MW increase in capacity and will improve reliability of service to Western's customers.
- Rugby Substation (North Dakota) – Replace the 115/69-kV transformer and make other substation upgrade/additions. The 60-year old transformer was installed in 1952 and has significantly exceeded its expected service life of 40 years placing reliability at risk. The addition of a power circuit breaker for a dedicated transformer bay will increase capacity by 10 MW, and add protection, reliability, and operating flexibility to substation.
- Rapid City Substation (South Dakota) – Addition of a customer-furnished 115/69 kV transformer to Western's Rapid City Substation to provide greater reliability and operating flexibility.

Alternative Financing - Western will pursue alternative financing from its customers to fund the remaining ongoing rehabilitation work estimated at \$23.5 million in FY 2014:

- Spencer Substation (Iowa) – Replace two aging transformers at the Spencer Substation and install two shunt capacitor banks. The replacements will increase the capacity to 100 MVA as the current loading conditions exceed the operating capability of the existing 50-year-old transformers.
- Granite Falls Substation (Minnesota) – Replace the 1959 115/69-kV transformer KY2A at the Granite Falls Substation to address reliability concerns in the area. The transformer is at increased risk for near term overloading conditions and needs to be replaced to ensure continued reliability.
- Mead Substation (Nevada) – Replace the 345-kV transformer at Mead Substation south of Boulder City that provides 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.
- VT Hanlon Substation (South Dakota) – Rebuild and reconfigure the VT Hanlon Substation to eliminate significant maintenance issues including deteriorating foundation, rodent infestation, and obsolete bus, disconnects, and protection equipment. The rebuild will enhance operational control and reliability to the critical Sioux Falls-Fort Thompson 230-kV transmission line which serves the largest load area in South Dakota.

Rehabilitation Starts

Appropriations - Several substation rehabilitation activities are planned to begin in FY 2014 to address system reliability risks and operational problems. The FY 2014 Request includes \$3.0 million in appropriations to initiate these activities.

- Green Mountain Switchyard (Colorado) – Construct a new standard control building with relay and control systems; remove obsolete relay and control systems housed within Bureau of Reclamation Powerplant.
- Bayard City Tap (Nebraska) – Relocate 1.8 MVAR cap bank from Morrill tap to Bayard City tap to improve operating flexibility for Western's system in the Platte Valley area.
- Gering Substation (Nebraska) – Install 1200 amp breaker at Gering Substation to increase operational flexibility and mitigate low voltage problems in the Platte Valley Area.
- Lancer Substation (Nebraska) – Construct a substation with 230/115-kV transformation near the crossing of DJ-Stegall and Torrington-Wildcat transmission lines to improve operational flexibility and mitigate low voltage issues in the Platte Valley area.
- Mitchell Rural Substation (Nebraska) – Construct a substation with 115/34.5-kV transformation near Mitchell Rural Tap to improve operational flexibility and mitigate low voltage issues in the Platte Valley area.
- Armour Substation (South Dakota) – Replacement of the aged and loaded transformers and installation of shunt capacitors is needed to provide voltage support and improve system reliability in the area.
- Badwater Substation (Wyoming) – Furnish and install a Static Var System at Badwater Substation to enhance reliability, mitigate constraints on WECC Path 38, and provide voltage support for loads served out of the substation.

Alternative Financing - Western will pursue alternative financing from its customers to fund the remaining substation rehabilitation starts estimated at \$6.5 million in FY 2014:

- Tucson Substation (Arizona) – Upgrade the obsolete 1952 vintage Tucson Substation bus structure and antiquated equipment to increase reliability, safety, and maintainability of the Parker-Davis Power System.
- Curecanti Substation (Colorado) – Replace the 50-year-old 230/115/13.8-kV transformer before failure to improve reliability and lower costs.
- Beresford Substation (South Dakota) - Addition of two 10 MVAR shunt capacitor banks and associated equipment at Beresford Substation to relieve voltage problems along the Gavins Point-Beresford-Sioux Falls transmission line.
- Lovell Substation (Wyoming) – Install 15 MVAR capacitor bank in the 115-kV yard at Lovell Substation to alleviate existing constraints on WECC Path 38.

Benefits

- Promotes firm clean renewable hydropower resource.
- Provides reliable power delivery and strengthens the grid.
- Protects employee and public safety.
- Ensures long-term cost recovery and repayment of Federal investment.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Continue rehabilitation and construction required at Western substations to cost-effectively market and deliver clean-renewable Federal hydropower and promote a strong record of reliability and safety.	36,125
FY 2013	Continue rehabilitation and construction required at Western substations to cost-effectively market and deliver clean-renewable Federal hydropower and promote a strong record of reliability and safety.	36,336
FY 2014	Continue rehabilitation and construction required at Western substations to cost-effectively market and deliver clean-renewable Federal hydropower and promote a strong record of reliability and safety. (Net budget authority requested is \$8,320,000 and alternative customer financing sought is \$30,033,000).	38,353

Other Construction and Rehabilitation Overview

The Other category includes construction and rehabilitation activities not otherwise included within the Substation or Transmission Lines and Terminal Facilities categories. These activities include two sub activities – communication equipment and miscellaneous – which covers items like construction or major rehabilitation of maintenance facilities, access roads, and facility decommissioning and removal costs:

Communications Systems

Appropriations - This activity funds work 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 obsolete communications systems are often difficult to obtain. With technological advances in the communications field, increased use of remote control of facilities, and the need for greater integration of the Federal system with the rest of the grid, maintaining secure and reliable communications is crucial to Western's mission. The FY 2014 Request includes \$0.6 million in appropriations to continue planned communication system (microwave, fiber optic, global information system, and telecommunication) improvements in the Central Valley Project and the Pick-Sloan Missouri Basin Program.

Note: The communication equipment requested within this activity is not included in the Spectrum Relocation Fund initiative.

Miscellaneous

Appropriations - The FY 2014 Request includes appropriations of \$6.1 million for:

- Parker-Davis Facility Rating Mitigation (Arizona) – In compliance with new regulations, Western has completed assessment of several transmission line segments which revealed a number of violations that require the installation of inset structures underneath certain transmission line spans and re-stringing conductor on other spans.
- Sierra Nevada Transmission Improvement Project (California) – Increase the reliability of the existing transmission network within the Sierra Nevada Region and within existing Right-of-Ways to meet strengthening network reliability compliance criteria and anticipated future demands to ensure continued, long-term, safe, reliable delivery of power services.
- Watertown Maintenance/Marketing Facility (South Dakota) – Replace demolished buildings to provide for consolidated 240x80 space to house maintenance and marketing groups, equipment/material storage, house vehicles and provide shop areas. Previous buildings were demolished due to safety concerns. Lack of this maintenance facility delays Western responsiveness to system disruptions.
- Continue minor power facility development activities that provide technical products in support of the construction and rehabilitation program activities across Western's service area.

Alternative Financing - Western will pursue voluntary alternative financing from its customers to fund the following activities estimated at \$1.3 million in FY 2014:

- Decommissioned Mesa Substation – Continue the demolition and clean-up of the decommissioned Mesa Substation built in the early 1940s, including buried and underground rooms, storage, piping, and conduit tunnels.

Benefits

- Promotes firm clean renewable hydropower resource.
- Provides reliable power delivery and strengthens the grid.
- Protects employee and public safety.
- Ensures long-term cost recovery and repayment of Federal investment.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Continue other rehabilitation and construction required at Western to cost-effectively market and deliver clean-renewable Federal hydropower and promote a strong record of reliability and safety.	7,247
FY 2013	Continue rehabilitation and construction required at Western substations to cost-effectively market and deliver clean-renewable Federal hydropower and promote a strong record of reliability and safety.	7,291
FY 2014	Continue rehabilitation and construction required at Western substations to cost-effectively market and deliver clean-renewable Federal hydropower and promote a strong record of reliability and safety. (Net budget authority requested is \$6,654,000 and alternative customer financing sought is \$1,284,000).	7,938

**Purchase Power and Wheeling
Funding Profile by Subprogram and Activity**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Purchase Power and Wheeling			
Central Valley	300,584	302,424	287,495
Pick-Sloan Missouri Basin and Other Programs	170,951	171,997	119,614
Subtotal, Purchase Power and Wheeling	471,535	474,421	407,109
Alternative Financing	-164,994	-166,004	-176,371
Offsetting Collections	-306,541	-308,417	-230,738
Total, Purchase Power and Wheeling (Budget Authority)	0	0	0

Overview

The Purchase Power and Wheeling (PPW) subprogram supports Western’s marketing efforts and delivery capability which spans a 1.3-million-square-mile area serving a diverse group of several hundred wholesale customers, including municipalities, cooperatives, public utility and irrigation districts, Federal and state agencies and Native American tribes. The PPW subprogram provides for 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. As part of Order 741, FERC recently promulgated new guidance requiring RTO/ISOs to take physical title/ownership to the energy bought/sold in their respective markets, making it necessary for Western to acknowledge that customers receive the financial, and not the physical benefit of their Federal power allocations. Western plans to voluntarily participate in the California greenhouse gas cap-and-trade program.

Benefits

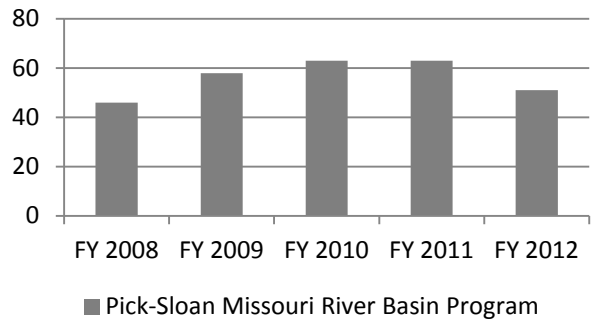
- Firm clean renewable hydropower resource.
- Reliable cost-based power and related services.
- Avoids Federal duplication of transmission resources.
- Ensures cost recovery and repayment of Federal investment.

Subprogram Accomplishments

In FY 2012, the PPW subprogram continued to support Western’s power marketing effort by providing for power purchases to firm the variable hydropower resource and securing transmission services as necessary to meet its contractual power delivery obligations.

Pick-Sloan water conditions

Reservoir Storage
(million acre-feet)



Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
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Central Valley Project

- The gross PPW requirement of \$287.5 million in FY 2014 decreases 4.4 percent from the \$300.6 million level anticipated in FY 2012. The decrease reflects a reduction in anticipated purchases to meet marketed requirements.
- Note: The PPW amounts are for offsetting collection authority and alternative financing; no direct appropriations are requested for this activity.

300,584	287,495	-13,089
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Pick-Sloan Missouri Basin and Other Programs

- The gross PPW requirement of \$119.6 million in FY 2014 decreases 30 percent from the \$171.0 million estimated for FY 2012 reflecting water conditions in the 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.

170,951	119,614	-51,337
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Total, Purchase Power and Wheeling

471,535	407,109	-64,426
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**Purchase Power and Wheeling
Overview**

The Purchase Power and Wheeling (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), 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, power plant 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. In accordance with FERC Order 741, preference power customers will continue to receive their power allocation, but the underlying new market structures may result in certain customers receiving financial and not the physical benefit of their Federal power allocation. Western will continue to participate in new energy markets to reliably deliver federal preference power at the lowest cost possible, consistent with sound business principles. In addition to physical purchase of energy, Western will begin to use financial instruments for energy in these markets to ensure delivery at the lowest cost possible. At the direction of the Department of Energy, Western is voluntarily participating in the California greenhouse gas (GHG) cap-and-trade program. The program is a central element of California's Global Warming Solutions Act (Assembly Bill 32) and covers major sources of GHG emissions in the State such as refineries, power plants, industrial facilities, and transportation fuels. The regulation includes an enforceable GHG cap that will decline over time. The California Air Resources Board (CARB) will distribute allowances, which are tradable permits, equal to the emission allowed under the cap. Initially, CARB will distribute ‘free’ allowances to specified entities. The free allowances will decline over time. Western estimates its total required allowances will exceed its ‘free’ allowances, so participation will require buying and selling allowances. Western estimates the cost of additional allowances to be \$15.4 million in FY 2014. The purchase of additional allowances will be managed with the Use of Receipts for Purchase Power and also may include the use of customer advance funding, using both non-Federal and Federal reimbursable authority.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Purchase Power and Wheeling (net budget authority)	0
FY 2013	Purchase Power and Wheeling (net budget authority)	0
FY 2014	Purchase Power and Wheeling (net budget authority)	0

Other Information

(Dollars in Thousands)

FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
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Central Valley Project

- | | | | |
|---|---------|---------|---------|
| Central Valley Project, Program Requirement | 300,584 | 302,424 | 287,495 |
|---|---------|---------|---------|

In FY 2014, 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 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 | -152,619 | -153,553 | -160,833 |
|--|----------|----------|----------|

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

Central Valley Project	147,965	148,871	126,662
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No appropriations are requested. This is authority to use offsetting collections only.

Pick-Sloan Missouri Basin and Other Programs

- | | | | |
|---|---------|---------|---------|
| Pick-Sloan Missouri Basin and Other Programs, Program Requirement | 170,951 | 171,997 | 119,614 |
|---|---------|---------|---------|

In FY 2014, 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 2014 are based primarily on market pricing of short-term firm energy, negotiated transmission rates, and Western and generating agency's forecasts. The FY 2014 program forecasts reduced purchases.

- | | | | |
|--|---------|---------|---------|
| Pick-Sloan Missouri Basin and Other Programs, Alternative/Customer Financing | -12,375 | -12,451 | -15,538 |
|--|---------|---------|---------|

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

Pick-Sloan Missouri Basin and Other Programs	158,576	159,546	104,076
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No appropriations are requested. This is authority to use offsetting collections only.

Total, Purchase Power and Wheeling (Spending authority for offsetting collections)	306,541	308,417	230,738
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**Program Direction
Funding Profile by Category**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Program Direction			
Salaries and Benefits	134,016	134,836	144,646
Travel	10,500	10,564	10,803
Support Services	30,830	31,019	23,257
Other Related Expenses	29,901	30,084	39,003
Total, Program Direction	205,247	206,503	217,709
Use of Alternative Financing	-3,300	-3,320	-5,800
Use of Receipts from Colorado River Dam Fund	-3,788	-3,811	-5,147
Offsetting Collections, Other Expenses	-156,609	-157,567	-168,193
Total, Program Direction	41,550	41,805	38,569
Full Time Equivalents (FTEs)*	1,116	1,138	1,148

* FTEs funded by TIP are included in the FTE count in CROM Program Direction in FY 2013 (11) and FY 2014 (11). In FY 2012, the 16 FTEs funded by TIP are counted in TIP.

Overview

Western’s Program Direction subprogram provides compensation and all related expenses for its workforce, including those employees that operate and maintain 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; those that market the power and energy produced to repay annual expenses and capital investment; and those that administratively support these functions.

The Program Direction subprogram supports DOE and Western missions. To attain reliability performance, dispatchers match generation to load minute-by-minute to meet or exceed performance levels established by NERC. Energy schedulers maximize revenues from non-firm energy sales and power rates are reviewed and adjusted to support repayment of the 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, which includes the following activities: exploring ways to increase Human Resource efficiency through consolidation; the development and/or expansion of Western Area Power Administration/Construction, Rehabilitation, Operation and Maintenance/Program Direction

sion 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; strategic use of knowledge sharing and training events in critical occupations; and, succession planning development programs for mid- to upper-level graded Federal positions. By design, costs for these HCM programs will be minimal as local area expertise and facilities are 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.

In consultation 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.

Major Program Shifts or Changes

No major program shifts or changes.

Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
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Salaries and Benefits

The increase to salary and benefits includes Western’s request for an increase of 21 FTEs from FY 2012 actual levels (excluding TIP, as discussed above), and the remaining FTEs financed in this account, to include those salaries determined through negotiations. Changes in Western's CROM account FTEs include an increase of 7 FTEs for the Boulder Canyon Project funded through a reimbursable agreement with the Bureau of Reclamation for maintenance activities, plus an increase of 14 FTEs to support mission related activities. Of these 14 FTEs, 4 FTEs are from the Colorado River Basins Power Marketing Fund to perform maintenance work scope on CROM activities. The remaining 10 FTEs increase included in this request are funded predominantly through Reimbursable activity to include Western's Alternative Financing agreements, CROM, and an indirect account which is distributed to a mixture of fund sources including Reimbursable and CROM. The following positions and number of FTEs are requested: Civil Engineer (1); Civil Engineer Technician (1); Electrical Engineer (1); Maintenance NERC Compliance Coordinator (1); Field Engineer (1); Compliance Specialist (1); Heavy Equipment Operator (1); Public Utility Specialist (1); and Journeyman Electrician (2).

134,016	144,646	+10,630
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Travel

The slight increase in travel supports essential travel in support of Western’s mission-related operation and maintenance activities to service over 17 thousand miles of Western’s interconnected transmission system. This increase is offset by a slight decrease to Western’s annual funded travel for various travel in support of OMB Memorandum M-12-12 Promoting Efficient Spending to Support Agency Operations. This reduction will be achieved by limiting travel associated with general agency operations, administrative training, and conferences. Also, Western will strive to find alternatives to attain required training by means other than by traveling.

10,500	10,803	+303
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Support Services

The decrease to this activity is primarily attributable to the completion of a contract performance period for specific economic and environmental analysis requirements, as well as a decrease to general administrative and ADP support. These decreases are offset by a slight increase to training and education for mission related education activities.

30,830	23,257	-7,573
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Other Related Expenses

The increase is primarily attributable to architectural and engineering services, and other contractual requirements to support Western’s mission requirements. This includes a Lidar Study, studies prior to the demolition of a service center, and compliance contractual estimates for facility ratings mitigation and vegetation management. Also included are inflationary and other slight increases to supplies and materials, GSA rental space estimates, and operation and maintenance of office equipment. DOE is working to achieve economies of scale through an enhanced Working Capital Fund (WCF). The WCF increase from FY 2012 covers certain shared, enterprise activities including enhanced cyber security architecture, employee health and testing services, and consolidated training and recruitment initiatives. These increases are offset by slight decreases to communication expenses, printing and reproduction, training, and other government account purchases.

	29,901	39,003	+9,102
Total Funding Change, Program Direction	205,247	217,709	+12,462

Support Services by Category

(Dollars in Thousands)

	FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
Technical Support Services			
Feasibility of Design Considerations	0	0	0
Development of Specifications	0	0	0
System Definition	0	0	0
System Review and Reliability Analysis	0	0	0
Trade-Off Analysis	0	0	0
Economic and Environmental Analysis	5,200	2,590	-2,610
Test and Environmental Studies	0	0	0
Surveys or Reviews of Technical Operations	0	0	0
Total, Technical Support Services	0	0	0
	5,200	2,590	-2,610
Management Support Services			
Analysis of Workload and Workflow	0	0	0
Directive Management Studies	0	0	0
Automated Data Processing	7,865	6,826	-1,039
Manpower Systems Analysis	0	0	0
Preparation of Program Plans	0	0	0
Training and Education	1,523	1,535	+12
Analysis of DOE Management Processes	0	0	0
Reports and Analyses Management and General Administrative Support	16,242	12,306	-3,936
Total, Management Support Services	25,630	20,667	-4,963
Total, Support Services	30,830	23,257	-7,573

Other Related Expenses by Category

(Dollars in Thousands)

	FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
Other Related Expenses			
Rent to GSA	2,451	2,744	+293
Rent to Others	0	0	0
Communication, Utilities, Misc.	4,900	4,487	-413
Printing and Reproduction	126	118	-8
Other Services	12,583	21,426	+8,843
Training	86	72	-14
Purchases from Gov. Accounts	531	430	-101
Operation and Maintenance of Equipment	2,127	2,204	+77
Supplies and Materials	3,085	3,356	+271
Equipment	2,585	2,632	+47
Working Capital Fund	1,427	1,534	+107
Total, Other Related Expenses	29,901	39,003	+9,102

**Utah Mitigation and Conservation
Funding Profile by Subprogram and Activity**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Western Area Power Administration Utah Mitigation and Conservation Budget Authority	3,375	3,396	0
Total, Utah Mitigation and Conservation Budget Authority	3,375	3,396	0

Overview

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 the account is to ensure that the level of environmental protec-

tion, 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. Western's Administrator is authorized to deposit funds into the Account each year, through FY 2013.

Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

	FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
Utah Mitigation and Conservation			
• Western's contribution to the Utah Mitigation and Conservation Program ended in fiscal year 2013 as legislated in Title II, Sec 214 of Public Law 108-137.	3,375	0	-3,375
Total, Utah Mitigation and Conservation Budget Authority	3,375	0	-3,375

**Utah Mitigation and Conservation
Overview**

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 enhancements 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. Western’s Administrator is authorized to deposit funds into the Account each year, through fiscal year 2013. Such expenditures are to be considered non-reimbursable and non-returnable. The Utah Reclamation Mitigation and Conservation Commission (Commission) established under Title III of the Act, is authorized to administer all funds deposited into this Account. Public Law 108-137, Sec 214 provided for the contributions of Western to the Utah Reclamation Mitigation and Conservation Account to expire ten fiscal years from the date of enactment, thereby providing for the sunset of Western’s contribution in fiscal year 2013. Western’s contributions ended in 2013; the Act authorizes the Commission to utilize interest earned and accrued to the Account to provide funding.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Deposit made	3,375
FY 2013	Deposit will be made	3,396
FY 2014	Program sunset in FY 2013. No deposit will be made in FY 2014	0

**Falcon and Amistad Operating and Maintenance Fund
Funding Profile by Subprogram and Activity**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Western Area Power Administration			
Falcon and Amistad Operating and Maintenance Fund	4,169	4,194	6,196
Subtotal, Falcon and Amistad Operating and Maintenance Fund	4,169	4,194	6,196
Offsetting Collections	-3,949	-3,973	-4,911
Alternative Financing	0	0	-865
Total, Falcon and Amistad Operating and Maintenance Fund	220	221	420

Overview

The Falcon and Amistad Project consists of two international dams located on the Rio Grande River between Texas and Mexico. The United States and Mexico operate separate power plants on each side of the Rio Grande River; the power output is divided evenly between the two countries. The Operating and Maintenance Fund was established in the Treasury of the United States and is administered by Western’s Administrator for use by the Commissioner of the U.S. Section of the International Boundary and Water Commission (IBWC) to defray administrative, O&M, replacement, and emergency costs for the hydroelectric facilities at the Falcon and Amistad Dams.

Benefits

- Firm clean renewable hydropower resource.
- Reliable cost-based power and related services.
- Provides power to rural electric cooperatives through Western.

- Ensures cost recovery and repayment of Federal investment.

Subprogram Accomplishments

- Provided power generation as required by customer needs.
- Maintained continual, reliable and efficient generation while using a temporary transformer at the Amistad facility while replacement and repairs were being performed.

Major Program Shifts or Changes

Change made to the program for FY 2014 is the inclusion of Alternative Financing as a funding option. The addition of this funding option will allow for needed work to be accomplished via customer advances, a mechanism used throughout Western under the Contributed Funds Act, 43 USC 395.

Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

	FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
Salaries and Benefits			
• The increase to this activity is due to additional employee positions, within grade increases and promotions.	2,662	2,854	+192
Routine Services			
• The increase is due to a rise in required operations and maintenance activities charged to this account. Items such as inspection and repairs of Turbines, Annunciation System, Turbines, and Intake Gates; Fire Protection and Turbine modernization at Falcon and the replacement of the Excitation System at Amistad are included in this section.	1,272	2,891	+1,619
Miscellaneous Expenses			
• Under this activity, the increase is attributed to recertification training and requirements as well as security training. Remaining increase is due to inflation of costs such as phone services; cell, landline and satellite. The replenishment of the emergency fund reserve of \$200,000 is also included in this category.	219	430	+211
Marketing, Contract, Repayment Studies			
• Increase is due to inflation and increased work demands.	16	21	+5
Total, Falcon and Amistad Operating and Maintenance Fund	4,169	6,196	+2,027

**Falcon and Amistad Operating and Maintenance Fund
Overview**

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, FYs 1994 and 1995. The Maintenance Fund is administered by Western's Administrator for use by the Commissioner of the U. S. Section of the International Boundary and Water Commission (IBWC) to defray administrative, O&M, replacement, and emergency costs for the hydroelectric facilities at the Falcon and Amistad Dams. IBWC owns and operates the U.S. portion of the projects, and Federal staff funded under this program continues to be allocated to the U.S. Section of IBWC by the Department of State. The Falcon and Amistad project supports Western's program goals by providing power to rural electric cooperatives through Western. With the exception of monies received from the Government of Mexico, all revenues collected from the sale of electric power generated at the Falcon and Amistad Dams are credited to the Maintenance Fund. Monies received from the Government of Mexico are credited to the General Fund of the U.S. Treasury. Revenues collected in excess of operating expenses are used to repay, with interest, the cost of replacements and original investments. 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.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Appropriations requested for capital costs; balance of funding is authority to use offsetting collections	220
FY 2013	Appropriations requested for capital costs; balance of funding is authority to use offsetting collections	221
FY 2014	Appropriations requested for capital costs and replenishment of emergency reserves; balance of funding is authority to use offsetting collections and alternative financing.	420

**Colorado River Basins Power Marketing Fund
Funding Profile by Subprogram and Activity**

	(Dollars in Thousands)		
	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Colorado River Basins Power Marketing Fund			
Equipment, Contracts and Related Expenses			
Supplies, Materials, and Services	22,868	23,008	21,995
Purchase Power Costs	122,041	122,788	84,818
Capitalized Equipment	9,876	9,936	10,015
Interest/Transfers	9,717	9,777	6,575
Total, Equipment, Contracts and Related Expenses	164,502	165,509	123,403
Program Direction	55,895	56,237	57,441
Total, Operating Expenses from new authority	220,397	221,746	180,844
Offsetting Collections	-243,397	-244,887	-203,844
Total, Obligational Authority	-23,000	-23,141	-23,000

Overview

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 Fund 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 is responsible for construction, maintenance, and operation of facilities for transmitting and marketing the electrical energy generated in these power systems.

Benefits

- Replacement and upgrading of existing electrical system infrastructure to sustain reliable power delivery to our customers.
- Support a stable and reliable interconnected power system.

- 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.
- Retain the value of our assets.

Subprogram Accomplishments

In FY 2012, Western met its power marketing and contractual power delivery obligations with continued high marks for reliability. Revenues collected from customers to recover the costs of the Federal Power Program were sufficient to provide for Western's FY 2012 expenses for the power systems in the CRBPMF. Revenues were also sufficient in FY 2012 for the CRBPMF to make a \$20 million capital principal repayment to Treasury.

Explanation of Funding AND/OR Program Changes

	(Dollars in Thousands)		
	FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
Supplies, Materials, and Services			
• The decrease is due to cyclical maintenance requirements and includes procurements of miscellaneous services.	22,868	21,995	-873
Purchase Power Costs			
• Purchase power costs decrease in FY 2014 as a result of the anticipated improvement of water conditions and a decrease in the costs of purchase power.	122,041	84,818	-37,223
Capitalized Equipment			

(Dollars in Thousands)

- The slight increase in capitalized equipment purchases is attributed to inflationary factors.

Interest

- Projected decrease in FY 2014 is primarily due to a slight decrease in investment and an increase in principal payments made from the prior years' estimated Power Repayment Study.

Total, Equipment, Contracts and Related Expenses

FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
9,876	10,015	+139
9,717	6,575	-3,142
164,502	123,403	-41,099

Equipment, Contracts and Related Expenses Overview

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.

This activity funds the procurement of supplies, materials, and services necessary to respond to routine and emergency situations in the transmission system, and the continuation of reimbursements to the U.S. Army Corps of Engineers for operation and maintenance of the Fort Peck Powerplant. Estimates are based on recent actual costs for supplies needed to maintain transmission system reliability.

Purchase Power Costs

This activity funds the procurement of electrical power, transmission capacity and wheeling services on the open market. The request anticipates the results of continued low-steady-flow tests conducted at Glen Canyon Dam, as required by the Glen Canyon Dam Environmental Impact Statement Record of Decision. Additionally, the request includes obligation 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 when Western lacks sufficient generation to meet its full contract commitment. The funds for the replacement power purchases are advanced by the requesting customers prior to the purchase.

Capitalized Equipment

This activity funds the procurement of capitalized equipment including circuit breakers, transformers, relays, switches, transmission line equipment, microwave, SCADA, and other communication and control equipment to assure reliable service to Western's customers. Replacement and upgrade of aged power system components are crucial to system reliability and transmission services. Planned communications equipment purchases include replacing existing ground wire with fiber optic ground wire and upgrading conductors. Included also is funding for the continuation of the project to replace analog microwave with fiber optic ground wire and fiber optic terminal. Cost comparisons have shown that fiber optics have a significant lower life cycle cost and higher bandwidth capacity than digital microwave.

Transmission line estimates include the purchase of poles, crossarms, conductors, fusion splicers, line switches, overhead ground wire and hardware for the continued transmission line rebuilds. This estimate includes line rebuilds with the anticipated completion of 10 miles a year.

Planned substation estimates include upgrades, replacement of breakers and circuit switches, and replacement of transformers, test equipment, as well as other aged equipment at various substations. Western is beginning the eighth year of a ten-year program to replace older electro-mechanical relays with microprocessor relays. The microprocessor relays will assist in finding faults faster in order to more efficiently restore service to customers. Other miscellaneous items required for substation replacements include surge arrestors, batteries and chargers, and monitoring equipment.

Planned movable capitalized property estimates include replacements of special purpose trucks, replacement of generators to maintain the reliability and backup power to the communications system, and replacement of outdated test and recording equipment. 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. Other requests include funding for the continuation of the SCADA Upgrade program, as well as other minor enhancements that provide for the ease of maintenance, protection of equipment and materials, and environmental compliance.

Interest/Transfers

This activity funds interest payments to the U.S. Treasury. Estimates are based on Power Repayment Studies for the Projects funded in this account.

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.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Total, Equipment, Contracts and Related Expenses	164,502
FY 2013	Total, Equipment, Contracts and Related Expenses	165,509
FY 2014	Total, Equipment, Contracts and Related Expenses	123,403

**Program Direction
Funding Profile by Category**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Program Direction			
Salaries and Benefits	37,356	39,685	40,183
Travel	2,756	2,871	3,056
Support Services	7,775	6,037	5,735
Other Related Expenses	8,008	7,644	8,467
Total, Program Direction Budget Authority	55,895	56,237	57,441
Full Time Equivalents (FTEs)	299	297	295

Overview

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.

Major Program Shifts or Changes

No major program shifts or changes.

Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

	FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
Salaries and Benefits The increase in salaries and benefits is due to salary and within grade increases, including salaries determined by prevailing rates in the electric utility industry. This request includes a decrease of 4 FTEs that have shifted to Western’s CROM account for planned maintenance and operation activities.	37,356	40,183	+2,827
Travel The increase is attributable to inflationary factors and a slight increase in planned mission-related maintenance activity travel.	2,756	3,056	+300
Support Services The decrease is primarily attributed to a decrease to ADP support and administrative services, offset by a slight increase in training for inflationary factors.	7,775	5,735	-2,040
Other Related Expenses The request reflects an increase for architectural and engineering contractual services, and funding to replace aging office equipment. DOE is working to achieve economies of scale through an enhanced Working Capital Fund (WCF). The WCF increase from FY 2012 covers certain shared, enterprise activities including enhanced cyber security architecture, employee health and testing services, and consolidated training and recruitment initiatives. All other categories decrease in an effort to minimize costs of Western’s revolving fund to the rate payer of this account.	8,008	8,467	+459
Total Funding Change, Program Direction	55,895	57,441	+1,546

Support Services by Category

(Dollars in Thousands)

	FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
Technical Support Services			
Feasibility of Design Considerations	0	0	0
Development of Specifications	0	0	0
System Definition	0	0	0
System Review and Reliability Analysis	0	0	0
Trade-Off Analysis	0	0	0
Economic and Environmental Analysis	0	0	0
Test and Environmental Studies	0	0	0
Surveys or Reviews of Technical Operations	0	0	0
Total, Technical Support Services	0	0	0
	0	0	0
Management Support Services			
Analysis of Workload and Workflow	0	0	0
Directive Management Studies	0	0	0
Automated Data Processing	2,447	1,681	-766
Manpower Systems Analysis	0	0	0
Preparation of Program Plans	0	0	0
Training and Education	358	401	+43
Analysis of DOE Management Processes	0	0	0
Reports and Analyses Management and General Administrative Support	4,970	3,653	-1,317
Total, Management Support Services	7,775	5,735	-2,040
Total, Support Services	7,775	5,735	-2,040

Other Related Expenses by Category

(Dollars in Thousands)

	FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
Other Related Expenses			
Rent to GSA	979	827	-152
Rent to Others	0	0	0
Communication, Utilities, Misc.	1,411	1,237	-174
Printing and Reproduction	30	27	-3
Other Services	3,276	4,192	+916
Training	46	27	-19
Purchases from Gov. Accounts	120	52	-68
Operation and Maintenance of Equipment	572	263	-309
Supplies and Materials	829	825	-4
Equipment	444	647	+203
Working Capital Fund	301	370	+69
Total, Other Related Expenses	8,008	8,467	+459

Western Area Power Administration/
Colorado River Basins Power Marketing Fund/
Program Direction

**Transmission Infrastructure Program (TIP)
Funding Profile by Subprogram and Activity**

(Dollars in Thousands)

	FY 2012 Current	FY 2013 Annualized CR	FY 2014 Request
Transmission Infrastructure Program (TIP)			
Operating Expenses			
Operational Program Costs	4,319	6,071	7,722
Operational Project Financing Costs	0	151,000	0
Payments to Projects from Treasury Draw	35,711	44,331	22,245
Operating Reserve	10,068	2,876	292
Total, Operating Expenses	50,098	204,278	30,259
Offsets and Funding Sources			
Treasury Draw Estimates	-37,111	-45,816	-20,541
Payments for Operational Project Financing	0	-151,000	0
Advances and Collections	-10,496	-3,242	-3,799
Reimbursable Authority	-2,491	-4,220	-5,919
Total, Offsets and Funding Sources	-50,098	-204,278	-30,259
Total, Transmission Infrastructure Program	0	0	0
Full Time Equivalents*	16	(11)	(11)

* The FTEs reported for TIP are displayed in parenthesis to indicate that they are accounted for in the CROM budget.

Overview

Western established the Transmission Infrastructure Program (TIP) and Office to implement Title III, Section 301 of the Hoover Power Plant Act of 1984 as amended by the American Recovery and Reinvestment Act of 2009 (Recovery Act), which provided Western borrowing authority of up to \$3.25 billion for the purposes of: (1) 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 (2) delivering or facilitating the delivery of power generated by renewable energy resources constructed or reasonably expected to be constructed after the date of enactment.

All operating costs will be offset by alternative financing and collections. Western is not requesting any new annual appropriated funds for TIP.

Note: Values for TIP are based on early stages of project development, forecasts of current projects, and estimates of future project development. These estimates are to be regarded as non-binding representations that are subject to change.

While TIP now funds 11 FTEs within its budget, the FTEs are still counted in the CROM Budget, consistent with the original FY 2010 appropriation.

Benefits

- Promotes firm clean renewable energy resources.
- Provides reliable power delivery and strengthens the grid.
- Ensures long-term cost recovery and repayment of Federal investment

Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

	FY 2012 Current	FY 2014 Request	FY 2014 Request vs FY 2012 Current
Operational Program Costs Expenditures within this activity include indirect labor costs, contracts, overhead expenses, and general operating costs of the TIP office. The increase can be attributed to growth in project support needs.	4,319	7,722	+3,403
Operational Project Financing Costs Estimates for repayments to Treasury of cash draws.	0	0	0
Payments to Projects from Treasury Draw Estimates of payments to customers for development costs for projects. The reduction in this category reflects expected project completion and the effects of early repayment and close out of the MATL project.	35,711	22,245	-13,466
Operating Reserve Funding under this category is integral to the long term ability for TIP to be a self-sustaining program. Amounts fluctuate from year to year based on revenue receipt timing. The large decrease here is attributed to a lump sum repayment from MATL in FY 2012 in lieu of the planned annualized amounts over several years.	10,068	292	-9,776
Total, Transmission Infrastructure Program	50,098	30,259	-19,839

**Transmission Infrastructure Program (TIP)
Western Area Power Administration**

Overview

Western established the Transmission Infrastructure Program (TIP) and Office to implement Title III, Section 301 of the Hoover Power Plant Act of 1984 as amended by the American Recovery and Reinvestment Act of 2009 (Act) which provided Western borrowing authority of up to \$3.25 billion for the purposes of: (1) 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 (2) delivering or facilitating the delivery of power generated by renewable energy resources constructed or reasonably expected to be constructed after the date of enactment. All operating costs will be offset by alternative financing and collections. Western is not requesting any new annual appropriated funds for this program.

The Act also provided Western \$10 million of non-reimbursable funding as the initial source of program operating funds, as of fiscal year end 2012 all \$10 million has been obligated. TIP was established to be a self-sustaining, full-cost-recovery program through long term funding arrangements. Western collects additional revenue from project sponsors to support ongoing development of TIP projects, and fund the overhead and administrative costs of the program. Reimbursable and Advance Funding Agreements with project sponsors are currently required prior to initiating efforts to evaluate the technical and financial merits of any and all potential projects to ensure the full cost of services delivered are paid by project beneficiaries.

TIP complements Western’s primary mission of marketing and delivering Federal hydropower to customers across the West, and supports both Western and DOE priorities by facilitating delivery of renewable energy resources to market. As mandated, the program is completely separate and distinct from Western’s power marketing program.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Total, Transmission Infrastructure Program (TIP)	50,098
FY 2013	Total, Transmission Infrastructure Program (TIP)	204,278
FY 2014	Total, Transmission Infrastructure Program (TIP)	30,259

**Transmission Infrastructure Program
Projects
Overview**

Western's TIP has five transmission projects (summarized briefly below) that it has completed or is actively pursuing using its borrowing authority or customer Advance Funding Agreements. Many other projects will be considered for detailed evaluation and possible financing support pending receipt of Business Case proposals from the project developers.

Montana –Alberta Tie Ltd. (MATL)

On August 27, 2012, Enbridge prepaid approximately \$151 million principal outstanding under the \$161 million Western TIP loan. Western has successfully concluded its role as senior lender in the MATL project.

Trans West Express (TWE)

Western and a wholly-owned subsidiary of the Anschutz Corporation, the project developer, are each contributing 50 percent of the \$50 million development phase of the TWE project. As of the end of FY 2012, Western had contributed \$8.2 million of its \$25 million share of the development costs. In the event Western terminates its participation in the development of TWE, Western's contributions are fully reimbursable by the parental guarantee and letter of credit provided by the Anschutz Corporation. Western has the option to take an ownership share of the line should it participate in the construction phase of the project. Western could also have a capacity interest in the line. The project would be a 725-mile, 600-kilovolt DC transmission line from south central Wyoming to the El Dorado Valley south of Las Vegas, Nevada, a transmission gateway to California. Line capacity would be 3,000 MWs. The project is in the development phase which is expected to be complete at the end of 2014.

Electrical District No. 5 to Palo Verde Hub (ED5)

Western will pay an estimated \$91 million for 100 percent ownership of this project. As of the end of FY 2012 Western has contributed \$21.6 million. Repayment will be made to Treasury via a facilities use charge to utilities contracting for use of the capacity of the line. The project consists of building 45 circuit-miles of new and upgraded Western transmission line and purchasing capacity rights on 64 miles of the Southeast Valley Project (SEV) 500-kV line. Preliminary line capacity ratings indicate 156 MWs West to East and approximately 254 MWs East to West. Project construction has begun and is 31 percent complete. The estimated project completion is early in FY 2015.

Centennial West

Clean Line Energy Partners is developing an approximately 800-mile 500-600 kV HVDC line to transport 3,500 MWs of new renewable energy from eastern New Mexico via southern Nevada to California. Western has entered into an Advanced Funding Agreement with Centennial West Clean Line LLC for development phase work and will serve as a joint lead agency with the Bureau of Land Management in the preparation of the Environmental Impact Statement for the project, as well as provide technical expertise and support for the Western Electricity Coordinating Council path rating studies. When the development phase is complete, the project may be evaluated for borrowing authority under the TIP program.

Southline

Black Forest Partners is developing the Southline Transmission Project with Hunt Power LLC. Southline is a new high voltage transmission line from the El Paso region across southern New Mexico, into southeast Arizona (via upgrades) to the Palo Verde Hub west of Phoenix. The line would be a 1,000 MW bidirectional energy line engineered to enable renewable generation to reach load centers in California, Arizona, New Mexico and Texas. Western and Southline Transmission, LLC have executed an Advance Funding Agreement for development work to serve as the joint lead agency on National Environmental Policy Act (NEPA) planning, facilitate the Western Electricity Coordinating Council path rating process, and provide technical and developmental support in connection with the project. When the development phase is complete, the project may be evaluated for borrowing authority under the TIP program.

Estimate of Gross Revenues ^a

	(Dollars in Thousands)		
	FY 2012	FY 2013	FY 2014
Boulder Canyon Project	98,238	95,425	100,067
Central Valley Project	379,053	385,710	389,928
Central Arizona Project ^b	145,668	145,668	145,668
Falcon-Amistad Project	5,591	7,892	7,470
Fryingpan-Arkansas Project	19,717	19,679	19,319
Pacific Northwest-Southwest Intertie Project	30,789	31,219	32,079
Parker-Davis Project	60,513	57,409	70,914
Pick-Sloan Missouri Basin Program	538,047	524,334	509,977
Provo River Project	292	300	308
Washoe Project	822	822	822
Salt Lake City Area Integrated Projects	176,936	176,943	177,773
Total, Gross Revenues	1,455,666	1,445,401	1,454,325

^a For most power systems, amounts are based on the FY 2011 Final Power Repayment Studies (PRS). The Falcon-Amistad Project and 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 Proprietary Receipts

(Dollars in Thousands)

	FY 2012 Actual	FY 2013	FY 2014
MANDATORY			
Falcon Amistad Maintenance Fund, 89517810	986	220	420
Sale and transmission of electric power, Falcon and Amistad Dams, 89224500	900	2,337	1,274
Sale of Power and Other Utilities Not Otherwise Classified, 89224900	61,863	30,000	30,000
Sale of Power–Western–Reclamation Fund, 89500027	240,097 ^a	189,194	142,377
Total, Mandatory Receipts	303,846	221,751	174,071
DISCRETIONARY			
Offsetting Collections from the recovery of power related expenses – Western – 895068	115,983	308,417	230,738
Less Purchase Power and Wheeling expenses	-115,983	-308,417	-230,738
Subtotal, 895068	0	0	0
Offsetting Collections from the recovery of annual expenses – Western - 895068	189,932	191,094	203,989
Less Operating and Maintenance expenses	-33,323	-33,527	-35,796
Less Program Direction expenses	-156,609	-157,567	-168,193
Subtotal, 895068	0	0	0
Offsetting Collections from the recovery of power related expenses – Falcon Amistad Maintenance – 895178	3,949	5,335	4,911
Less Operating and Maintenance expenses	-3,949	-5,335	-4,911
Subtotal, 895178	0	0	0
Subtotal, Discretionary Receipts	0	0	0
Total, Proprietary Receipts	303,846	221,751	174,071

^a Actual includes \$2.8 million reported to Treasury in October 2012 on supplemental statement of transactions for September 2012.

Bonneville Power Administration

Bonneville Power Administration

Bonneville Power Administration (Bonneville, BPA)

Proposed Appropriations Language

Expenditures from the Bonneville Power Administration Fund, established pursuant to Public Law 93–454, are approved for construction of, or participating in the construction of, a high voltage line from Bonneville's high voltage system to the service areas of requirements customers located within Bonneville's service area in southern Idaho, southern Montana, and western Wyoming; and such line may extend to, and interconnect in, the Pacific Northwest with lines between the Pacific Northwest and the Pacific Southwest, and for John Day Reprogramming and Construction, the Columbia River Basin White Sturgeon Hatchery, and Kelt Reconditioning and Reproductive Success Evaluation Research, and, in addition, for official reception and representation expenses in an amount not to exceed \$5,000: Provided, That during fiscal year 2014, no new direct loan obligations may be made.

Explanation of Changes

The proposed appropriations language restricts new direct loans in FY 2014 as in FY 2013. This bill language is drafted consistent with the Credit Reform Act of 1990.

Please Note - The FY 2014 Bonneville Power Administration Congressional Budget submission includes FY 2013 budget estimates.

Bonneville finances its operations with a business-type budget under the Government Corporation Control Act, 31 U.S.C 9101-10, on the basis of the self-financing authority provided by the Federal Columbia River Transmission Act of 1974 (Transmission Act) (Public Law 93-454) and the U.S. Treasury borrowing authority provided by the Transmission Act, the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Pacific Northwest Power Act) (Public Law 96-501) for energy conservation, renewable energy resources, investment in capital fish facilities, and other purposes, the American Recovery and Reinvestment Act of 2009 (Public Law 111-5), and other legislation. Authority to borrow from the U.S. Treasury is available to Bonneville on a permanent, indefinite basis. The amount of U.S. Treasury borrowing outstanding^{1/} at any time cannot exceed \$7.70 billion. Bonneville finances its approximate \$4.3 billion annual cost of operations and investments primarily using power and transmission revenues and borrowing from the U.S. Treasury at rates comparable to borrowings at open market rates for similar issues.

This budget has been prepared in accordance with the Statutory Pay-As-You-Go Act (PAYGO) of 2010. Under PAYGO, all Bonneville budget estimates are treated as mandatory and are not subject to the discretionary caps included in the Budget Control Act of 2011. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to Bonneville estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because Bonneville operates within existing legislative authority, Bonneville is not subject to a "pay-as-you-go" test regarding its revision of current-law funding estimates.

^{1/} Amount of total bonds outstanding can be found on table BP-4 in the Additional Tables section.

Bonneville Power Administration

Funding Profile by Subprogram ^{1/}

(Accrued Expenditures in Thousands of Dollars)

	Fiscal Year			
	2012 (Actuals)	2013 Original ^{2/}	2013 Revised ^{2/}	2014 Proposed
Capital Investment Obligations				
Associated Project Costs ^{3/}	214,187	N/A	248,349	249,802
Fish & Wildlife	57,679	N/A	67,145	60,275
Conservation & Energy Efficiency ^{3/}	79,785	N/A	75,200	75,200
Subtotal, Power Services	351,651	N/A	390,694	385,278
Main Grid	64,070	N/A	213,321	233,097
Area & Customer Service	7,356	N/A	32,663	21,128
Upgrades & Additions	95,940	N/A	237,463	275,648
System Replacements	87,469	N/A	233,610	216,557
Transmission Services Total	254,836	N/A	717,057	746,430
Capital Equipment & Bond Premium	44,149	N/A	57,813	46,897
Total, Capital Obligations ^{3/}	650,637	937,196	1,165,563	1,178,605
Expensed and Other Obligations				
Expensed	2,832,169	2,464,963	2,929,697	3,046,259
Projects Funded in Advance	304,698	94,989	71,790	60,511
Total, Obligations	3,787,503	3,497,148	4,167,050	4,285,375
Capital Transfers (cash)	493,194	877,573	179,174	132,442
Bonneville Total	4,280,697	4,374,721	4,346,224	4,417,816
Bonneville Net Outlays	340,000		(10,000)	(10,000)
Full-time Equivalents (FTEs)	3,037	3,117	3,175	3,100

Public Law Authorizations include:

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

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

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

Flood Control Act of 1944, Public Law No. 78-543

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

Outyear Funding Profile by Subprogram ^{1/}

(Accrued Expenditures in Thousands of Dollars)

Fiscal Year

	2015	2016	2017	2018
Capital Investment Obligations				
Associated Project Costs ^{3/}	245,082	248,293	244,288	249,935
Fish & Wildlife	41,807	36,650	30,795	28,646
Conservation & Energy Efficiency ^{3/}	92,000	94,760	97,603	100,531
Subtotal, Power Services	378,890	379,703	372,686	379,112
Main Grid	278,961	276,556	53,989	63,513
Area & Customer Service	14,696	14,906	14,208	14,770
Upgrades & Additions	217,676	133,527	99,563	70,681
System Replacements	199,701	195,635	234,792	242,161
Transmission Services	711,034	620,624	402,553	391,125
Capital Equipment & Bond Premium	47,982	49,068	50,155	49,579
Total, Capital Obligations ^{3/}	1,137,906	1,049,395	825,393	819,817
Expensed and Other Obligations				
Expensed	3,177,380	3,243,021	3,449,963	3,515,423
Projects Funded in Advance	48,760	49,687	56,831	69,421
Total, Obligations	4,364,045	4,342,103	4,332,187	4,404,661
Capital Transfers (cash)	150,602	116,422	83,788	102,493
BPA Total	4,514,647	4,458,525	4,415,975	4,507,155
Bonneville Net Outlays	(10,000)	(10,000)	(10,000)	(10,000)
Full-time Equivalents (FTEs)	3,100	3,100	3,100	3,100

These notes are an integral part of the preceding tables.

- 1/ This budget has been prepared in accordance with PAYGO. Under PAYGO all Bonneville budget estimates are treated as mandatory and are not subject to the discretionary caps included in the Budget Control Act of 2011. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to Bonneville estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because Bonneville operates within existing legislative authority, Bonneville is not subject to a "pay-as-you-go" test regarding its revision of current-law funding estimates.
- 2/ Original estimates reflect Bonneville's FY 2013 Congressional Budget Submission. Revised estimates, consistent with Bonneville's annual near-term funding review process, provide notification to the Administration and Congress of updated capital and expense funding levels for FY 2013.
- 3/ Includes infrastructure investments designed to address the long-term needs of the Northwest and to reflect significant changes affecting Bonneville's power and transmission markets.

Additional Notes

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 2012 is \$2,697 million.

Refer to 16 USC Chapters 12B, 12G, 12H, and Bonneville's other organic laws, including P.L. 100-371, Title III, Sec. 300, 102 Stat. 869, July 19, 1988 regarding Bonneville's ability to obligate funds.

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). Actual Net Outlays could differ from estimates due to changing market conditions, streamflow variability, and continuing restructuring of 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 Northwest Power Act are also assumed.

FTE outyear data are estimates and may change.

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 Bonneville's multi-year performance targets that lay out the course for achieving Bonneville's long-term objectives. Outyear capital investment levels support Bonneville'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.

Overview and Accomplishments

Bonneville provides electric power, transmission, and energy efficiency throughout the Pacific Northwest. Bonneville serves a 300,000 square mile area including Oregon, Washington, Idaho, Western Montana, and parts of Northern California, Nevada, Utah, and Wyoming with a population of about 12.3 million people. Bonneville markets the electric power produced from 31 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) – known as Associated Projects. Bonneville also acquires non-Federal power, including the power from the nuclear power plant, Columbia Generating Station (CGS), to meet the needs of its customer utilities. Bonneville maintains and operates 15,272 circuit miles of transmission lines, 262 substations and associated power system control and communications facilities over which this electric power is delivered. Bonneville has capital leases for certain transmission facilities. Bonneville also supports the protection and enhancement of fish and wildlife, and promotes conservation and energy efficiency, as part of its efforts to preserve and balance the economic and environmental benefits of the Federal Columbia River Power System (FCRPS).

The organization of Bonneville's FY 2014 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 Operations & Maintenance (O&M) Costs, and Northwest Power and Conservation Council (Planning Council or Council).

The mission of Bonneville 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: (1) an adequate, efficient, economical and reliable power supply; (2) an open access transmission system that is adequate for integrating and transmitting power from Federal and non-Federal generating units, providing service to Bonneville's customers, providing interregional interconnections, and maintaining electrical reliability and stability; and (3) mitigation of the FCRPS impacts on fish and wildlife. Bonneville is legally obligated to provide cost-based rates and public and regional preference in its marketing of power. Bonneville sets its

rates as low as possible consistent with sound business principles and sufficient to ensure the full recovery of all of its costs, including timely repayment of the Federal investment in the system. Bonneville's vision is to provide: (1) high reliability; (2) low rates consistent with sound business principles; (3) responsible environmental stewardship; and (4) accountability to the region. Bonneville pursues this vision consistent with its three core values of trustworthy stewardship of the FCRPS, collaborative relationships, and operational excellence.

Alignment to Strategic Plan

Bonneville contributes to the Administration's clean energy goals and aligns to Goal 1 of the Department of Energy's (DOE) Strategic Plan to *Transform our Energy Systems: Catalyze the timely, material, and efficient transformation of the nation's energy system and secure U.S. leadership in clean energy technologies*. As part of its responsibilities, Bonneville also promotes energy efficiency, renewable resources and new technologies.

To validate and verify program performance, Bonneville conducts various internal and external reviews and audits. Bonneville conducts extensive review within the region of both capital and expense programs. In addition, Bonneville's programmatic activities are subject to review by Congress, the U.S. Government Accountability Office (GAO), the DOE's Inspector General, and other governmental entities. Bonneville's financial statements are audited annually by an independent external auditor. Bonneville has received an unqualified audit opinion since the mid-1980s and no material weaknesses have been identified in controls over financial reporting.

Legislative History

The Bonneville Project Act of 1937 provides the statutory foundation for Bonneville's utility responsibilities and authorities. In 1974, passage of the Federal Columbia River Transmission System Act (Transmission Act) applied provisions of the Government Corporation Control Act (31 U.S.C. §§ 9101-9110) to Bonneville. The Transmission Act legislation provided Bonneville with "self-financing" authority, 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 authorized Bonneville 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 obligations and responsibilities to encourage: electric energy conservation to meet regional electric power loads placed on Bonneville; develop renewable energy resources; within the Pacific Northwest; assure adequate, efficient, economical, and reliable power supply; regional participation and planning; and protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries. The Northwest Power Act also established the statutory framework for Bonneville's administrative rates-setting process and established judicial review of Bonneville's final decisions in the Ninth Circuit of the U.S. Court of Appeals.

As of 2013, Congress has provided Bonneville with Treasury borrowing authority of \$7.7 billion.

The Columbia River Treaty

The Columbia River Treaty (CRT) enables a wide range of benefits primarily related to increased generation and flood control in British Columbia and the Pacific Northwest. Signed in 1961 and ratified in 1964, the CRT is known throughout the world as one of the best and most successful examples of a transboundary water treaty. The 60 years of prepaid flood control benefits under the CRT now expire in 2024. In addition, the CRT includes a unilateral right for either country to terminate beginning in 2024 with at least 10 years' notice provided. The U.S. Entity for the CRT, consisting of Bonneville and the Corps, has initiated a process to discuss with the region's state governments and tribes, as well as non-governmental entities, issues related to the post-2024 future of the CRT. The U.S. Entity has established management structures to engage fellow Federal agencies, regional sovereigns and non-sovereign stakeholders to help develop a U.S. Entity recommendation to be provided to the State Department in late calendar year 2013.

Judicial and Regulatory Activity

The Energy Policy Act of 2005 authorized the Federal Energy Regulatory Commission (FERC) to approve and enforce mandatory electric reliability standards with which users, owners and operators of the bulk power system, including Bonneville, are required to comply. These standards became enforceable on June 18, 2007, and compliance is monitored by the North American Electric Regulatory Corporation (NERC) and the regional reliability organizations. DOE has taken the position that financial penalties may not be imposed on federal agencies for violations of electric reliability standards.

Fish and Wildlife Program Overview

Bonneville is committed to continue funding its share of the region's efforts to protect listed Columbia River 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 (Council's Program). Sub-basin plans that include prioritized strategies for mitigation actions will help guide project selection to meet both Bonneville's Endangered Species Act (ESA) and Northwest Power Act responsibilities.

Included with the budget schedules section of this document is the current tabulation of Bonneville's fish and wildlife costs from FY 2000 through FY 2012.

Infrastructure Investment

Bonneville is moving forward with infrastructure investments in the Pacific Northwest to meet transmission needs that will also continue to support a competitive wholesale market in the Western Interconnection, which encompasses 14 western states, two Canadian provinces and one Mexican State. The McNary-John Day line – completed in FY 2012 under budget and ahead of schedule – added 79 miles, and 3 additional proposed transmission lines will add more than 140 miles of lines to the Northwest transmission grid, improving reliability in combination with other transmission projects, will allow Bonneville to provide service to about 3,881 megawatts (MWs) of requests for Bonneville transmission, including service for 3,138 MWs of additional renewable resource generation. The proposed transmission lines include Bonneville's I-5 Corridor Reinforcement Project, which is currently undergoing environmental review and Central Ferry-Lower Monumental 500Kv Reinforcement and Big Eddy-Knight 500Kv transmission line and substation. If all three proposed projects are constructed along with the McNary-John Day line they will provide almost 6,000 MW of new transmission service.

In FY 2012, Bonneville signed two agreements through which the agency agrees to participate with two investor owned utilities in the environmental work and permitting for the Boardman-to-Hemingway 500-kilovolt line. Participation in this preliminary review keeps Bonneville's options open for serving its six southeast

Idaho preference customers after the agreements through which Bonneville currently serves those customers are terminated. Bonneville has not made a decision to co-develop or purchase capacity in these projects.

These efforts will help meet the increasing demand for Bonneville's service to meet regional greenhouse gas reduction and environmental goals of western states. In support of these goals and as part of the Regional Dialogue implementation, Bonneville is working with stakeholders to determine its role in the development and use of energy efficiency for the post-2012 period. Bonneville is continuing to target transmission investments in those areas with reliability needs.

Bonneville has recently experienced significant growth within its balancing area of installed variable renewable generation, primarily in the form of wind generation. Since 2001, installed wind generation has grown from 115 MW to 4,711 MWs by FY 2012. Bonneville estimates as much as 5,800 MW could be in place by 2015. This substantial increase in variable renewable generation has resulted in additional uncertainties in the balance between load and generation required for maintaining a reliable grid. Wind also is a non-dispatchable source of energy, meaning it cannot be relied upon for capacity. As a result, Bonneville has implemented and continues to study operational tools for integrating this variable generation more cost effectively and reliably. In addition, Bonneville is currently studying the feasibility of further developing storage technologies, including pump storage capabilities at the John W. Keys III Pump Generating Plant.

Bonneville considers strategies other than the use of Treasury borrowing authority to sustain funding for its infrastructure investment requirements as well. These additional strategies include 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 document. This FY 2014 Budget assumes \$15 million of annual reserve financing in FYs 2013-2018 for transmission infrastructure capital, which is included in this budget under Projects Funded In Advance.

Radio Spectrum Communications

Bonneville's wireless communication system is used to operate and control critical national transmission grid infrastructure in a reliable, secure and safe manner.

Bonneville's communication systems are designed to meet strict reliability/availability objectives as required by NERC and Western Electricity Coordinating Council (WECC) standards. Concerning proper spectrum stewardship, Bonneville designs highly efficient radio systems which use minimal radio frequency (RF) channel bandwidths to meet critical mission needs. However, in certain circumstances, efficiently designed spectrum radio systems will require broad RF channels and/or lower state RF modulation schemes to meet existing and future requirements in order to meet operational and reliability/availability objectives.

In order to meet Bonneville's mission/operational requirements, RF communication equipment approved for system use goes through a rigorous evaluation and testing process. RF spectrum efficiency factors are considered during the evaluation/testing period. RF terminal equipment approved for use is normally purchased directly from vendors and is not typically supplied through an RFP process.

Bonneville operational telecommunications and other capital equipment and systems are acquired using Bonneville's self-financing and procurement authorities. The Bonneville budget includes a system-wide electric reliability performance indicator, consistent with NERC rules, to track and evaluate performance.

Bonneville may share temporarily-available spare capacity on its RF communication system with other government agencies (both Federal and State), and with other electric utilities in the region whose power systems interconnect with Bonneville. Non-critical administrative traffic is typically supported by commercial carrier enterprises. However, to meet NERC/WECC electrical bulk transmission requirements, Bonneville exclusively operates highly critical transmission control traffic over its private telecommunication system as Bonneville has no control over the reliability/availability of the commercial enterprise nor have control on how quickly critical operational control circuits are restored to active service during an interruption.

For high capacity communication system applications, Bonneville considers and operates non-spectrum dependent alternatives such as fiber optic cable infrastructure systems.

During FY 2014, Bonneville plans to begin upgrading the VHF land mobile system and to install a number of digital SONET rings typically consisting of fiber segments

in combination with point-to-point microwave hops operating in the 4 GHz and 7/8 GHz bands. These various telecommunication systems operate within Bonneville's approximate 300,000 square mile utility responsibility service territory (Oregon, Washington, Idaho, Montana) with the majority of the RF infrastructure located in low population-rural areas.

In FY 2011, the PMAs, in total, had approximately 33,730 miles of transmission lines, 609 electric substations, sold 135.8 billion kilowatt hours of electric power from a total of 134 power plants with an installed capacity of 38,437 MW and earned \$4.9 billion in power and transmission revenues. The power plants are primarily owned by the Corps and Reclamation, which also utilize federal radio spectrum to preserve very high operational telecommunications and power system reliability. Bonneville markets all of the electric power from the Energy Northwest nuclear power generating plant in Hanford, Washington.

Bonneville expects to return approximately \$8 million of excess funds remaining in the Spectrum Relocation Fund in FY 2015.

Financial Mechanisms

Bonneville's program is treated as mandatory and nondiscretionary. Bonneville is "self-financed" by the ratepayers of the Pacific Northwest and does not receive annual appropriations from Congress. Under the Transmission Act, Bonneville funds the expense portion of its budget and repays the Federal investment with revenues from electric power and transmission sales. 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 mitigation and recovery needs. Through FY 2012, Bonneville has returned approximately \$28.1 billion to the Treasury, of which about \$3.1 billion was for payment of FCRPS O&M and other costs, \$14.1 billion for interest, and \$10.9 billion for amortization of appropriations and bonds.

In this FY 2014 Budget, the term Bonneville "bonds" refers to the debt instruments under which Bonneville receives advances of funds from the Treasury. This reference is consistent with section 13(a) of the Transmission Act (P.L. 93-454), which defines Bonneville bonds as all bonds, notes, and other evidences of indebtedness issued and sold to the Treasury.

Bonneville and Treasury have a comprehensive banking arrangement that covers Bonneville's short- and long-term Federal borrowings and establishes a phased-in approach to a market-based investing program. This provides Bonneville with the ability to borrow to finance assets and, on a short term basis, to cover Northwest Power Act-related operating expenses. This latter ability provides Bonneville with much needed liquidity to help manage within-year cash flow needs and mitigate risk. Access to this use of Treasury borrowing authority has been incorporated into and relied upon in Bonneville's rate-setting process.

Bonneville recently initiated a Power Prepayment Program under which all Bonneville preference customers had an opportunity to submit formal offers to provide lump sum payments to Bonneville as prepayments of a portion of their power purchases through September 30, 2028, the termination date of the Long-Term Regional Dialogue Power Sales Contracts. Bonneville has formally accepted offered power prepayments from four preference customers, as described below.

Upon Bonneville's receipt of the agreed-to, lump-sum prepayments, the selected preference customers shall be entitled to future portions of their electricity from Bonneville without further payment. The power prepayments will be reflected in the customers' future power bills from Bonneville as fixed, equal monthly prepayment credits. In effect, the amount of electricity that is prepaid may vary by month, depending on Bonneville's power rates and rate schedules that apply to electricity purchases by the prepaying customers in the related month. Because this is structured as a variable amount prepayment and not as a fixed-price/fixed-amount type of prepayment, Bonneville's flexibility to establish rates for the electric power that is prepaid will not be compromised.

This phase of the program involved determining the amount of the prepayments and the amount of resulting credits through a competitive process in which Preference Customers submitted formal offers to participate in the program. Bonneville sequenced the bid and acceptance process so that it would know the prepayment amounts and credits in setting power rates for the FY 2014-2015 rate period.

Bonneville plans to use the amounts it receives from the prepayment program as a source to fund needed FCRPS hydroelectric investments during the two-year rate

period. Bonneville accepted offers from four Preference Customers for roughly \$350 million in aggregate power prepayments, received in March 2013. This is estimated to result in approximately \$2.5 million of aggregate power prepayment credits per month through FY 2028.

Depending on a variety of factors it is possible that Bonneville may seek to implement later phases of the Power Prepayment Program in connection with future FCRPS hydroelectric investment needs.

Treasury Payments and Budget Overview

Bonneville made its full planned FY 2012 payment of \$886 million to the Treasury (and included \$53 million in advanced amortization as part of Bonneville debt optimization program). Total 4(h)(10)(C) credits associated with fish mitigation and recovery and applied toward Bonneville's Treasury payment, were about \$76.5 million for FY 2012. For FY 2013, Bonneville plans to pay the Treasury \$675 million: \$179 million to repay investment principal, \$402 million for interest, and \$94 million for Associated Project costs and pension and post-retirement benefits. The FYs 2014 and 2015 Treasury payments are currently estimated at \$671 million and \$732 million, respectively. The FYs 2013-2015 4(h)(10)(C) credits are estimated at \$83 million, \$95 million, and \$92 million, respectively.

Estimates of interest and amortization levels for outyear Treasury payments are based on estimates from the 2012 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, Bonneville 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 2012 is about \$2,697 million. Amortization estimates in this FY 2014 Budget include planned amortization in advance of scheduled amortization (due to earlier EN debt optimization refinancing) in FYs 2011 and 2012 of \$70 million and \$53 million, respectively, consistent with rate case documentation.

Bonneville has direct funding arrangements with the Corps and Reclamation to pay the power related portion of operations and maintenance (O&M) and capital investments. Direct funded capital costs, previously funded through appropriations, are now being paid

through Bonneville's borrowing from the Treasury. Bonneville's total direct funding was \$520 million in FY 2012.

This FY 2014 Budget proposes Bonneville accrue expenditures of \$3,046 million for operating expenses, \$61 million for Projects Funded in Advance (PFIA), \$1,179 million for capital investments, and \$132 million for capital transfers in FY 2014.

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

Current Financial Status

Bonneville 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. Bonneville employs a strategic planning process using the balanced scorecard model to align all business units around specific goals and align resources to achieve these goals. Results from these efforts include continued efficiency gains, performance integration improvements, and a high assurance for repayment of Treasury borrowing.

After many years of sustained effort, Bonneville recovered from the financial effects of the 2000-2001 West Coast power crisis. Continued cost management efforts helped Bonneville regain adequate financial reserve levels despite mostly below-average water years. These gains are helping Bonneville 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 U.S. taxpayers.

Rate proposals for FY 2012-2013 Power and Transmission rates were confirmed by FERC December 31, 2012 and reflect Bonneville's Long-Term Regional Dialogue Policy and Record of Decision (Regional Dialogue Policy) in July 2007.

Budget Estimates and Planning

This FY 2014 Budget includes capital and expense estimates based on Bonneville's Integrated Program Review (IPR) report. FY 2012 costs are based on Bonneville's FY 2012 audited actuals.

Capital funding levels reflect Bonneville'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 2014 Budget reflect executive management decisions from Bonneville's Capital Allocation Board (CAB) and the associated capital review process. Bonneville utilizes a structured capital project selection process requiring submission of a standardized business case for review by Bonneville. Each business case consists of a description of the project, a clear statement of objectives, description and mitigation of risks, and a rigorous analysis of project costs including a status quo assumption and preferred alternatives. In addition, both annual and end of project targets are set for each project covering cost, scope, and schedule. Progress reports on these targets are provided to Bonneville's senior executives at least quarterly.

The FYs 2013-2018 revenue estimates in this budget, included in the Net Outlay formulation, are calculated consistent with cash management goals. The revenue estimates reflect assumed adjustments, which include the use of a combination of tools, including: 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. The revenue estimates also include depreciation and Treasury repayment credit assumptions. These Treasury repayment credits offset, among other things, Bonneville'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 reflect current cost saving actions taken to date and anticipated cash management goals. Net Outlay estimates are expected to reflect anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses.

Overview of Detailed Justifications

Bonneville's Detailed Justification Summaries, included in this FY 2014 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 Bonneville's FY 2014 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 expense, 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 expected use of \$1,179 million in bonds to be sold to the U.S. Treasury in FY 2014.

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 Bonneville's near-term capital funding review process and Bonneville's standard operating budget process, this FY 2014 Budget includes updated capital funding levels for FY 2013. 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 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 (more detailed 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 2014, budget expense obligations are estimated at \$3,046 million. The total program requirements of all Bonneville programs include estimated budget obligations of \$4,285 million in FY 2014.

Evidence and Analysis in the Budget

Consistent with the President's emphasis on evidence and rigorous evaluation in the budget, Bonneville has undertaken several initiatives to determine appropriate budget expenditures.

Bonneville's strategy specifically calls out the need for its key systems and processes to employ best practices and emphasize cost performance. In order to aggressively pursue cost reductions and revenue enhancements, several years ago Bonneville, along with external contractor KEMA, embarked on the Enterprise Process

Improvement Program (EPIP). KEMA looked at 70 different functions across Bonneville and, using benchmarking and prioritization, identified 23 where potential efficiencies could be found. Bonneville then launched individual EPIP projects across the agency to develop and implement specific changes in how we conduct our business.

As the EPIP projects concluded, Bonneville built on the EPIP work by focusing on institutionalizing operational excellence – continuous improvement that produces more efficient and effective ways to deliver on Bonneville's mission and vision. Bonneville has established a Business Process and Continuous Improvement organization which provides consultation and advice on benchmarking and other operational excellence efforts. In FY 2012, Bonneville embarked on an extensive assessment of utility benchmarking and elected to adopt a benchmarking program to support meaningful evidence of efficiency and cost-effectiveness. The Bonneville Benchmarking & Operational Excellence Program will comprehensively benchmark four specific strategic focus areas in FY 2013.

Performance Measures

Performance Goal (Measure)	BPA Hydropower Generation Efficiency Performance - Achieve 97% 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.		
Fiscal Year	2012	2013	2014
Target	≥ 97.5 percent	≥ 97.5 percent	≥ 97.5 percent
Result	Met - 102		
Endpoint Target	Maintain at least 97.5% Heavy-Load-Hour Availability		

Program	Bonneville Power Administration		
Performance Goal (Measure)	BPA Repayment of Federal Power Investment - Meet planned annual repayment of principal on Federal power investments.		
Fiscal Year	2012	2013	2014
Target	≥ 100 percent	≥ 100 percent	≥ 100 percent
Result	Met - 100		
Endpoint Target	Continue to meet planned annual repayment of principal		

Program	Bonneville Power Administration		
Performance Goal (Measure)	BPA System Reliability Performance - NERC Rating - Attain average North American Reliability Council (NERC) compliance ratings for NERC Control Performance Standard 1 (CPS1) which measures generation/load balance on one-minute intervals (rating > or = 100).		
Fiscal Year	2012	2013	2014
Target	≥ 100 CPS1 rating	≥ 100 CPS1 rating	≥ 100 CPS1 rating
Result	Met - 132.69		
Endpoint Target	Maintain CSP1 score of >= 100		

**Power Services - Capital
Funding Schedule by Activity**

	(Accrued Expenditures) (Dollars in Thousands)		
	FY 2012	FY 2013	FY 2014
Power Services - Capital			
Associated Project Costs	214,187	248,349	249,802
Fish & Wildlife	57,679	67,145	60,275
Energy Efficiency	79,785	75,200	75,200
Total, Power Services - Capital	351,651	390,694	385,278

Outyear Funding Schedule

	(Accrued Expenditures) (Dollars in Thousands)			
	FY 2015	FY 2016	FY 2017	FY 2018
Total, Power Services - Capital	378,890	379,703	372,686	379,112

Program Overview

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 FCRPS 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 hydroelectric 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 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

ensuing 12 to 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 2008, and again in 2010, Bonneville 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 2014 Budget 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.

Bonneville’s fish and wildlife capital program is directed at activities that improve Columbia River Basin fish and wildlife resources, including projects designed to increase juvenile and adult fish passage in tributaries and at mainstem dams, to increase fish production and survival through construction of hatchery and acclimation facilities, land acquisitions for resident fish

and wildlife that follow Bonneville's Capitalization Policy, and fish monitoring facilities. Capital project funding will focus on integrating ESA-related priorities with the region's Columbia River Basin Fish and Wildlife Program in order to efficiently meet Bonneville's costs of the mitigation of hydrosystem impacts to Columbia River Basin fish and wildlife and facilitating salmon and steelhead recover.

Projects recommended by the Council undergo independent review as directed by the 1996 Energy and Water Appropriations Act, which added section 4(h)(10)(D) to the Northwest Power Act. As a result, the Council appoints 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 continue this review cycle in 2013.

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. Sub-basin plans that include prioritized strategies for mitigation actions will help guide project selection that meets both Bonneville's ESA and Northwest Power Act responsibilities. In order to address the *in lieu* provision of the Northwest Power Act, which prohibits Bonneville from funding mitigation that other entities are authorized or required to undertake, 16 U.S.C. § 839b(h)(10)(A), Bonneville 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.

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 Bonneville Power Administration/
Power Services – Capital

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 Council's 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. This includes a number of wildlife mitigation settlements for dam impacts, most recently a 2010 agreement addressing the Willamette Basin in Oregon. It includes the construction and operation of hatcheries to offset fish habitat lost from the development and operation of the FCRPS. 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 NOAA and USFWS.

- In February 2006, USFWS issued a new BiOp for Libby Dam for the Kootenai River white sturgeon and bulltrout.
- In 2000 USFWS issued a BiOp for FCRPS impacts on bull trout. In 2010 USFWS designated critical habitat for bull trout. The action agencies have begun to prepare a biological assessment covering FCRPS operational effects on bull trout critical habitat.
- In May 2008, NOAA issued a new FCRPS BiOp for salmon and steelhead, augmented in a 2010 Supplemental BiOp and Adaptive Management Implementation Plan, which continue to be challenged in Oregon District Court. On August 2, 2011 Federal District Judge Redden issued an opinion and order rejecting the 2008/2010 BiOp because it failed to identify specific and verifiable mitigation plans beyond 2013. But he left the BiOp in place through 2013 while ordering a new supplemental BiOp by January 1, 2014.
- In July 2008, USFWS and NOAA issued Willamette River BiOps to address impacts from 13 federal dams on salmon, steelhead, Oregon chub, and bull trout.

These BiOps collectively require the action agencies (Corps, Reclamation, and Bonneville) to implement hydro, habitat, and hatchery 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.

In addition to the 2008 NOAA FCRPS BiOp, the action agencies also signed the 2008 Columbia Basin Fish Accords (Fish Accords or Accords) with five Northwest Tribes, and the states of Idaho and Montana. In 2009, an agreement was signed with the state of Washington and federal agencies (the state of Washington Estuary agreement). And in 2012 the federal agencies signed an agreement with the Kalispel Tribe of Indians covering Albeni Falls Dam and FCRPS operations. The Fish Accords supplement the activities encompassed within the 2008 BiOp and the Council's Program by providing firm commitments to mitigation actions and securing funding for the next 10 years. As a result of the new BiOp and the Fish Accords, as discussed below, expenditures above and beyond those planned in FY 2009 are required in FY 2011 and beyond.

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

Energy Efficiency 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 Council's Power Plan. The Council's 6th Power Plan, finalized in February 2010, established a regional target of 1,200 aMW of energy efficiency in 2010 through 2014. Bonneville, in collaboration with its Public Power Customers, has taken responsibility for Public Power's share of the regional target, approximately 42 percent (504 aMW) of that target. Bonneville anticipates that between 175 and 300 aMW of this amount will be acquired under its capital energy efficiency program. Beginning in FY 2012 at least 70% of this energy efficiency budget will be allocated to utilities to fund energy efficiency incentives with the remainder going to support regional programs and completion of a utility energy efficiency reporting system. Program performance measurements (\$/aMW) indicate that Bonneville is realizing value for these investments relative to other resources.

Long-term investments in energy efficiency help buffer the FCRPS against future resource uncertainties. During periods of price volatility, energy efficiency 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 to avoid environmental impact.

Accomplishments

- Filed final rate proposal for FYs 2012-2013 with FERC.
- Facilitated integration of 4,711 MW of wind generation by FY 2012.
- Completed Kaplan unit linkage repairs at John Day and Lower Granite.
- Completed exciter replacement at Libby.
- Completed intake crane replacements at Lower Granite and Lower Monumental.
- Completed transformer installations at Grand Coulee and continue the pre-overhaul capital work in the Grand Coulee Third Power Plant.
- The returns of adult salmon and steelhead to Bonneville dam between 2009 and 2012 vary by species, but many stocks (e.g., Snake River fall Chinook and Snake River sockeye) have enjoyed returns that have been among the highest seen in recent years. These returns are a combination of wild and hatchery fish. The survival of juvenile salmon and steelhead migrating through the Snake and Columbia Rivers is also much improved over recent years.
- Conducted analysis and demonstrations of Demand Response on a cost share basis with our utility customers.

Explanation of changes

Bonneville's budget includes \$385 million in FY 2014 for Power Services capital which is a 0.6 percent decrease over the FY 2013 forecasted level. The FY 2014 level reflects a continuing need for investment in the hydro electric system assets including a ramp up of the pre-overhaul capital work in the Grand Coulee Third Power Plant, funding necessary to implement the BiOp, Fish Accords, Columbia Basin Fish and Wildlife activities, and a focus on energy efficiency initiatives within the region.

The FY 2014 budget increases the levels for Associated Projects (+\$ 1.5 million), decreases Fish & Wildlife (-\$ 6.9 million), and Energy Efficiency remains constant.

Strategic Management

Bonneville provides electric power while supporting the achievement of its vital responsibilities for fish and wildlife, energy efficiency, renewable resources and low-cost power in the Pacific Northwest. Bonneville will continue to implement the following strategies to serve the region:

1. 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.
2. 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.
3. Bonneville is committed to continue funding efforts to protect listed fish and wildlife species in the Columbia Basin under the ESA and to work closely with the Council, regional fisheries

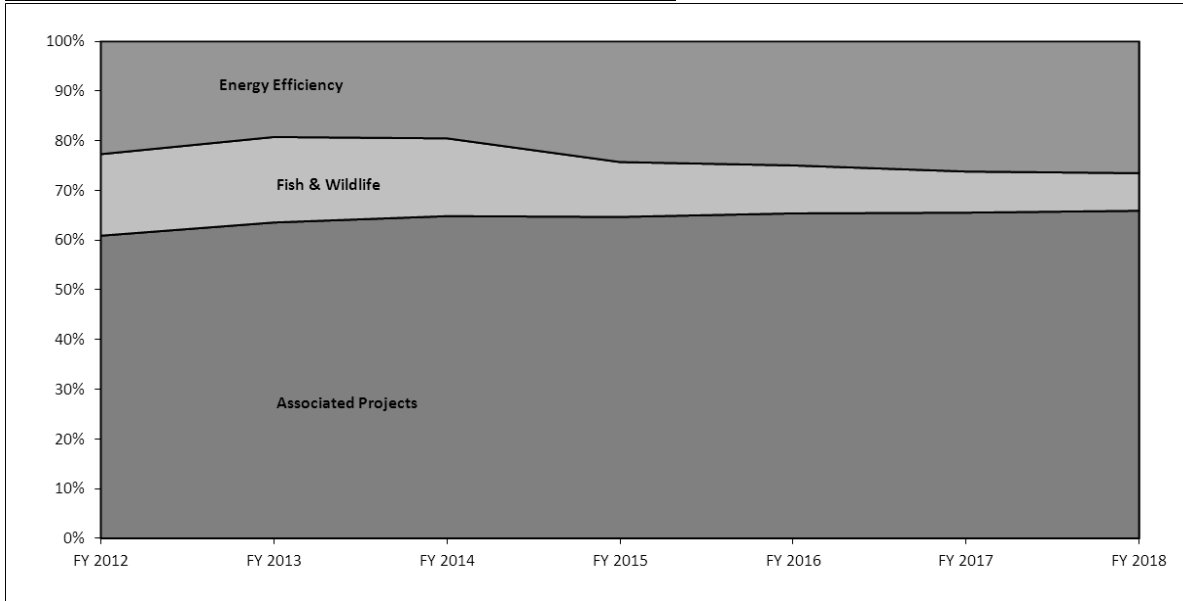
managers, and other Federal agencies to prioritize and manage fish and wildlife program projects.

4. Private and public sector partners have been and continue to be an important part of Bonneville's collaborative efforts to promote and foster efficient use of energy.
5. Bonneville has partnered and assisted with a DOE Wind Power crosscutting initiative to strengthen energy security by adding alternative sources of renewable energy.

The following external factors present the strongest impact to overall achievement of the program's strategic goal:

1. Continually changing economic and institutional conditions
2. Competitive dynamics
3. Ongoing changes in the electric industry

Relative Outyear Funding Priorities in Power Services Capital



Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

FY 2013	FY 2014	FY 2014 vs FY 2013
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Associated Projects

The increase reflects the continuing need for investment in the hydro electric system assets.

248,349	249,802	+1,454
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Fish & Wildlife

The decrease reflects a reshaping of funding necessary to implement the BiOp, Fish Accords, Columbia River Basin Fish and Wildlife activities.

67,145	60,275	-6,870
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Energy Efficiency

The funding amount reflects a continuing focus on energy conservation initiatives within the region.

75,200	75,200	+0
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TOTAL Funding Change, Power Services Capital

390,694	385,278	-5,416
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**Associated Projects
Overview**

Bonneville 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.

The work is focused on improving the reliability of the FCRPS, increasing its generation efficiency or capacity through turbine runner replacements, optimizing hydro facility operation and new unit construction. 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.

Funding and Activity Schedule

Corps of Engineers (known projects to date)

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	<ul style="list-style-type: none"> • Continued hydro optimization investigations and equipment installations at selected projects through the power plant efficiency improvements project. • For Bonneville, continued elevator replacement, main unit breakers, station service upgrades, headgate refurbishment/replacements, fire protection upgrades, protective relay replacements, and additional crane and deck refurbishments. Began governor replacements, vibration and air gap monitoring, and transformer improvements. • For John Day, completed powerhouse unit 11 repair and bridge crane refurbishment. Continued fire protection upgrades, protective relay replacements, governor replacements, and elevator rehabilitation. Began BLH turbine hub upgrades, DC system upgrades and station service transformer replacements. • For The Dalles, completed powerhouse roof replacement and spare 230 kV transformer purchase, Continued governor replacement, elevator rehabilitation, DC system upgrades, and fire protection design and upgrades. Began SCC control replacement and tailrace gantry crane rehabilitation. • For the Willamette plants, completed protective relay replacements at Green Peter and Foster and bridge crane refurbishment at Hills Creek. Continued transformer oil/water separation at Cougar and Hills Creek, electric reliability upgrades at Detroit, and emergency engine generator at Lookout Point. Continued governor replacement at Foster, Hills Creek, Green Peter, and Lost Creek. Continued turbine runner replacements at Hills Creek and Lookout Point, penstock roller gate work at Lookout Point and spillway tainter gate work at Dexter and Big Cliff, fire protection upgrades at Lost Creek. Began governor replacements at Big Cliff, Cougar, Detroit, Lost Creek and Dexter. Began electrical reliability upgrades at Dexter and transformer oil/water separation at Green Peter, Dexter, and Foster. • For Albeni Falls, completed auxiliary board upgrades and hi-lift pump replacement, continued DC system boards and breaker replacement, and intake and spillway crane modernization. Began spillway gate modifications. • For Libby, completed exciter replacement and continued governor replacement design. • For Chief Joseph, continued 480-V upgrade/SQ0 substation replacement, exciter replacements, protective relay replacements, automatic synchronizer replacement, DC and preferred AC upgrades and turbine replacements. Began governor replacement design. 	143,457

Fiscal Year	Activity	Funding (Dollars in Thousands)
	<ul style="list-style-type: none"> • For McNary, completed station service governor replacements. Continued protective relay replacements, generator winding replacements, station service rehabilitation, and heat pump replacement. Continued fishway exit cranes replacement, potable water system upgrade, turbine design and replacement, and levee drainage pump station upgrades. Began main unit governor replacement design. • For Dworshak, continued unit 3 standby generator guide bearing and oil cooler assemblies and powerhouse HVAC upgrade. . • For Ice Harbor, completed tailrace crane rehabilitation, T1, T2, T3 cooler leak repair, project storage building, and XW-5 breaker repair. Continued units 2 and 3 runner replacements and T6 transformer replacement. Continued low voltage switchgear SQ board replacements and DC system upgrade. Started main unit governor replacement design, and drainage and dewatering pump upgrade. • For Little Goose, completed thrust bearing shoes, runner and oil coolers replacement and diesel generator replacement. Continued exciter replacements, powerhouse bridge crane rehabilitation, wastewater treatment plant upgrades and intake crane replacement. • For Lower Granite, completed SQ2 replacement, exciter replacements, and intake crane replacement. Continued diesel generator replacement, powerhouse bridge crane refurbishment, powerhouse HVAC upgrade, unit 1 linkage repair, and sewage treatment plant upgrade. • For Lower Monumental, completed intake crane replacement, SQ2 replacement, diesel generator replacement, and exciter replacements. Continued unit 1 linkage replacement. • In addition, new investments were pursued as set out in the Asset Plan and replacements of failed units occurred as needed to restore availability. 	
FY 2013	<ul style="list-style-type: none"> • Continue hydro optimization investigations and equipment installations at selected projects through the power plant efficiency improvements project. • For Bonneville, complete elevator replacement, gantry crane rehabilitation, and station service. Continue protective relay replacements, governor replacements, headgate refurbishment/replacements, vibration and air gap monitoring, transformer improvements, main unit breakers, and fire protection upgrades. Begin GSU transformer instrumentation and governor oil filtration system. • For John Day, complete protective relay replacements and elevator rehabilitation. Continue governor replacements, DC system upgrades, BLH turbine hub upgrades, station service transformer replacements, and fire protection upgrades. • For The Dalles, continue governor replacements, fire protection upgrades, SCC control replacement, DC system upgrades, tailrace gantry crane, and elevator rehabilitation. Begin transformer replacement.. • For the Willamette plants, complete penstock roller gate work at Lookout Point, spillway tainter gate work at Dexter, and transformer oil/water separation at Cougar and Hills Creek. Continue electric reliability upgrades at Detroit, fire protection upgrades at Lost Creek and emergency engine generator at Lookout Point. Continue turbine runner replacements at Hills Creek and Lookout Point. Continue spillway tainter gate repair at Big Cliff. Continue governor replacements at Big Cliff, Cougar, Dexter, Detroit, Foster, Green Peter, Hills Creek, and Lost Creek. Continue electrical reliability upgrades at Dexter and transformer oil/water separation at Green Peter, Dexter, and Foster. Begin governor replacement at Lookout Point and butterfly valve replacement at Lost Creek. Begin Generic Data Acquisition and Control System (GDACS) installation at all Willamette Valley plants. 	147,800

Fiscal Year	Activity	Funding (Dollars in Thousands)
	<ul style="list-style-type: none"> • For Albeni Falls, complete DC system boards and breaker replacement, and continue spillway crane modernization, spillway gate modifications, and intake crane modernization. • For Libby, begin governor installation. Begin powerhouse and dam electrical distribution equipment replacement. • For Chief Joseph, complete auto synchronizer replacement, continue 480-V upgrade/SQ0 substation replacement and DC and preferred AC upgrades. Continue exciter replacements, protective relay replacements and turbine replacements. Begin governor installation and generator cooling system upgrades. • For McNary, complete fishway exit cranes replacement and protective relay replacement. Continue generator winding replacements, station service rehabilitation, heat pump replacement, turbine design and replacement, potable water system upgrade and levee drainage pump station upgrades. Continue main unit governor replacement design. Begin exciter replacement. • For Dworshak, continue unit 3 standby generator guide bearing and oil cooler assemblies and powerhouse HVAC upgrade. Begin governor replacement design. • For Ice Harbor, complete T6 transformer replacement, low voltage switchgear SQ board replacements and DC system upgrade. • Continue units 2 and 3 runner replacements and begin main unit governor installation, and oil storage and handling upgrade. • For Little Goose, complete exciter replacements and continue intake crane replacement and powerhouse bridge crane rehabilitation. Continue wastewater treatment plant upgrades. Start governor installation. • For Lower Granite, complete diesel generator replacement. Continue powerhouse HVAC upgrade and sewage treatment plant upgrade. Continue powerhouse bridge crane refurbishment. Start governor replacement design and unit 1 linkage replacement. • For Lower Monumental, continue unit 1 linkage replacement. Start governor replacement design. • In addition, new investments will be pursued as set out in the Asset Plan and replacement of failed units will occur as needed to restore availability. 	
FY 2014	<ul style="list-style-type: none"> • Continue hydro optimization investigations and equipment installations at selected projects through the power plant efficiency improvements projects. • For Bonneville, complete protective relay replacement and headgate refurbishment/replacements. Continue governor replacements, main unit breakers, governor oil filtration system, vibration and air gap monitoring, GSU transformer instrumentation, and fire protection upgrades. • For John Day, continue governor replacements, DC system upgrades, BLH turbine hub upgrades, station service transformer replacements, and fire protection upgrades. Begin transformer and powerhouse oil/water separator. • For The Dalles, complete elevator rehabilitation. Continue governor replacements, SCC control replacements, DC system upgrades, fire protection upgrades, tailrace gantry crane and transformer replacements. • For the Willamette plants, complete emergency engine generator at Lookout Point and spillway tainter gate repair at Big Cliff. Continue turbine runner replacements at Hills Creek and Lookout Point. Continue governor replacements at Big Cliff, Cougar, Dexter, Detroit, Foster, Green Peter, Hills Creek, Lost Creek and Lookout Point. Continue electrical reliability upgrades at Dexter, fire protection upgrades at Lost 	148,665

Fiscal Year	Activity	Funding (Dollars in Thousands)
	<p>Creek and transformer oil/water separation at Green Peter, Dexter, and Foster. Continue butterfly valve replacement at Lost Creek. Continue GDACS installation at all Willamette Valley plants.</p> <ul style="list-style-type: none"> • For Albeni Falls, complete spillway crane modernization and spillway gate modifications. Continue intake crane modernization. • For Libby, continue governor installation and powerhouse and dam electrical distribution equipment replacement. Begin station service MCC replacement. • For Chief Joseph, complete 480-V upgrade/SQ0 substation replacement, DC and preferred AC upgrades and protective relays. Continue exciter replacement, governor installation, generator cooling system upgrades, and turbine replacements. Begin powerhouse HVAC upgrades. • For McNary, complete heat pump replacement. Continue generator winding replacements, turbine design and replacement, station service rehabilitation, exciter replacement potable water system upgrade and levee drainage pump station upgrades. Begin governor installation. • For Dworshak, complete unit 3 standby generator guide bearing and oil cooler assemblies and powerhouse HVAC upgrade. Begin governor installation. • For Ice Harbor, complete main unit governor install and oil storage and handling upgrade. Continue units 2 and 3 runner replacements, Begin HVAC controls upgrade. • For Little Goose, complete intake crane replacement and wastewater treatment plant upgrades. Continue governor installations and powerhouse bridge crane rehabilitation. Begin spare tailrace stoplogs. • For Lower Granite, complete powerhouse HVAC upgrade and sewage treatment plant upgrade. Continue powerhouse bridge crane refurbishment and unit 1 linkage replacement. Begin governor installation. • For Lower Monumental, continue unit 1 linkage replacement and begin governor installation. • In addition, new investments will be pursued as set out in the Asset Plan and replacement of failed units will occur as needed to restore availability. 	
FY 2015-2018	<ul style="list-style-type: none"> • Continue planned investment in FCRPS infrastructure 	587,751

Bureau of Reclamation (known projects to date)

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	<ul style="list-style-type: none"> • For Grand Coulee, completed air housing cooler replacements, K10 transformer replacement, material storage building, and G19 & G20 transformer replacements. Continued SCADA replacement, 500 kV switchyard relay replacements, third power plant exciter replacements, third power plant governor replacement, left power plant transformer replacements, third power plant high voltage cable replacement, units 19-20 upgrades including winding replacements, purchase of another left and right powerhouse spare winding, third power plant crane rehabilitation, third power plant elevator rehabilitation, and hydro optimization investigations with related equipment 	70,730

Fiscal Year	Activity	Funding (Dollars in Thousands)
	<p>installations. Start units 19-24 wear ring replacements and fixed wheel gate chamber modifications.</p> <ul style="list-style-type: none"> • For Hungry Horse, completed powerhouse roof replacement, and continued SCADA replacement, main unit transformer fire protection system replacement, and SS and MCC upgrades. • For the five Upper Snake River plants, completed an area microwave system upgrade. • For Palisades, continued turbine runner replacement. • For Chandler, continued transformer replacement. • For Green Springs, continued transformer replacement and begin exciter replacement. • For Black Canyon, continued additional unit, units 1 and 2 upgrades, and trash rake system design. • For Keys PGP, continued plant modernization and upgrades. Began reliability replacement designs. • In addition, new investments were pursued as set out in the Asset Plan and replacements of failed units occurred as needed to restore availability. 	
FY 2013	<ul style="list-style-type: none"> • For Grand Coulee, complete third power plant high voltage cable replacement, third power plant elevator rehabilitation, and fixed wheel gate chamber modifications. • Continue SCADA replacement, 500 kV switchyard relay replacements, left power plant transformer replacements, purchase of another left and right powerhouse spare winding, third power plant governor replacement, units 19-20 upgrades including winding replacements, third power crane rehabilitation, units 19-24 wear ring replacements, third power plant exciter replacements, and hydro optimization investigations with related equipment installations. • For Hungry Horse, continue SCADA replacement, main unit transformer fire protection system replacement, and SS and MCC upgrades. • For Palisades, continue turbine runner replacement. • For Chandler, complete transformer replacement. • For Green Springs, continue exciter replacement. • For Black Canyon, continue additional unit, units 1 and 2 upgrades, and trash rake system designs. • For Keys PGP, continue plant modernization and upgrades and reliability replacement designs. • In addition, new investments will be pursued as set out in the Asset Plan and replacement of failed units will occur as needed to restore availability. 	100,548
FY 2014	<ul style="list-style-type: none"> • For Grand Coulee, complete third powerplant elevator rehabilitation, left powerplant transformer replacement, third powerplant crane rehabilitation, and 500 kV switchyard relay replacements. • Continue SCADA replacement, purchase of another left and right powerhouse spare winding, third power plant governor replacements, units 19-20 upgrades including winding replacements, G19-24 wear ring replacement, and hydro optimization investigations with related equipment installations. Begin right powerplant transformer replacements. • For Hungry Horse, complete SCADA replacement and SS and MCC replacement, continue main unit transformer fire protection system replacement, and begin exciter and governor replacement. • For Palisades, continue turbine runner replacement. • For Green Springs, continue exciter replacement. 	101,137

Fiscal Year	Activity	Funding (Dollars in Thousands)
	<ul style="list-style-type: none"> • For Black Canyon, continue additional unit, units 1 and 2 upgrades, and begin trash rake system install. • For Keys PGP, continue plant modernization and upgrades, and reliability replacements. • In addition, new investments will be pursued as set out in the Asset Plan and replacement of failed units will occur as needed to restore availability. 	
FY 2015-2018	<ul style="list-style-type: none"> • Continue planned investment in FCRPS infrastructure. 	399,848

Fish & Wildlife Overview

Bonneville continues to build budgets based on the suite of mitigation projects it adopted in FY 2007 on recommendations from the Council. Bonneville reaffirmed many project-specific commitments in FY 2008 through both BiOp and Fish Accords. These decisions were based upon the management objectives and priorities in the Council's Program as well as an integration of ESA responsibilities as described in the NOAA Fisheries and USFWS's FCRPS BiOp. The 2010 NOAA Fisheries BiOp and the Accords build on and to a great extent continue the suite of projects from FY 2007, a strategy that the Council embraced in its most recent Program amendments in 2009. Coordination continues among Bonneville, Council, Federal resource management agencies, states, tribes and others to plan for additional projects to fill specific gaps in Bonneville's mitigation portfolio through expansion of existing projects and targeted solicitations.

The following fish facilities have been submitted for Congressional approval for FY 2014 as required by the Northwest Power Act for new fish and wildlife facilities of at least \$2.5 million and an economic life greater than 15 years (P.L. 96-501, sec.4(h)(10)(B)): John Day Reprogramming and Construction, Columbia River Basin White Sturgeon Hatchery, and Kelt Reconditioning and Reproductive Success Evaluation Research. See Proposed Appropriations (expenditure authority) Language included earlier in this FY 2014 budget.

Bonneville intends to continue implementation of the projects listed below. 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 construction and operation of the FCRPS power facilities, under the auspices of the Northwest Power Act and the ESA, and other laws. 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.

Bonneville's efforts include continued implementation of the Council's Program in an integrated fashion, in particular proceeding with high priority ESA-related projects and activities associated with the currently operative NOAA and USFWS BiOps and Fish Accords. These capital facilities are typically planned in the Council's three-step process, which includes development of a Master Plan, environmental compliance, and review by the Independent Science Review Panel, among other analyses.

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

Bonneville also may capitalize the investment in some fish and wildlife habitat acquisitions if such investment provides a creditable and quantifiable benefit against a defined obligation for Bonneville and follows Bonneville's Capitalization Policy.

The five types of capital 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 dam spillways.
- 3) Hatchery facility construction -- Projects and activities relating to the construction of fish hatcheries, including related satellite facilities (acclimation ponds and collection weirs). 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

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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 credit to Bonneville, such as habitat units (HUs) or acres for wildlife or instream miles for resident fish, to fulfill the legal obligation of Bonneville to mitigate the impacts from construction and operation of the FCRPS power facilities.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	See Detailed Description Below	57,679
FY 2013	See Detailed Description Below	67,145
FY 2014	See Detailed Description Below	60,275
FY 2015- 2018	See Detailed Description Below	137,859

Detailed Justification

Anadromous fish supplementation, production and related facilities that may require capital funds in FY 2014 include the following:

Ongoing Projects

- John Day Reprogramming and Construction: This project is being proposed by the Columbia River Inter-Tribal Fish Commission (CRITFC) under the Accords to work on the appropriate balance between upriver and down river salmon hatchery production mitigating for John Day and The Dalles Dams. Final reprogramming facilities and locations are still being analyzed. The project area encompasses the mainstem Columbia River from the base of McNary Dam downstream to The Dalles Dam. Capital dollars from this project will help fund designing and constructing additions to new or existing FCRPS hatchery facilities to accommodate the reprogramming of hatchery fish.

-Black Canyon Trout Hatchery: The Shoshone Paiute Tribes of the Duck Valley Reservation propose that Bonneville fund the purchase and renovation of an existing privately-owned trout hatchery near Pocatello, Idaho. The purchase could occur as early as FY 2014. The Tribes would own and operate the hatchery to produce trout for stocking in reservoirs located on the Duck Valley Reservation. Bonneville would fund the capital renovation at the hatchery to meet contemporary aquaculture standards and achieve fish production goals. The Tribe believes it can reduce federal reservoir stocking costs if it owns and operates the hatchery.

- Columbia River Basin White Sturgeon Hatchery: The Columbia River Basin White Sturgeon Hatchery, proposed by the CRITFC, under the Accords, will mitigate for white sturgeon population declines due to consistent poor recruitment upstream of Bonneville Dam. Expected production at a new or existing facility will be 15,000 - 20,000 yearling white sturgeon per year. The final project may include broodstock collection and holding, rearing juveniles, and acclimating juveniles prior to release. A location for the facility has not yet been determined, but it will likely be located within 60 miles of the confluence of the Columbia and Snake Rivers.

- Kelt Reconditioning and Reproductive Success Evaluation Research: CRITFC, under the Accords, is proposing a relatively small holding tank facility to recondition female steelhead (kelts) after they have spawned. The capital portion of the project is expected to be constructed in the Snake River Basin, potentially at Lower Granite Dam. Bonneville will implement the kelt reconditioning plan to improve the productivity of Snake River basin B-run steelhead populations which are listed for protection under the ESA and to support the 2008 BiOp. NOAA’s analysis of Prospective Actions indicates that a combination of transportation, kelt reconditioning, and in-stream passage improvements (e.g. spill-flow modifications) could increase kelt returns enough to increase the number of returning Snake River B-run steelhead spawners to Lower Granite Dam by about 6%.

- Kootenai River Native Fish Conservation Aquaculture Program: The Kootenai Tribe of Idaho is proposing to construct a new hatchery, most likely on Tribal owned land at the confluence of the Moyie and Kootenai rivers (Twin Rivers). A new

facility will address current physical space limitations that challenge expansion of the existing Tribal Sturgeon Hatchery. The Twin Rivers site offers high quality ground and surface water needed to support the aquaculture objectives for Kootenai River white sturgeon and possibly burbot. This location may also help to extend the river reaches where Kootenai sturgeon imprint and ultimately return to spawn. Bonneville would complete its National Environmental Policy Act compliance, likely an Environmental Assessment in 2013, prior to construction.

Proposed facilities include dual water supplies and filtration, incubation rooms, juvenile rearing tanks and ponds, spawning channels, support facilities and staff housing. The Tribe is also proposing the experimental use of remote streamside incubation and early rearing facilities to imprint Kootenai sturgeon upstream of the new hatchery site. The improvements the Tribe is proposing for the existing Tribal Sturgeon Hatchery near Bonners Ferry would enhance sturgeon handling and rearing capabilities. A new spawning room would eliminate the need to relocate large fish from one building to another. A safer means to transport large adults to and from the river would be provided, in addition to a number of measures to improve fish culture practices and program efficiency and success.

- Crystal Springs Hatchery Facilities: This project is for facilities for rearing and out-planting resident and anadromous fish in central and southern Idaho. The facility is located near the American Falls Reservoir in Idaho. Resident fish that may be produced include Yellowstone Cutthroat. The anadromous fish may include Snake River spring Chinook salmon Snake River steelhead, and Snake River sockeye. The facility is sponsored by the Shoshone-Bannock Tribes under their Accord, who are expected to operate and manage the facility once it is complete. A final Environmental Impact Statement is expected to be complete in the spring of 2014.

- 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 ESA consultations and 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.

- 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 has been acquired in Idaho under the Idaho Columbia Basin Fish Accord to bring production annually to between 500,000 and 1,000,000 smolts as called for in the 2008 FCRPS BiOp. 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 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: Bonneville is funding the construction of Chief Joseph Dam Hatchery Program, primarily a comprehensive management program for supplementing Chinook salmon to increase the abundance, productivity, distribution, and diversity of naturally spawning populations of summer/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). Project includes a new hatchery facility (at the base of the Chief Joseph Dam). In addition, the Colville Tribes as sponsor will use the facility to reintroduce extirpated spring Chinook back into the Okanogan Subbasin. This Accord 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. Bonneville has entered into an agreement with one public utility where that utility will pay a portion of the capital and operation and maintenance costs associated with this hatchery. In addition, Bonneville has agreed in principle with two

other public utilities to pay a portion of the operation and maintenance costs. Construction on the hatchery facility was initiated in 2010 and is expected to be completed in 2013.

- Klickitat Production Expansion: The Klickitat River Master Plan was submitted by the Yakama Nation, reviewed by the ISRP, recommended with comments by the Council, and approved by Bonneville in 2008. The plan's goal is to protect and increase naturally producing populations of spring chinook and steelhead that support harvest while protecting the biological integrity and the genetic diversity of indigenous fish stocks in the sub-basin. The Klickitat Master Plan includes three main elements: Lyle Falls Fishway upgrades, construction of the Castile Falls enumeration facility, upgrades to the Klickitat hatchery with the potential for constructing a new facility to accommodate the ongoing production of Coho and fall Chinook, and an acclimation site in the upper watershed at McCreedy Creek. In early 2009 Bonneville completed the Lyle Falls Environmental Impact Statement (EIS) and ROD. From 2009 to present, 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 were completed. Lyle and Castile Falls fishways have pit tag interrogation capability and Lyle includes a lamprey passage structure. A new Klickitat Hatchery Complex 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. The Yakama Nation issued a revised Master Plan, July 2012, providing updates to their fish management plans. The EIS and Master Plan will be available for Council review and for their recommendation to move from Step 2 to Step 3 in the Council 3-Step Review process. The Final EIS is scheduled to be complete by summer 2013 and Bonneville will issue a ROD once NMFS completes the Biological Opinion for the Klickitat Production/Fish Management plans. Bonneville is working with Yakama Nation to identify the highest priority construction actions in the Klickitat Watershed to focus on, given the limited capital budget.

- 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. The Powerdale Dam Fish Trap has provided 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. Powerdale Dam, which is owned and operated by PacifiCorp, began to be decommissioned during the summer of 2010. The dam formed 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. 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.

- Mid Columbia Coho Restoration: Indigenous naturally spawning Coho salmon no longer occupy the mid-Columbia river basins. Columbia Coho salmon populations were decimated by 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 have not been re-established in mid-Columbia basins. This Yakama Accord project'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. This program will construct a facility (anticipated on the Wenatchee River) for holding and spawning broodstock, incubating eggs, and rearing juveniles. Additional semi-natural ponds may also be constructed in the Wenatchee and Methow subbasins for acclimating smolts prior to their release. 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: The Walla Walla Hatchery is proposed by the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) under their Accord. The tribe would own and operate the hatchery, which will produce up to 500,000 spring Chinook smolts annually for release into the Walla Walla River. Hatchery master planning and pre-design have been completed. The next phase of the project, final-design and permitting (environmental compliance) is expected to start in Bonneville Power Administration/

the summer of 2013, upon finalization of an NPCC/BPA/CTUIR agreement to proceed. An environmental impact statement is expected to be completed in the spring of 2014. When complete, the facility will hold, spawn, incubate and rear spring Chinook on the South Fork Walla Walla River near Milton-Freewater, Oregon.

- Yakima 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 19th 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.

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

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

Energy Efficiency Overview

Bonneville’s energy efficiency program offers several ways for customers to participate in regional energy efficiency. Program components include: (1) utility standard offer and custom programs, which result in customer proposals to conserve energy through such programs as residential weatherization, commercial lighting, Heating, Ventilation, and Air Conditioning (HVAC), industrial processes and lighting, irrigated agriculture, etc.; (2) third party delivery programs, such as residential lighting, the Energy Smart Grocer, Energy Smart Industrial, and Green Motors programs; (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.

Bonneville’s energy efficiency budgets reflect a ramp-up in regional energy efficiency goals and the increasing cost of the energy efficiency measures that must be implemented to achieve the targets. Specifically, Bonneville’s energy efficiency targets have increased from about 280 aMW under the Council’s 5th Power Plan (2005-09) to approximately 504 aMW under its 6th Power Plan (2010-14). The 504 aMW reflects conservation that is achievable in the service territories of Bonneville’s preference customers. Bonneville established a five-year target and plan to meet these goals. In FY 2012, we remained on track to reach the next two-year goal under the Northwest Power and Conservation Council’s Sixth Power Plan. The five-year Energy Efficiency Action Plan has been adjusted to account for faster-than-expected energy efficiency savings in FY 2010-2011 and slightly lower than planned levels for FY 2012. The cost of energy efficiency is also increasing as market penetration is reached for some low-cost measures and the region moves to more expensive measures. Due to anticipated changes in federal lighting standards, for example, standard twister compact fluorescent lamps (CFLs), which were the largest single contributor to past savings, are being phased out of the program beginning in 2012. The shift away from this particularly low-cost measure increases overall energy efficiency costs. That cost increase is reflected in these budgets. The front-loaded shape of these budgets reflects a push to acquire as much low-cost conservation as possible before the change in lighting and other standards. In meeting its energy efficiency goals Bonneville may employ resource acquisition agreements, authorized by Northwest Power Act section 6, as well as customer self-funded conservation.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Continued to support utility incentive programs. Continued to support regional energy efficiency programs. Began update of a regional energy efficiency reporting system.	79,785
FY 2013	Continue to support utility incentive programs. Continue to support regional energy efficiency programs. Complete regional energy efficiency reporting system. Begin supporting energy efficiency at direct serve federal agencies.	75,200
FY 2014	Continue to support utility incentive programs. Continue to support regional energy efficiency programs. Continue supporting energy efficiency at direct serve federal agencies.	75,200
FY 2015- 2018	Continue to support utility incentive programs. Continue to support regional energy efficiency programs. Continue supporting energy efficiency at direct serve federal agencies.	384,894

**Transmission Services – Capital
Funding Schedule by Activity**

	(Accrued Expenditures) (Dollars in Thousands)		
	FY 2012	FY 2013	FY 2014
Transmission Services - Capital			
Main Grid	64,070	213,321	233,097
Area & Customer Services	7,356	32,663	21,128
Upgrades & Additions	95,940	237,463	275,648
System Replacements	87,469	233,610	216,557
Projects Funded in Advance	304,698	71,790	60,511
Total, Transmission Services - Capital	559,534	788,847	806,942

Outyear Funding Schedule

	(Accrued Expenditures) (Dollars in Thousands)			
	FY 2015	FY 2016	FY 2017	FY 2018
Total, Transmission Services - Capital	759,793	670,311	459,384	460,546

Overview

Transmission Services (TS) is responsible for about 75 percent of the Pacific Northwest’s high-voltage transmission. TS provides funding for all additions, upgrades and replacements to the Bonneville transmission system, resulting in reliable service to northwest generators and transmission customers. The Bonneville 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. Bonneville 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 Bonneville 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 recent infrastructure improvements, TS had built no major transmission projects since 1987. Only incremental additions were added to the system over the years.

Bonneville’s completed infrastructure investments in the last decade 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, Coulee-Bell, Kangley–Echo Lake, Shultz-Wautoma, McNary-John Day, and Portland Area Additions.

In 2005, with the Congressional approval of wind tax credits, a number of potential wind generation companies made requests for interconnection to the Bonneville transmission grid. By 2007, Bonneville built facilities to connect up to 3,000 MW of wind generation and connected 1,430 MW. In 2008, 619 MW was connected and in 2009, 608 MW was connected to the FCRPS grid. In 2010, Bonneville began construction of several new large substations to meet these interconnection requests. Bonneville has a total installed wind capability of 4,711 MW as of the end of fiscal year 2012. Bonneville has more than 16,000 MW in additional wind project interconnection requests, many interconnecting in the 2014 through 2020 timeframe. Current projections are 5,800 MW by 2015 interconnected and possibly 8,500 MW total by 2020. Also in the interconnection queue is approximately 800 MW of natural gas, solar, bio-mass and geothermal fueled generation proposed for connection between 2013 and 2020. Much of the wind generation demand is a result of the Renewable Portfolio standards enacted by

California and Pacific Northwest states that require utilities to supply electricity produced by renewable resources. An estimated 5,000 MW of renewable generation is expected to be connected to the Bonneville grid by 2020. Exports to California could add another 2,000-2,500 MW during the same time period.

In June 2008, Bonneville's first Network Open Season (NOS) received 153 requests from 28 customers for 6,410 MW of new service, about three-fourths for wind energy integration. Bonneville 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 500 kV Reinforcement (formerly Little Goose Area Reinforcement); and (4) I-5 Corridor 500 kV Reinforcement. Construction of the McNary-John Day 500 kV transmission line is complete and Bonneville has begun construction on the Big Eddy-Knight project. The I-5 Corridor project is in the planning stage. If all four projects are constructed they will provide almost 6,000 MW of new transmission service.

Bonneville's second NOS window for new transmission service requests in 2009 resulted in 82 service requests resulting in 34 contracts totaling 1,553 MW. Of that, approximately 923 MW represent wind project interconnection requests. Bonneville has completed cluster studies for NOS 2010. These requests total 3,759 MW, of which 2,993 MW is wind. Several projects are being reviewed as a result of these studies including Colstrip West, Colstrip East and the Northern Intertie project. Bonneville elected to not hold a NOS in 2012.

As noted, Bonneville's capital program for TS includes a wide variety of specific investments that are determined after internal review and, in some cases, external review. In 2009, Bonneville's Transmission Services organization began implementing Asset Management based upon PAS 55, an Asset Management framework that provides a standardized structure and approach to Asset Management. As a result, Transmission Services Asset Strategies, which are derived from Agency Strategies, drive our Asset Plans which determine our capital and expense needs. 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 Bonneville Power Administration/
Transmission Services – Capital

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 specificity 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: arrester, 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 TS 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 Bonneville cost of this relocation is \$48.7 million. This project is approximately 90% complete.

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 Bonneville's facilities and provide video surveillance and monitoring capabilities.

In order to centralize staff and reduce reliance on leasing a multiplicity of commercial office and related space, and to meet the evolving staff needs of Bonneville's Transmission Services, Bonneville has begun preliminary study and design of a new Transmission Services Facility to be located on Bonneville's Ross Campus. Although the future costs of this building are mentioned in the budget narrative, this building will be the subject to continuing conversations with Bonneville's customers and regional stakeholders.

Accomplishments

- Held Capital Investment Review (CIR) and Integrated Program Review (IPR) with customers and stakeholders for FY 2014-2015 rate period.
- McNary -John Day project was completed under budget and ahead of schedule.
- Began construction of Big Eddy-Knight and Central Ferry-Lower Monumental projects
- Integrated 4,711 MW of wind by FY 2012 on Bonneville's transmission system
- Approved major renovations at Celilo (PDCI Project)

- Implementation and refinement of Asset Management Strategies for Sustain and Expand Programs

Explanation of Changes

Bonneville's budget includes \$806 million in FY 2014 for TS (including non-borrowing authority capital) which is a 2.3% increase over the FY 2013 forecasted level. The increase reflects investment in Main Grid and Upgrades and Additions necessary to incorporate and deliver new generation throughout the Northwest as well as increases in System Replacements to address numerous issues with aging electric and telecom infrastructure.

The FY 2014 budget increases the levels for Main Grid (+\$20 million) and Upgrades & Additions (+\$38 million). The budget decreases levels for Area & Customer Services (-\$11 million), System Replacements (-\$17 million), and PFIA (-\$11 million).

Strategic Management

Bonneville provides transmission and energy services while supporting integration of renewable resources and low-cost transmission in the Pacific Northwest. Bonneville will continue to implement the following strategies to serve the region:

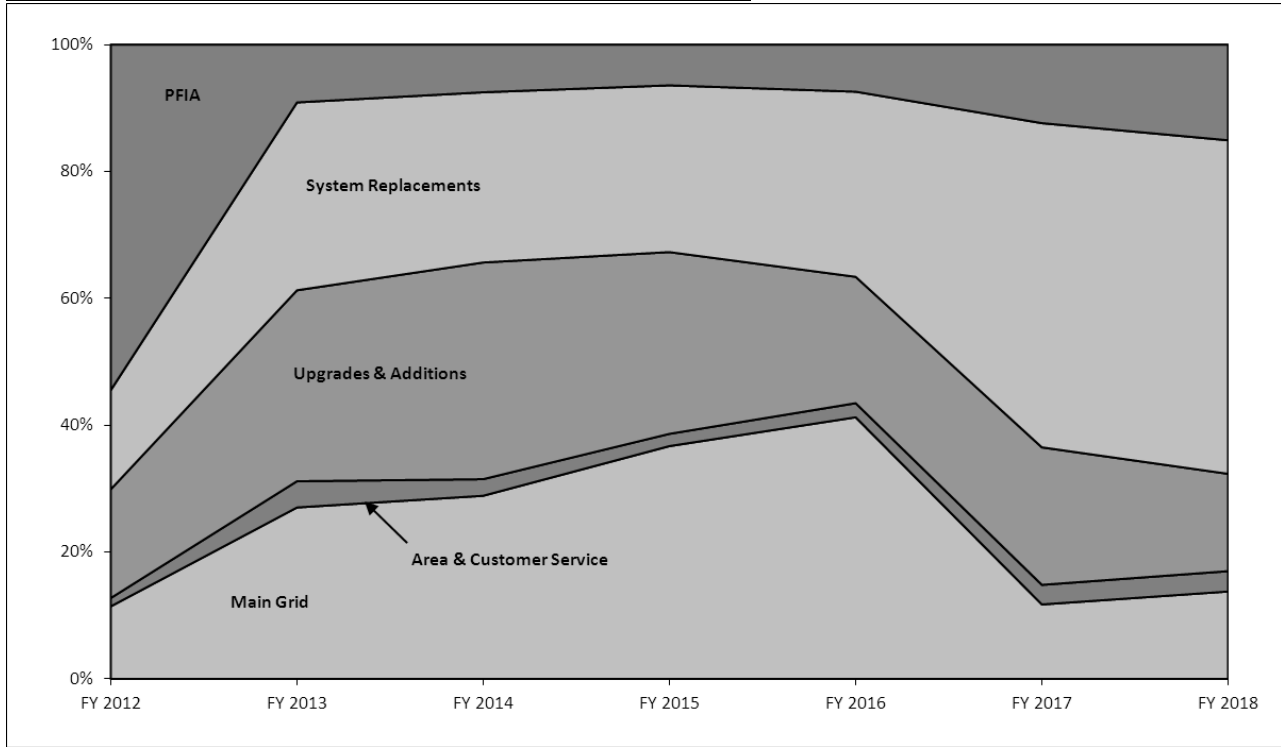
1. To improve system adequacy, reliability and availability, Bonneville has embarked on major transmission infrastructure projects. The projects shore up the region's transmission system and help deliver the region's future power needs. These projects address multiple challenges, such as integration 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 Bonneville's open access policy in support of competitive markets. Specific strategies for these efforts are outlined in the TS Load Service and Generation Integration strategies.
2. Bonneville will continue to replace aging assets that are vital to the reliability of the existing transmission system. To that end, TS has developed specific long term strategies for the following asset categories:
 - a. Substations AC
 - b. Power System Control/Telecom
 - c. Wood Lines
 - d. Steel Lines
 - e. Rights of Way (ROW), (Land Rights and Access Roads)

f. System Protection and Control
(A long term strategy is under development
for Control Center assets)

1. Continually changing economic and institutional conditions
2. Competitive dynamics
3. Ongoing changes in the electric industry
4. Different siting issues

The following external factors present the strongest impact to overall achievement of the program's strategic goal

Relative Outyear Funding Priorities in Transmission Services Capital



Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

	FY 2013	FY 2014	FY 2014 vs FY 2013
Main Grid The increase reflects increased level of funding to support Central Oregon Capacity expansion for Data Centers and NOS projects.	213,321	233,097	+19,777
Area & Customer Services The decrease reflects a decrease in the number of customer required projects.	32,663	21,128	-11,535
Upgrades & Additions The increase reflects the need to improve power flows to the south through the Pacific Direct Current Line (PDCI).	237,463	275,648	+38,185
System Replacements The decrease is due to certain replacement projects being executed during Upgrade & Addition and Main Grid projects where appropriate.	233,610	216,557	-17,053
PFIA The decrease reflects decreased activity by wind generators to interconnect new projects.	71,790	60,511	-11,279
TOTAL Funding Change, TS Capital	788,847	806,942	+18,095

**Main Grid
Overview**

Bonneville’s strategic objectives for Main Grid projects are to assure compliance with the NERC planning standards and Western Electricity Coordinating Council (WECC) reliability criteria, provide voltage support, provide a reliable transmission system for open access, per FERC requirements, and provide for relief of transmission system congestion. During this budgeting period, projects are planned that will provide transmission reinforcement and voltage support to major load areas that are primarily west of the Cascade Mountains. In addition, transmission reinforcements are planned for load centers in central Oregon, central Washington, the Willamette Valley, and along the I-5 Corridor, as well as projects to provide transmission access for new generation projects.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	<ul style="list-style-type: none"> • Continued environmental analysis and continue design for the I-5 Corridor Reinforcement project. • McNary-John Day (West of McNary Reinforcements Group 1)-completed construction. • Big Eddy-Knight (West of McNary Reinforcements Group 2)-completed the design and began construction. • Central Ferry-Lower Monumental 500 kV Reinforcement (formerly Little Goose Area Reinforcement)-completed design. • Completed design for the addition of a 2nd 500/230 kV transformer at Ponderosa substation and begin construction. • Continued planning studies to identify needed infrastructure additions. • Continued planning studies to identify projects driven by NERC planning standards and WECC reliability criteria. • Continued planning studies to identify system reactive needs to mitigate unacceptable low or high voltage problems and other system additions. • Continued planning studies to relieve transmission system congestion and for integrating potential new generation facilities. • Continued planning studies and design for projects related to the NOS. 	64,070
FY 2013	<ul style="list-style-type: none"> • Continue route analysis and gathering of customer input for I-5 Corridor project. • Big Eddy-Knight (West of McNary Reinforcements Group 2)-continue construction. • Central Ferry-Lower Monumental 500 kV Reinforcement (formerly Little Goose Area Reinforcement)- begin construction. • Continue construction of the addition of a 2nd 500/230 kV transformer at Ponderosa substation. • Begin design and construction of Bonanza Substation. • Begin design and construction for the Puget Sound Area Northern Intertie (PSANI) project. • Begin design and construction of new shunt caps at Tucannon, LaPine, Franklin, White Bluffs, Monroe and McNary. • Design the Reactor for Alvey Substation. • Continue planning studies to identify needed infrastructure additions. • Continue planning studies to identify projects driven by NERC planning standards and WECC reliability criteria. • Continue planning studies to identify system reactive needs to mitigate unacceptable low or high voltage problems and other system additions. • Continue planning studies to relieve transmission system congestion and for 	213,321

Fiscal Year	Activity	Funding (Dollars in Thousands)
	integrating potential new generation facilities. <ul style="list-style-type: none"> • Continue planning studies, NEPA work and design for projects related to the NOS. 	
FY 2014	<ul style="list-style-type: none"> • Continue route analysis and gathering of customer input for I-5 Corridor project. • Big Eddy-Knight (West of McNary Reinforcements Group 2)-complete construction. • Central Ferry-Lower Monumental 500 kV Reinforcement (formerly Little Goose Area Reinforcement)- continue construction. • Bonanza Substation-complete construction. • Continue Construction of the Puget Sound Area Northern Intertie (PSANI) project. • Continue to Install shunt reactor at Alvey Substation. • Continue construction of the Monroe and McNary Shunt Caps. • Continue planning studies to identify needed infrastructure additions. • Continue planning studies to identify projects driven by NERC planning standards and WECC reliability criteria. • Continue planning studies to identify system reactive needs to mitigate unacceptable low or high voltage problems and other system additions. • Continue planning studies to relieve transmission system congestion and for integrating potential new generation facilities. • Continue planning studies and design for projects related to the NOS. 	233,097
FY 2015-2018	<ul style="list-style-type: none"> • Continue investment in Main Grid assets. 	673,019

**Area & Customer Service
Overview**

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

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	<ul style="list-style-type: none"> • Began the design of Hooper Springs substation. • Continued preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for Bonneville’s service area. • Began design of Capacitor Bank at Kalispell. 	7,356
FY 2013	<ul style="list-style-type: none"> • Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service to Bonneville’s service area. • Complete the design and begin construction of the Hooper Springs substation. • Complete the design and begin construction of new Capacitor Bank at Kalispell. 	32,663
FY 2014	<ul style="list-style-type: none"> • Complete construction of cap bank at Kalispell. • Continue construction of Hooper Springs Substation. • Begin Capacitor design for Aberdeen. • Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service to Bonneville’s service area. 	21,128
FY2015-2018	<ul style="list-style-type: none"> • Continue investment in Area & Customer Service assets. 	58,580

**Upgrades & Additions
Overview**

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.

During this budget period, Bonneville 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.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	<ul style="list-style-type: none"> • Continued upgrading 2 miles of fiber between Bonneville Power House and Bonneville Control House. • Continued planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths. • Continued planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for Bonneville’s service area. • Continued construction of secondary fiber related projects and digital radio system upgrades to improve the operational telecommunication system. • Continued material procurement and construction to upgrade the main fiber optic backbone system (#KC and #NC systems). • Continued design and begin construction of the VHF Radio System upgrade. • Completed design and continue construction at multiple sites of the Synchrophasor project. • Completed studies and begin design for the upgrading of the Pacific DC Intertie to 3,800 MW project. • Continued the design of the Ross-Schultz fiber circuit upgrade and begin material procurement. • Continued design and begin material procurement for the Bell-Boundary #DC SONET ring upgrade. 	95,940
FY 2013	<ul style="list-style-type: none"> • Continue upgrading 2 miles of fiber between Bonneville Power House and Bonneville Control House. • Continue planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths. • Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for Bonneville’s service area. • Continue construction of secondary fiber related projects and digital radio system upgrades to improve the operational telecommunication system. • Continue material procurement and construction to upgrade the main fiber optic backbone system (#KC and #NC systems). 	237,463

Fiscal Year	Activity	Funding (Dollars in Thousands)
	<ul style="list-style-type: none"> • Continue construction of the VHF Radio System upgrade. • Complete design and continue construction at multiple sites of the Synchrophasor project. • Complete design and begin construction for the upgrading of the Pacific DC Intertie to 3,800 MW project. • Begin construction of the Ross-Schultz fiber circuit upgrade and begin material procurement. • Begin construction of the Bell-Boundary #DC SONET ring upgrade. 	
FY 2014	<ul style="list-style-type: none"> • Continue upgrading 2 miles of fiber between Bonneville Power House and Bonneville Control House. • Install 500Kv spares at wind integration substations. • Continue planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths. • Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for Bonneville's service area. • Continue construction of secondary fiber related projects and digital radio system upgrades to improve the operational telecommunication system. • Continue material procurement and construction to upgrade the main fiber optic backbone system (#KC and #NC systems). • Continue construction of the VHF Radio System upgrade. • Continue construction at multiple sites of the Synchrophasor project. • Continue construction for the upgrading of the Pacific DC Intertie to 3,800 MW project. • Continue construction of the Ross-Schultz fiber circuit upgrade and begin material procurement. • Continue construction of the Bell-Boundary #DC SONET ring upgrade. 	275,648
FY2015-2018	<ul style="list-style-type: none"> • Continue investment in Upgrades & Additions assets. 	521,447

System Replacements Overview

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 mandated replacements due to legislation; and (3) replacing all other existing high-risk equipment and facilities affecting the safety and reliability of the transmission system.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	<p>Non-Electric Replacements.</p> <ul style="list-style-type: none"> • Continued non-electric replacements as necessary. • Continued the design, material acquisition, and construction for the Access Road program capital component and the Land Rights program capital component in support of the Lines and ROW Programs. • Continue design and review of the Transmission Services Facility based on the result of the feasibility study and development of business case. • Continued design and construction of capital improvements for identified existing facilities. <p>Electric Replacements.</p> <ul style="list-style-type: none"> • Continued replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using Reliability Centered Maintenance 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. • Continued replacement of under-rated and high maintenance substation equipment. • Continued replacing spacer dampers on various 500 kV lines. • Continued replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers. <p>Continued replacing deteriorating wood pole transmission line structures, spacer dampers and insulators with NCI.</p>	87,469
FY 2013	<p>Non-Electric Replacements.</p> <ul style="list-style-type: none"> • Continue non-electric replacements as necessary. • Continue the design, material acquisition, and construction for the Access Road program capital component and the Land Rights program capital component in support of the Lines and ROW Programs. • Evaluating Portland Vancouver Office Space Strategy and business requirements of staff and functions in the Portland/Vancouver area. • Continue design and construction of capital improvements for identified existing facilities. <p>Electric Replacements.</p> <ul style="list-style-type: none"> • Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using Reliability Centered Maintenance 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. • Continue replacement of under-rated and high maintenance substation equipment. 	233,610

	<ul style="list-style-type: none"> Continue replacing spacer dampers on various 500 kV lines. Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers. Continue replacing deteriorating wood pole transmission line structures, spacer dampers and insulators with NCI. 	
FY 2014	<p>Non-Electric Replacements.</p> <ul style="list-style-type: none"> Continue non-electric replacements as necessary. Continue the design, material acquisition, and construction for the Access Road program capital component and the Land Rights program capital component in support of the Lines and ROW Programs. Potential to begin construction of the Transmission Services Facility. Continue design and construction of capital improvements for identified existing facilities. <p>Electric Replacements.</p> <ul style="list-style-type: none"> Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using Reliability Centered Maintenance 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. Continue replacement of under-rated and high maintenance substation equipment. Continue replacing spacer dampers on various 500 kV lines. Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers. Continue replacing deteriorating wood pole transmission line structures, spacer dampers and insulators with NCI. Continue replacement of aging and defective converter transformers if the decision is to replace rather than upgrade. 	216,557
FY 2015-2018	<p>Non-Electric Replacements:</p> <ul style="list-style-type: none"> Continue non-electric replacements as necessary. Continued the design, material acquisition, and construction for the Access Road program capital component and the Land Rights program capital component in support of the Lines and ROW Programs. Potential to continue construction of the Transmission Services Facility. Continue design and construction of capital improvements for identified existing facilities. <p>Electric Replacements:</p> <ul style="list-style-type: none"> Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using Reliability Centered Maintenance 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. Continue replacement of under-rated and high maintenance substation equipment. Continue replacing spacer dampers on various 500 kV lines. Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers. Continue replacing deteriorating wood pole transmission line structures, spacer dampers and insulators with NCI. Continue replacement of aging and defective converter transformers if the decision is to replace rather than upgrade. 	872,290

**Projects Funded in Advance
Overview**

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

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	<ul style="list-style-type: none"> • Continued to integrate various new generation and line/load projects into Bonneville transmission grid based on requests placed and processed in accordance with transmission tariff. • Continued planning studies to identify system impacts and needs regarding proposed new generation projects. • Engineered and began construction of several large wind generation interconnection substations. • Completed environmental cleanup and other work necessary for the sale of Bonneville facilities. • Continued the design and construction for various radio replacements at accessible sites associated with the CSEA. • Completed construction of the California-Oregon Intertie improvement project. • Central Ferry Substation– Design. 	304,698
FY 2013	<ul style="list-style-type: none"> • Continue to integrate various new generation and line/load projects into Bonneville transmission grid based on requests placed and processed in accordance with transmission tariff. • Continue planning studies to identify system impacts and needs regarding proposed new generation projects. • Engineer and begin construction of several large wind generation interconnection substations. • Complete environmental cleanup and other work necessary for the sale of Bonneville facilities. • Complete other projects as agreed to with customers. • Continue the design and construction for various radio replacements at accessible sites associated with the CSEA. • Central Ferry Substation– Begin Construction. 	71,790
FY 2014	<ul style="list-style-type: none"> • Continue to integrate various new generation and line/load projects into Bonneville transmission grid based on requests placed and processed in accordance with transmission tariff. • Continue planning studies to identify system impacts and needs regarding proposed new generation projects. • Engineer and begin construction of several large wind generation interconnection substations. • Complete environmental cleanup and other work necessary for the sale of Bonneville facilities. • Complete other projects as agreed to with customers. • Continue the design and construction for various radio replacements at accessible sites associated with the CSEA. • Central Ferry Substation– Continue construction. 	60,511

FY2015-2018	<ul style="list-style-type: none">• Continue PFIA program to help Bonneville meet its infrastructure investment needs.	224,699
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**Capital Information Technology & Equipment/Capitalized Bond Premium
Funding Schedule by Activity**

	(Accrued Expenditures) (Dollars in Thousands)		
	FY 2012	FY 2013	FY 2014
Capital Information Technology (IT) & Equipment/Capitalized Bond Premium			
Capital IT & Equipment	42,149	55,813	44,897
Capitalized Bond Premium	2,000	2,000	2,000
Total, Capital IT & Equipment/Capitalized Bond Premium	44,813	57,813	46,897

Outyear Funding Schedule

	(Accrued Expenditures) (Dollars in Thousands)			
	FY 2015	FY 2016	FY 2017	FY 2018
Total, Capital IT & Equipment/Capitalized Bond Premium	47,982	49,068	50,155	49,579

Overview

Capital IT 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 Bonneville’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 continue to include asset management, emergency management, crisis management and continuity of operations.

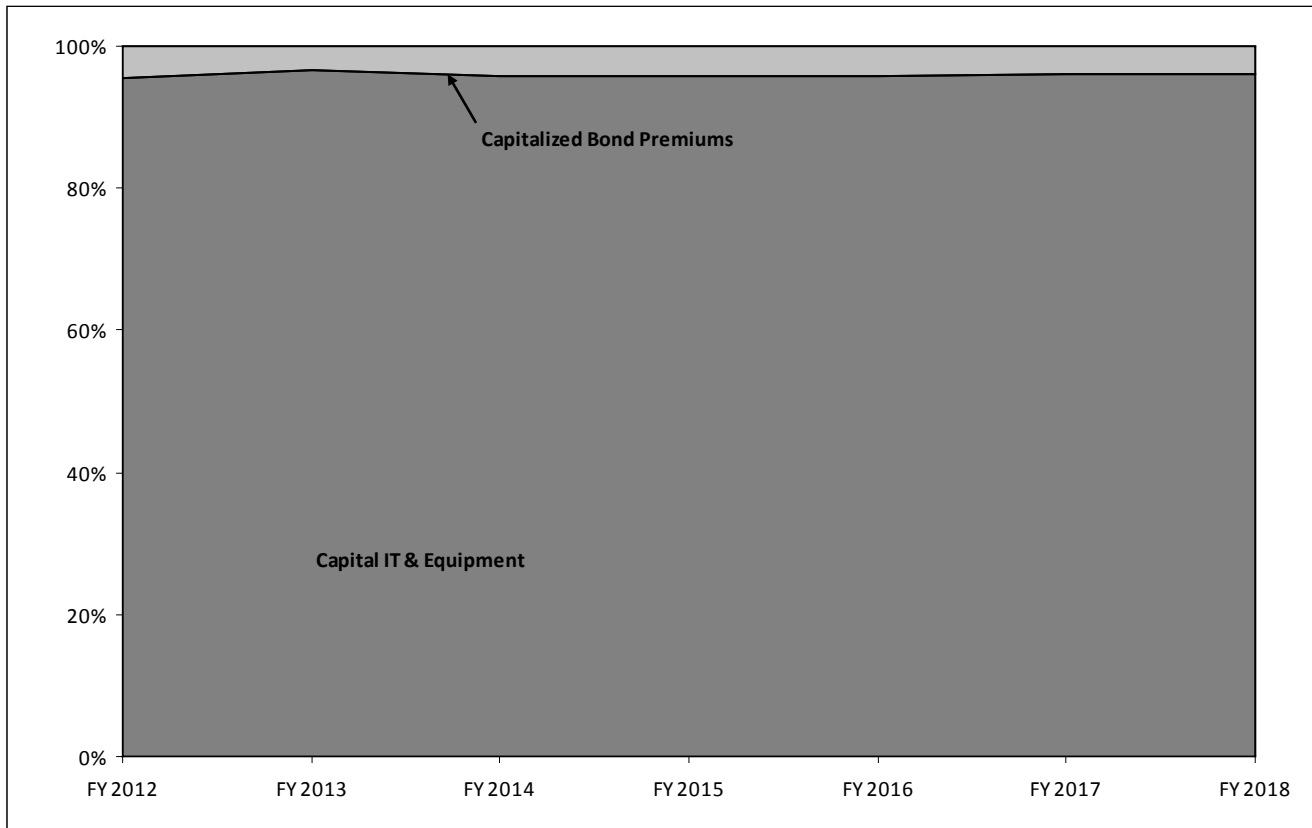
Bonneville continues to move its IT infrastructure to a more efficient architecture. This FY 2014 Budget supports this effort. IT continues to eliminate redundancies in tools and applications, establish an agency-wide IT architecture with standardized IT purchasing criteria, standardize software licensing 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 2014 Budget, under Capital IT and Equipment include all IT functions within the agency except TS grid operations. See the Capital Program – TS section of this budget for additional discussion of grid operations-related IT requirements acquisitions.

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

Bonneville can incur a bond premium when it repays a Treasury bond before the due date. When bonds are refinanced and premiums are incurred, the bond premiums can be capitalized. Historically, Bonneville generally has chosen to finance capitalized bond premiums with bonds issued to the Treasury, as was envisioned in the Transmission Act.

Relative Outyear Funding Priorities in Capital IT & Equipment/Capitalized Bond Premium



Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

	FY 2013	FY 2014	FY 2014 vs FY 2013
Capital IT & Equipment Reflects ongoing emphasis on business resiliency efforts.	55,813	44,897	-10,916
Capitalized Bond Premiums Reflects possible refinancings of outstanding Federal bonds.	2,000	2,000	+0
TOTAL Funding Change, Capital IT & Equipment Services/Bond Premiums	57,813	46,897	-10,916

**Capital IT & Equipment
Overview**

This category includes enhancements to Bonneville’s information technology processes to provide cost effective efficiencies for secure, timely and accurate information. Investments will enable continued 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. Other investments include acquisition of capital office furniture and equipment, capital automated data processing (ADP) based administrative telecommunications equipment, ADP equipment (hardware), and support of capital software development for certain Bonneville programs.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Capital system developments in support of: <ul style="list-style-type: none"> • Corporate IT Projects • IT Infrastructure Projects • Power IT Projects • Transmission Services IT Projects 	42,149
FY 2013	Capital system developments in support of: <ul style="list-style-type: none"> • Corporate IT Projects • IT Infrastructure Projects • Power IT Projects • Transmission Services IT Projects 	55,813
FY 2014	Capital system developments in support of: <ul style="list-style-type: none"> • Corporate IT Projects • IT Infrastructure Projects • Power IT Projects • Transmission Services IT Projects 	44,897
FY 2015-2018	Capital system developments in support of: <ul style="list-style-type: none"> • Corporate IT Projects • IT Infrastructure Projects • Power IT Projects • Transmission Services IT Projects 	188,784

**Capitalized Bond Premium
Overview**

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

Funding and Activity Schedule

Fiscal Year	Activity	Funding
		(Dollars in Thousands)
FY 2012	Possible refinancings of outstanding Federal bonds	2,000
FY 2013	Possible refinancings of outstanding Federal bonds	2,000
FY 2014	Possible refinancings of outstanding Federal bonds	2,000
FY 2015-2018	Possible refinancings of outstanding Federal bonds	8,000

**Power Services - Operating Expense
Funding Schedule by Activity**

Power Services - Operating Expenses	(Accrued Expenditures) (Dollars in Thousands)		
	FY 2012	FY 2013	FY 2014
Production	1,209,331	1,275,332	1,274,486
Associated Projects Costs	338,409	386,256	433,096
Fish & Wildlife	248,957	245,950	254,000
Residential Exchange Program	203,712	203,200	203,900
NW Power & Conservation Council	9,240	10,355	10,568
Energy Efficiency & Renewable Resources	71,522	85,990	88,206
Total, Power Services - Operating Expenses	2,081,170	2,207,083	2,264,256

Outyear Funding Schedule

Total, Power Services - Operating Expense	(Accrued Expenditures) (Dollars in Thousands)			
	FY 2015	FY 2016	FY 2017	FY 2018
	2,343,679	2,361,706	2,511,353	2,527,202

Overview

Production includes all Bonneville non-Federal debt service (including Energy Northwest debt service), O&M costs for power system generation resources, including a large nuclear plant, business operations, short- and long-term power purchases including expenses associated with the use of power financial instruments to hedge Bonneville's exposure to market price risk and certain index sales contract provisions as permitted by Bonneville's Power Transacting Risk Management Policy, electric utility marketing of power, and oversight of hydro and nuclear projects. Bonneville develops products and services to meet the needs of Bonneville customers and stakeholders, and acquires resources as needed. This FY 2014 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.

In FY 2010, Bonneville completed a long-term Resource Program to guide potential future resource acquisitions needed to meet customer loads. In the event that Bonneville does acquire a resource, Bonneville will modify its budget to reflect the acquisition.

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 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's Program developed pursuant to Section 4(h) of the Northwest Power Act. Through the Council's Program Bonneville also implements measures to aid in the protection 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 Council's Program (see ESA discussion in the Power Capital Overview section).

Bonneville's mitigation and recovery expenditures will focus on activities that benefit Columbia River Basin fish and wildlife resources, following priorities established through ESA consultations and the Council's Program, including:

- 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;
- reduce harvest-related mortality on ESA-listed and non-listed fish and encourage 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 Program. Sub-basin plans that include prioritized strategies for mitigation actions will help guide project selection that meets both Bonneville's ESA and Northwest Power Act responsibilities. In order to address the *in lieu* provision of the Northwest Power Act, which prohibits Bonneville from funding mitigation that other entities are authorized or required to undertake, Bonneville 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, Bonneville established a cost sharing Memorandum of Understanding (MOU) with the U.S. Forest Service in 2005, and renewed it in 2010, that requires a programmatic 30 percent cost share for FYs 2007-2009 for fish mitigation projects funded by Bonneville on U.S. Forest Service lands. Bonneville continues to operate in a cooperative manner with the U.S. Forest Service.

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 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'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 efficiency program – known as the Power Plan) 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.

Bonneville will acquire conservation resources consistent with the Council's Power Plan and act as a catalyst for energy efficiency. Such action will: 1) meet energy efficiency 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 energy efficiency. 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.

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 farm customers of Pacific Northwest electric utilities that meet certain conditions. Currently, the region's six investor-owned utilities (IOUs) and two of the region's consumer-owned utilities are actively participating in the REP. Payments under the REP are made to individual IOUs based on the

difference between Bonneville's utility-specific PF Exchange rates and each utility's average system cost (ASC), times a utility's residential and farm loads. The process and calculation of ASCs are governed by the 2008 Average System Cost Methodology (ASCM). Participating utility ASCs are established in a public process that occurs prior to and during Bonneville's power rate case. Bonneville's utility-specific Priority Firm (PF) Exchange rates are determined each rate period. As described below, Bonneville and regional parties reached a settlement of the REP in 2011 in which the total amount of REP benefits available to the IOUs has been settled for the next 17 years. Payments are made monthly based on historical invoiced exchange loads.

On July 26, 2011, Bonneville adopted a settlement, referred to as the 2012 REP Settlement, which resolves or moots out many legal challenges to Bonneville's implementation of the REP. The settlement reduces a significant element of litigation uncertainty and risk from Bonneville's power rates for the vast majority of utilities in the region. Under the Settlement, the Region's six IOUs will receive about \$4.1 billion in REP payments over the 17-year term of the settlement, beginning at \$182.1 million in FY 2012 and increasing to \$286.1 million in FY 2028. Distribution of the REP payments among the IOUs will be determined each rate period based on the

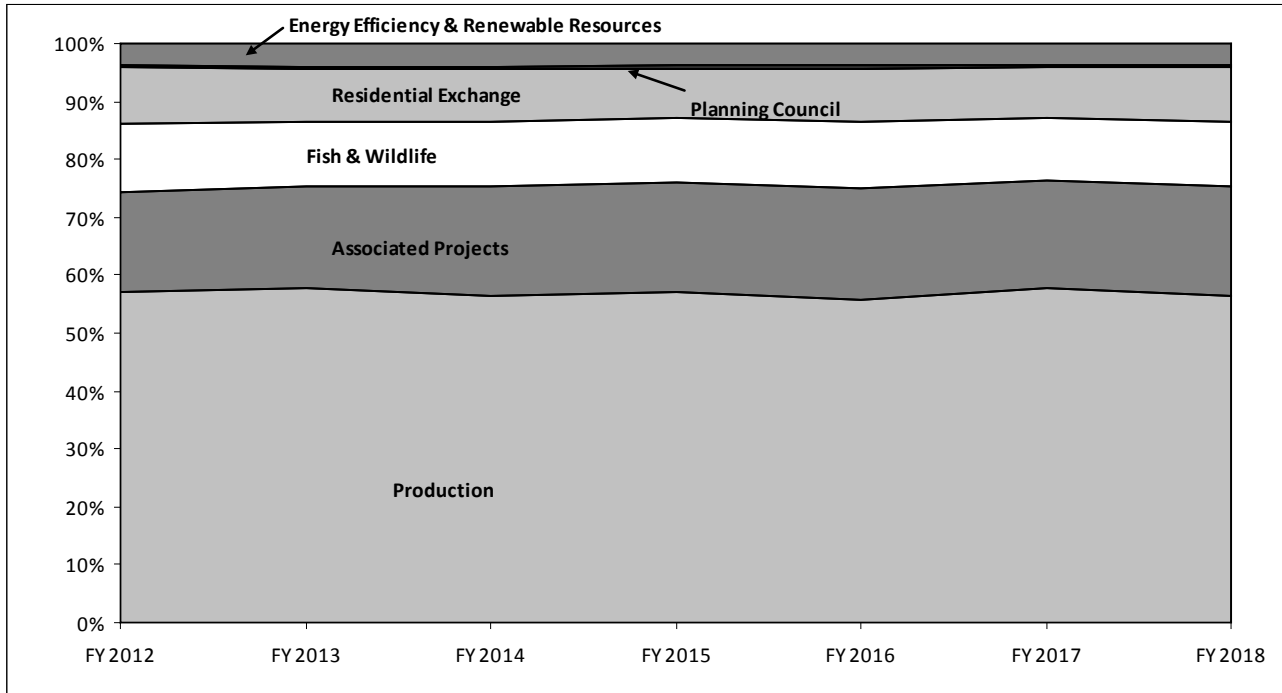
difference between the utilities' respective ASCs and Bonneville's utility-specific PF Exchange rates. The parties supporting the settlement include all six regional IOUs, three state utility commissions, several consumer-owned utility groups, a retail ratepayer advocacy group and consumer-owned utilities representing 88 percent of the power they receive from Bonneville. Together supporters of the settlement provide about 93 percent of power consumed in the Pacific Northwest. In addition to this settlement, Bonneville has reached related REP settlements with the two participating consumer-owned utilities. A single challenge to the 2012 REP Settlement is currently pending before the U.S. Court of Appeals for the Ninth Circuit.

Explanation of Changes

Bonneville's budget includes \$2,280 million in FY 2014 for Power Services operating expenses, which is a 2.9 percent increase over the FY13 forecasted level. The increase reflects continuing emphasis on operation and maintenance of hydro generation projects on the FCRPS.

The FY14 budget increases the levels for, Associated Projects (+\$46 million), Fish & Wildlife (+\$8 million), Residential Exchange (+\$7 million), Planning Council (+\$213 thousand), Energy Efficiency & Renewable Resources (+\$2 million), and decreases the level for Production (-\$1 million).

Relative Outyear Funding Priorities in Power Services Expense



Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

	FY 2013	FY 2014	FY 2014 vs FY 2013
Production The decrease reflects lower Columbia Generating Station (CGS) O&M costs along with decreased power purchases but is mostly offset by increased debt service.	1,275,332	1,274,486	-846
Associated Projects The increase reflects changes to security, biological opinion requirements, non-routine extraordinary maintenance, WECC/NERC compliance activities, and improvements, replacements, and minor additions at the projects.	386,256	433,096	+46,840
Fish & Wildlife The increase reflects funding associated with Biological Opinions, Fish Accord commitments and Northwest Power Act activities.	245,950	254,000	+8,050
Residential Exchange The increase reflects the 2012 REP Settlement and settlements with two participating consumer owned utilities.	203,200	203,900	+700
Planning Council The increase reflects continuing Council program activities.	10,355	10,568	+213
Energy Conservation & Renewable Resources The increase reflects continuing emphasis on energy efficiency program consistent with the Power Plan and increased Renewable Resource acquisition costs.	85,990	88,206	+2,217
TOTAL Funding Change, PS Expense	2,207,083	2,264,256	+57,173

Production Overview

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 Power Services' 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.

Columbia Generating Station (formerly WNP-2): Continue to acquire full capability of CGS. CGS is on a 24-month fuel and outage cycle. A maintenance and refueling outage is planned for the Spring of FY 2013.

Funding and Activity Schedule

Generation and Oversight:

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	<ul style="list-style-type: none"> • 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. • Power Purchases • Power Scheduling/Marketing 	1,209,331
FY 2013	<ul style="list-style-type: none"> • 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 Bonneville 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. • Power Purchases • Power Scheduling/Marketing 	1,275,332
FY 2014	<ul style="list-style-type: none"> • 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 Bonneville 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. • Power Purchases • Power Scheduling/Marketing 	1,274,486

FY 2015-2018	<ul style="list-style-type: none"> • 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 Bonneville 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. • Power Purchases • Power Scheduling/Marketing 	5,526,452
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**Associated Projects
Overview**

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 Bonneville’s strategic business objectives.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Bureau of Reclamation: <ul style="list-style-type: none"> • Continued direct funding Reclamation O&M power activities. Corps of Engineers: <ul style="list-style-type: none"> • Continued direct funding Corps O&M power activities. 	338,409
FY 2013	Bureau of Reclamation: <ul style="list-style-type: none"> • Continue direct funding Reclamation O&M power activities. Corps of Engineers: <ul style="list-style-type: none"> • Continue direct funding Corps O&M power activities. 	386,256
FY 2014	Bureau of Reclamation: <ul style="list-style-type: none"> • Continue direct funding Reclamation O&M power activities. Corps of Engineers: <ul style="list-style-type: none"> • Continue direct funding Corps O&M power activities. 	433,096
FY 2015-2018	Bureau of Reclamation: <ul style="list-style-type: none"> • Continue direct funding Reclamation O&M power activities. Corps of Engineers: <ul style="list-style-type: none"> • Continue direct funding Corps O&M power activities. 	1,842,262

**Fish & Wildlife
Overview**

Specific project solicitation recommendations were made by the Council in late 2006 followed by Bonneville review and funding decisions completed in early 2007 for the period FY 2007 through 2009. Bonneville, in coordination with the Council, reviews all on-going projects and reaffirms project-specific funding commitments annually, including projects under the BiOp, Fish Accords, and Washington Estuary Agreement. Bonneville bases its funding decisions on the management objectives and priorities in the Council’s Program, Sub-basin Plans, and the Accords as it integrates their implementation with actions necessary to fulfill ESA responsibilities as described in the NOAA Fisheries and USFWS BiOp. Bonneville’s fish and wildlife activities have been selected to help fulfill the Northwest Power Act purpose stated in section 2(6) to “protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries.” 16 U.S.C. § 839(6). Coordination continues among Bonneville, Council, Federal resource management agencies, states, tribes and others to plan for additional projects to fill the few specific gaps remaining in Bonneville’s mitigation portfolio through targeted solicitations.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	<p>Anadromous Fish: Continue implementing both ongoing and new projects that support ESA-listed species and other measures called for under the 2008 and 2010 FCRPS BiOps, the Fish Accords, the Washington Estuary Agreement, and the Willamette Fish Agreement. Prioritize projects that address the factors that limit mitigation success as identified in the Sub-basin Plans and that fulfill Bonneville’s responsibility for mitigating the impacts from the FCRPS power facilities. 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.</p> <p>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 Council’s Program, and the Fish Accords.</p> <p>Continue mitigation using resident fish to offset anadromous fish losses (substitution); mitigate for reservoir power 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 Bonneville’s Capitalization Policy will be funded under the capital portion of Bonneville’s Fish and Wildlife budget.</p> <p>Wildlife: Use existing Bonneville policies to continue the current effort to mitigate wildlife in a manner consistent with Council’s Program and fulfill commitments in wildlife agreements such as the Willamette Wildlife Agreement. 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 projects that meet Bonneville’s Capitalization Policy will be funded under the capital portion of Bonneville’s Fish and Wildlife budget and credited according to Bonneville’s crediting policy and applicable mitigation contracts.</p> <p>Habitat Protection and Enhancement: Continue to protect and enhance habitat for fish and wildlife using fee acquisition, conservation easements, habitat improvement projects, and other techniques in a manner consistent with the Program. Bonneville seeks cost</p>	248,957
FY 2013		245,950
FY 2014		254,000
FY 2015-2018		1,082,000



effective ways to implement the Program, including the BiOp and Accords, and tries to emphasize planning and management in each habitat project to reasonably integrate the mitigation needs for anadromous fish, resident fish, and wildlife.



**Residential Exchange, Northwest Power and Conservation Council, and Energy Efficiency & Renewable Resources
Overview**

Residential Exchange Program

- Includes forecasted REP benefits based on the 2012 REP Settlement.

Northwest Power and Conservation Council

- 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.

Energy Efficiency & Renewable Resources

- 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 energy efficiency purposes. As an agency with independent responsibilities based on its authorizing legislation, Bonneville has a statutory responsibility to encourage and support the development of energy efficiency 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, Bonneville has been helping create a delivery infrastructure to ensure conservation savings are installed efficiently and effectively throughout the region.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Residential Exchange: 203,712 Northwest Power and Conservation Council: 9,240 Energy Efficiency & Renewable Resources: 71,522	284,474
FY 2013	Residential Exchange: 203,200 Northwest Power and Conservation Council: 10,355 Energy Conservation & Renewable Resources: 85,990	299,545
FY 2014	Residential Exchange: 203,900 Northwest Power and Conservation Council: 10,568 Energy Conservation & Renewable Resources: 88,206	302,674
FY 2015- 2018	Residential Exchange: 883,500 Northwest Power and Conservation Council: 44,428 Energy Conservation & Renewable Resources: 365,298	1,293,226

Transmission Services - Operating Expense

Funding Schedule by Activity

	(Accrued Expenditures) (Dollars in Thousands)		
	FY 2012	FY 2013	FY 2014
Transmission Services - Operating Expense			
Engineering	46,111	40,192	41,642
Operations	121,792	133,372	140,606
Maintenance	135,377	151,963	154,250
Total, Transmission Services - Operating Expense	303,280	325,528	336,498

Outyear Funding Schedule

	(Accrued Expenditures) (Dollars in Thousands)			
	FY 2015	FY 2016	FY 2017	FY 2018
Total, Transmission Services - Operating Expense	344,001	336,713	343,865	350,564

Overview

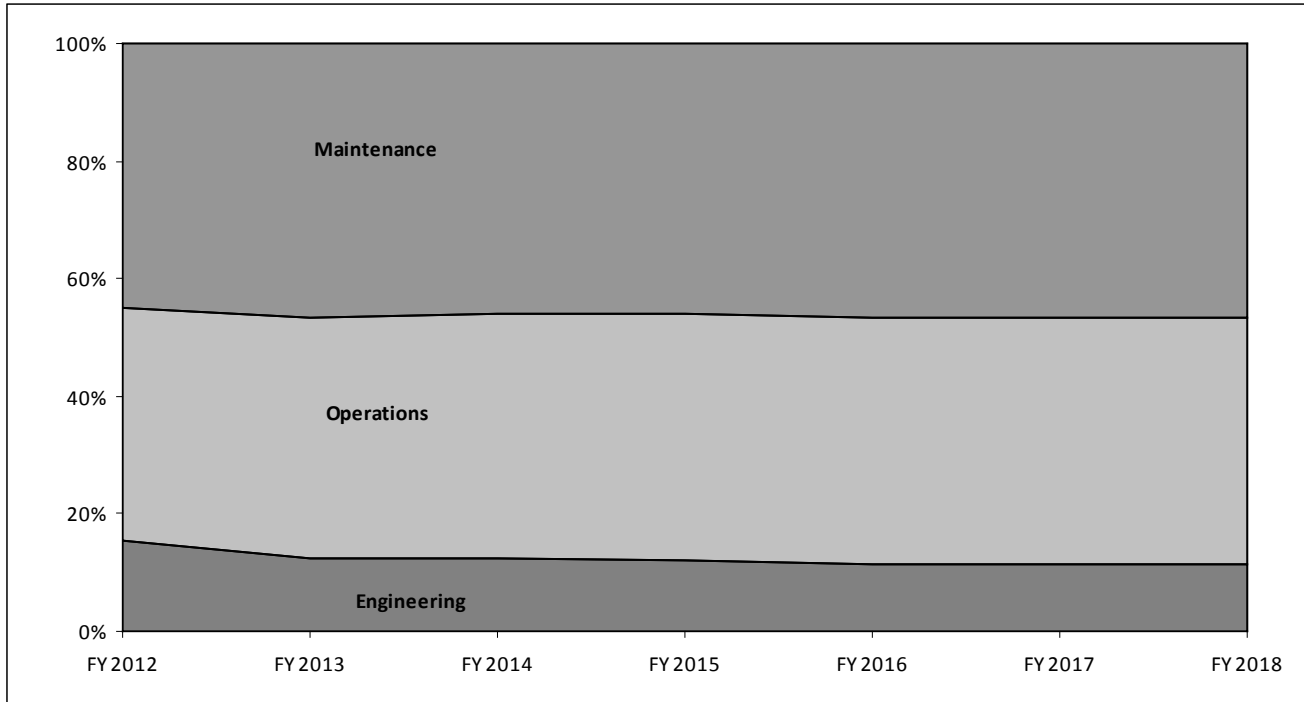
This activity provides for the transmission system services of engineering, operations, and maintenance for Bonneville’s electric transmission system, consisting of over 15,276 circuit miles of lines, 262 substations, and the associated power system control and communication facilities, with an invested 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; 4) provide open and nondiscriminatory transmission access; and 5) improve Bonneville's cost effectiveness.

Explanation of Changes

Bonneville’s budget includes \$336 million in Fiscal Year 2014 for TS expense which is a 3 percent increase over the FY 2013 forecasted level. The increase reflects continuing operation and maintenance of the Bonneville’s transmission assets.

The FY 2014 budget increases the levels for Engineering (+\$1.4 million). Operation (+\$2.3 million), and Maintenance (+\$7.2 million)

Relative Outyear Funding Priorities in Transmission Services Expense



Explanation of Funding AND/OR Program Changes

(Dollars in Thousands)

	FY 2013	FY 2014	FY 2014 vs FY 2013
Engineering The increase reflects emphasis on system reliability standards compliance and research and development.	40,192	41,642	+1,449
Operation The increase reflects continued emphasis on reliability compliance activities, wind integration activities, security, and control center systems support.	133,372	140,606	+7,234
Maintenance The increase reflects implementation of facilities asset management plans, continued implementation of live-line 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.	151,963	154,250	+2,287
TOTAL Funding Change, Transmission Services Expense	<u>325,528</u>	<u>336,498</u>	<u>+10,970</u>

Engineering

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.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	Asset Management: Continue deploying the Asset Management approach to sustain the existing assets and expanding the system to meet Agency objectives using PAS-55 as a methodology for improving Asset Management.	46,111
FY 2013		40,192
FY 2014		41,642
FY 2015-2018	<p>R&D: Conduct research focused on technologies related to business challenges Bonneville faces including reliability, energy efficiency, and integration of renewable energy resources. Technologies of interest are identified in Bonneville's Technology Roadmaps. A portfolio of research is selected every year through Bonneville's Portfolio Decision Framework.</p> <p>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.</p> <p>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.</p> <p>Regulatory Fees: WECC dues and loop flow payments, DOC/NTIA licensing costs for radio frequencies and NERC Critical Infrastructure Protection CIP compliance program costs. Includes membership in ColumbiaGrid.</p> <p>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 Bonneville'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.</p> <p>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 Bonneville 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).</p>	159,111

Operations

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, etc

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 legacy 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 non-discriminatory, open access to the Bonneville transmission system consistent with the Open Access Transmission Tariff (OATT). Schedule transmission capacity to eligible Bonneville customers, which include customers acquiring services under Use of Facilities (UFT), Formula Power Transmission (FPT), Integration of Resources (IR), and Part II, or Part III, of the OATT. Manage the reservations and scheduling of all transmission services associated with the OATT. Ensure commercial compliance for all transmission commercial functions. Update practices, policies and commercial systems to accommodate a large diversity of resources, including wind.

Funding and Activity Schedule

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	<ul style="list-style-type: none"> • Continued to operate within parameters of NERC and WECC. • Continued support of increased compliance activities related to the reliability of the transmission system including cyber security. • Continued developing facilities, policies, procedures and implementing systems to support the diversity of resources, including wind into the transmission grid. • Continued preparation for increased complexity of transmission scheduling, power system operations and dispatching, including congestion management and outage scheduling. • Continued developing facilities to support network operations center and one transmission scheduling operations facility • Continued developing a long-term approach to optimize transmission availability through streamlined, cost-effective, and sustainable processes. • Continued to address succession planning issues across key functions. • Continued development and implementation of business systems and tools. 	121,792
FY 2013	<ul style="list-style-type: none"> • Continue to operate within parameters of NERC and WECC. • 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 diversity of resources, including wind into the transmission grid. • Continue preparation for increased complexity of transmission scheduling, power 	133,372

	<p>system operations and dispatching, including congestion management and outage scheduling.</p> <ul style="list-style-type: none"> • Continue developing facilities and resources to support network operations center and one transmission scheduling operations facility. • Continued developing a long-term approach to optimize transmission availability through streamlined, cost-effective, and sustainable processes. • Continue to address succession planning issues across key functions. • Continue development and implementation of business systems and tools. 	
FY 2014	<ul style="list-style-type: none"> • Continue to operate within parameters of NERC and WECC. • 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 diversity of resources, including wind into the transmission grid. • Continue preparation for increased complexity of transmission scheduling, power system operations and dispatching, including congestion management and outage scheduling. • Continue developing resources to support network operations center and one transmission scheduling operations facility. • Continue developing a long-term approach to optimize transmission availability through streamlined, cost-effective, and sustainable processes. • Continue to address succession planning issues across key functions. • Continue development and implementation of business systems and tools. 	140,606
FY 2015-2018	<ul style="list-style-type: none"> • Continue to operate within parameters of NERC and WECC. • 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 diversity of resources, including wind into the transmission grid. • Continue preparation for increased complexity of transmission scheduling, power system operations and dispatching, including congestion management and outage scheduling- • Continue developing resources to support network operations center and one transmission scheduling operations facility. • Continue developing a long-term approach to optimize transmission availability through streamlined, cost-effective, and sustainable processes. • Continue to address succession planning issues across key functions. • Continue development and implementation of business systems and tools. 	576,478

Maintenance

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 at lowest lifecycle costs. In addition Bonneville 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 15,276 circuit miles on over 8,500 right-of-way miles (many of these miles are through rugged, inaccessible terrain).

Fiscal Year	Activity	Funding (Dollars in Thousands)
FY 2012	<ul style="list-style-type: none"> • 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 LiDAR to reliably and cost effectively manage vegetation. 	135,377
FY 2013	<ul style="list-style-type: none"> • 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, spacer dampers & fiber optic cable hardware). • Continue to prepare for the impact of an expected high attrition rate among 	151,963

	<p>Bonneville’s aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions.</p> <ul style="list-style-type: none"> • 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 2014	<ul style="list-style-type: none"> • 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 live line 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. 	154,250
FY 2015-2018	<ul style="list-style-type: none"> • 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 live line 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. 	639,554

Transmission Line Maintenance: Maintain and repair 15,276 circuit miles (24,523 km) of high voltage transmission lines, of which over 7,617 km (4,734 circuit miles) are 500 kV transmission extra-high voltage (EVH). Maintenance of EHV lines 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 costs effectively manage vegetation.

Substation Maintenance: Maintain and repair the transmission system power equipment located in Bonneville's 262 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.

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

Funding Schedule by Activity

	(Accrued Expenditures) (Dollars in Thousands)		
	FY 2012	FY 2013	FY 2014
Interest, Pension and Post-retirement Benefits			
BPA Bond Interest (Net)	124,713	123,407	168,130
BPA Appropriation Interest	26,712	21,271	17,185
Corps of Engineers Appropriation Interest	146,756	157,293	163,135
Lower Snake River Comp Plan Interest	16,526	16,526	16,526
Bureau of Reclamation Appropriation Interest	43,525	43,526	43,526
Subtotal, Interest – Operating Expense	358,232	362,023	408,503
Additional Pension and Post-retirement Benefits	34,486	35,064	37,002
Total, Interest, Pension and Post-retirement Benefits	392,718	397,087	445,505

Outyear Funding Schedule

	(Accrued Expenditures) (Dollars in Thousands)			
	FY 2015	FY 2016	FY 2017	FY 2018
Total, Interest, Pension and Post-retirement Benefits	489,700	544,602	594,745	637,657

Overview

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 Act, all Bonneville borrowing has been at market rates. As of October 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 Act that were unpaid as of September 30, 1996, were restructured and assigned new current-market interest rates. The Bonneville Appropriations Refinancing Act of 1996 (Refinancing Act) 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 prevailing market interest rates as of October 1, 1996. Bonneville's outstanding repayment obligations on appropriations at the end of FY 1996 were \$6.6 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 Refinancing Act to Treasury for its review and approval. Treasury approved the implementation calculations in July 1997. The Refinancing 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 makes additional annual contributions to the General Fund of the U.S. Treasury (receipt account 892889) in order to ensure that all Federal post-retirement benefit programs provided to employees associated with the operation of the FCRPS are fully funded. 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 and Reclamation projects.

Capital Transfers

Funding Schedule by Activity

	(Accrued Expenditures) (Dollars in Thousands)		
	FY 2012	FY 2013	FY 2014
Capital Transfers			
BPA Bond Amortization ^{1/}	328,600	122,800	103,000
Reclamation Appropriation Amortization	0	0	0
BPA Appropriation Amortization	75,110	56,374	19,198
Corps Appropriation Amortization	5,264	0	10,244
Total, Capital Transfers	408,974	179,174	132,442

Outyear Funding Schedule

	(Accrued Expenditures) (Dollars in Thousands)			
	FY 2015	FY 2016	FY 2017	FY 2018
Total, Capital Transfers	150,602	116,422	83,788	102,493

Overview

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.

^{1/} Bonneville "Bond(s)" in this FY 2014 Budget refers to all bonds issued by Bonneville to and advances received from the U.S. Treasury. This reference is consistent with section 13(a) of the Transmission Act (P.L. 93-454), which defines Bonneville bonds as all bonds, notes, and other evidences of indebtedness issued and sold to the U.S. Treasury.

Additional Tables

**BONNEVILLE POWER ADMINISTRATION
TOTAL OBLIGATIONS/OUTLAYS**

Current Services
(in millions of dollars)

BP-1 SUMMARY^{1/3/}

	2012		2013		2014		2015	2016	2017	2018
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
1 Residential Exchange Program	204	204	203	203	204	204	204	221	221	239
2 Power Services ^{2/}	1,603	1,603	1,665	1,665	1,708	1,708	1,780	1,772	1,914	1,903
3 Transmission Services	558	558	1,043	1,043	1,083	1,083	1,055	957	746	742
4 Conservation & Energy Efficiency	151	151	161	161	163	163	181	186	190	193
5 Fish & Wildlife	307	307	313	313	314	314	302	304	305	310
6 Interest/ Pension ^{4/}	393	393	397	397	446	446	490	545	595	638
7 Associated Project Cost - Capital	214	214	248	248	250	250	245	248	244	250
8 Capital Equipment	42	42	56	56	45	45	46	47	48	48
9 Planning Council	9	9	10	10	11	11	11	11	11	11
10 Misc. Accounting Adjs.	0	0	0	0	0	0	0	0	0	0
11 Projects Funded in Advance	305	305	72	72	61	61	49	50	57	69
12 Capitalized Bond Premiums	2	2	2	2	2	2	2	2	2	2
TOTAL OBLIGATIONS/ OUTLAYS ^{3/}	3,788	3,788	4,170	4,170	4,285	4,285	4,364	4,342	4,332	4,405

REVENUES AND REIMBURSEMENTS

Current Services
(in millions of dollars)

BP-1 SUMMARY	FISCAL YEAR									
	2012		2013		2014		2015	2016	2017	2018
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
14 Revenues ^{5/}	3,001	3,001	4,108	4,108	4,235	4,235	4,326	4,303	4,286	4,347
15 Project Funded in Advance	305	305	72	72	61	61	49	50	57	69
16 TOTAL	3,306	3,306	4,180	4,180	4,296	4,296	4,375	4,353	4,343	4,416
BUDGET AUTHORITY (NET) ^{6/}	459		648		1,027		1,023	875	668	773
17 OUTLAYS (NET) ^{6/7/}		340		(10)		(10)	(10)	(10)	(10)	(10)

The accompanying notes are an integral part of this table.

^{1/} This FY 2014 budget includes capital and expense estimates based on preliminary IPR forecasted data for FYs 2013-2018.

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 PAYGO. Under PAYGO all Bonneville budget estimates are treated as mandatory and are not subject to the discretionary caps included in the Budget Control Act of 2011. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to Bonneville estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because Bonneville operates within existing legislative authority, Bonneville is not subject to a "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 Northwest Power Act are also assumed.

^{6/} BPA received \$48.7 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). BPA anticipates returning the forecasted unused balance of approximately \$8 million to the U.S. Treasury in FY 2015.

^{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). Actual Net Outlays could differ from estimates due to changing market conditions, streamflow variability, and continuing restructuring of the electric industry.

EXPENSED OBLIGATIONS/OUTLAYS ^{1,4/}
Current Services
(in millions of dollars)
FISCAL YEAR

BP-2

	2012		2013		2014		2015	2016	2017	2018
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
1 Residential Exchange Program	204	204	203	203	204	204	204	221	221	239
2 Power Services ^{2/}	1,603	1,603	1,665	1,665	1,708	1,708	1,780	1,772	1,914	1,903
3 Transmission Services	303	303	326	326	336	336	344	337	344	351
4 Conservation & Energy Efficiency	72	72	86	86	88	88	89	91	92	93
5 Fish & Wildlife	249	249	246	246	254	254	260	267	274	281
6 Interest/ Pension ^{3/}	393	393	397	397	446	446	490	545	595	638
7 Planning Council	9	9	10	10	11	11	11	11	11	11
8 TOTAL EXPENSE	2,832	2,832	2,933	2,933	3,046	3,046	3,177	3,243	3,450	3,515
9 Projects Funded in Advance	305	305	72	72	61	61	49	50	57	69

CAPITAL OBLIGATIONS/OUTLAYS ^{1/}

Current Services
(in millions of dollars)

FISCAL YEAR

BP-2 continued	2012		2013		2014		2015	2016	2017	2018
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
Conservation & Energy Efficiency	80	80	75	75	75	75	92	95	98	101
10 Transmission Services	255	255	717	717	746	746	711	621	403	391
11 Associated Project Cost	214	214	248	248	250	250	245	248	244	250
12 Fish & Wildlife	58	58	67	67	60	60	42	37	31	29
13 Capital Equipment	42	42	56	56	45	45	46	47	48	48
14 Capitalized Bond Premiums	2	2	2	2	2	2	2	2	2	2
15 TOTAL CAPITAL INVESTMENTS ¹⁵	651	651	1,166	1,166	1,179	1,179	1,138	1,049	825	820
16 TREASURY BORROWING AUTHORITY TO										
17 FINANCE CAPITAL OBLIGATIONS ^{4/}	651		1,166		1,179		1,138	1,049	825	820

The accompanying notes are an integral part of this table.

^{1/} This FY 2014 budget includes capital and expense estimates based on preliminary IPR forecasted data for FYs 2013-2018.

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 PAYGO. Under PAYGO all Bonneville budget estimates are treated as mandatory and are not subject to the discretionary caps included in the Budget Control Act of 2011. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to Bonneville estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because Bonneville operates within existing legislative authority, Bonneville is not subject to a "pay-as-you-go" test regarding its revision of current-law funding estimates.

CURRENT SERVICES
(in millions of dollars)

CAPITAL TRANSFERS	FISCAL YEAR						
	2012 Pymts	2013 Pymts	2014 Pymts	2015 Pymts	2016 Pymts	2017 Pymts	2018 Pymts
Amortization:							
18 BPA Bonds	329	165	103	80	55	0	100
19 Reclamation Appropriations	0	0	0	0	0	0	0
20 BPA Appropriations	112	56	19	71	61	84	2
21 Corps Appropriations	53	0	10	0	0	0	0
22 TOTAL CAPITAL TRANSFERS	493	221	132	151	116	84	102
23 FULL-TIME EQUIVALENT (FTE)	3,037	3,175	3,100	3,100	3,100	3,100	3,100

PROGRAM & FINANCING SUMMARY

Current Services
(in millions of dollars)

Identification Code: 89-4045-0-3-271

	est.						
	2012	2013	2014	2015	2016	2017	2018
Program by activities:							
Operating expenses:							
0.01 Power Services	1,185	1,278	1,274	1,335	1,318	1,449	1,423
0.02 Residential Exchange Program	204	203	204	204	221	221	239
Associated Project Costs:							
0.05 Bureau of Reclamation	167	120	150	153	157	158	165
0.06 Corps of Engineers	207	216	231	237	244	251	259
0.07 Colville Settlement	20	21	21	21	22	22	23
0.19 U.S. Fish & Wildlife Service	22	30	31	32	32	33	34
0.20 Planning Council	9	10	11	11	11	11	11
0.21 Fish & Wildlife	249	246	254	260	267	274	281
0.23 Transmission Services	303	326	336	344	337	344	351
0.24 Conservation & Energy Efficiency	72	86	88	89	91	92	93
0.25 Interest	358	362	409	452	506	556	598
0.26 Pension and Health Benefits ^{1/}	34	35	37	38	38	39	39
0.91 Total operating expenses ^{2/}	2,831	2,933	3,046	3,176	3,244	3,450	3,515
Capital investment:							
1.01 Power Services	214	248	250	245	248	244	250
1.02 Transmission Services	255	717	746	711	621	403	391
1.03 Conservation & Energy Efficiency	80	75	75	92	95	98	101
1.04 Fish & Wildlife	58	67	60	42	37	31	29
1.05 Capital Equipment	42	56	45	46	47	48	48
1.06 Capitalized Bond Premiums	2	2	2	2	2	2	2
1.07 Total Capital Investment ^{3/}	651	1,166	1,179	1,138	1,049	825	820
2.01 Projects Funded in Advanced	305	72	61	49	50	57	69
10.00 Total obligations ^{4/}	3,788	4,170	4,285	4,363	4,343	4,332	4,405

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 2014 budget includes capital and expense estimates based on preliminary IPR forecasted data for FYs 2013-2018.

For purposes of this table, this FY 2014 budget reflects, for FY 2012, 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 Bonneville's other organic laws, including P.L. 100-371, Title III, Sec. 300, 102 Stat. 869, July 19, 1988 regarding Bonneville's ability to obligate funds.

Program and Financing (continued)

Current Services

(in millions of dollars)

est.

	2012	2013	2014	2015	2016	2017	2018
Financing:							
21.90 Unobligated balance available, start of year. ^{5/}	15	9	0	0	0	0	0
24.40 Unobligated balance available, end of year. ^{5/}	9	8	0	0	0	0	0
39.00 Budget authority (gross)	3,784	5,125	5,223	5,398	5,228	5,011	5,189
Budget Authority:							
67.10 Permanent Authority: Authority to borrow from Treasury (indefinite) ^{6/} Spending authority from off-setting collections	806	1,166	1,179	1,138	1,049	825	820
69.47 Portion applied to debt reduction	(329)	(221)	(132)	(151)	(116)	(84)	(102)
69.90 Spending authority from offsetting collections (adjusted)	1,615	3,959	4,144	4,260	4,179	4,186	4,369
71.00 Total obligations	3,788	4,170	4,285	4,363	4,343	4,332	4,405
87.00 Outlays (gross)	3,788	4,170	4,285	4,363	4,343	4,332	4,405
Adjustments to budget authority and outlays:							
Deductions for offsetting collections:							
88.00 Federal funds	(36)	(90)	(90)	(90)	(90)	(90)	(90)
88.20 Interest on Federal Securities	(3)	(3)	(3)				
88.40 Non-Federal sources	(3,267)	(4,088)	(4,203)	(4,285)	(4,263)	(4,253)	(4,326)
88.90 Total, offsetting collections	(3,306)	(4,180)	(4,296)	(4,375)	(4,353)	(4,343)	(4,416)
89.00 Budget authority (net)	459	945	1,027	1,023	875	668	773
90.00 Outlays (net)^{7/}	340	(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 Bonneville's capital program financing needs and either the use of, or creation of, deferred borrowing. Deferred borrowing is created when, as a cash and debt management decision, Bonneville 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 Of 7/19/88) clarified that Bonneville has authority to incur obligations in excess of Treasury borrowing authority and cash in the has authority to incur obligations in excess of Treasury borrowing authority and cash in the BPA fund. 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). Actual Net Outlays could differ from estimates due to changing market conditions, streamflow variability, and continuing restructuring of 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 Northwest Power Act are also assumed.

This budget has been prepared in accordance with PAYGO. Under PAYGO all Bonneville budget estimates are treated as mandatory and are not subject to the discretionary caps included in the Budget Control Act of 2011. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to Bonneville estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because Bonneville operates within existing legislative authority, Bonneville is not subject to a "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							
	2012				2013			
	Net Capital		Net Capital		Net Capital		Net Capital	
	Net Capital	Obs Subject	Net Capital	Bonds Out-	Net Capital	Obs Subject	Net Capital	Bonds Out-
	Obs	to BA	Expend.	Standing	Obs	to BA	Expend.	Standing
Start-of-Year: Total	2,303	1,761	3,202	3,098	2,625	2,083	3,524	3,420
Plus: Annual Increase								
Cum.-Annual Treasury Borrowing	651	651	651		1,166	1,166	1,166	
Treasury Borrowing (Cash)				651				1,166
Less:								
BPA Bond Amortization	329	329	329	329	123	123	123	123
Net Increase/(Decrease):	322	322	322	322	1,043	1,043	1,043	1,043
Cum.-End-of-Year: Total	2,625	2,083	3,524	3,420	3,668	3,126	4,567	4,463
Total Remaining Treasury Borrowing Amount				4,280				3,237
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 2014 budget, BPA "bond(s)" refers to all bonds issued by Bonneville 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 indebtedness issued and sold 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.

Bonneville reserve financing of \$15 million annually is assumed as part of TS capital-PFIA for FYs 2012-2018.

The cumulative amount of actual advance amortization payments as of the end of FY 2012 is \$2,697 million.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of TREASURY BORROWING
CURRENT SERVICES
(in millions of dollars)

BP-4B

	Fiscal Year							
	2014				2015			
	Net Capital		Net Capital		Net Capital		Net Capital	
	Net Capital Obs	Obs to BA	Net Capital Expend.	Bonds Out- Standing	Net Capital Obs	Obs to BA	Net Capital Expend.	Bonds Out- Standing
Start-of-Year: Total	3,668	3,126	4,567	4,463	4,743	4,201	5,642	5,539
Plus: Annual Increase								
Cum.-Annual Treasury Borrowing	1,179	1,179	1,179		1,138	1,138	1,138	
Treasury Borrowing (Cash)				1,179				1,138
Less:								
Total BPA Bond Amortization	103	103	103	103	80	80	80	80
Net Increase/(Decrease):								
Total	1,076	1,076	1,076	1,076	1,058	1,058	1,058	1,058
Cum.-End-of-Year: Total	4,743	4,201	5,642	5,539	5,801	5,259	6,700	6,597
Total Remaining Treasury Borrowing Amount				2,161				1,103
Total Legislated Treasury Borrowing Amount				7,700				7,700

The accompanying notes are an integral part of this table.

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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 2014 budget, BPA "bond(s)" refers to all bonds issued by Bonneville 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 indebtedness issued and sold 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.

Bonneville reserve financing of \$15 million annually is assumed as part of TS capital-PFIA for FYs 2012-2018.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of TREASURY BORROWING
CURRENT SERVICES
(in millions of dollars)

BP-4C

Fiscal Year

	2016				2017			
	Net Capital		Net Capital		Net Capital		Net Capital	
	Net Capital Obs	Obs Subject to BA	Net Capital Expend.	Bonds Out- Standing	Net Capital Obs	Obs Subject to BA	Net Capital Expend.	Bonds Out- Standing
Start-of-Year: Total	5,801	5,259	6,700	6,597	6,795	6,253	7,694	7,590
Plus: Annual Increase								
Cum.-Annual Treasury Borrowing	1,048	1,048	1,048		824	824	824	
Treasury Borrowing (Cash)				1,048				824
Less:								
Total BPA Bond Amortization	55	55	55	55	0	0	0	0
Net Increase/(Decrease):								
Total	993	993	993	993	824	824	824	824
Cum.-End-of-Year: Total	6,795	6,253	7,694	7,590	7,619	7,077	8,518	8,414
Total Remaining Treasury Borrowing Amount				<u>110</u>				<u>(714)</u>
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 2014 budget, BPA "bond(s)" refers to all bonds issued by Bonneville 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.

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.

**BONNEVILLE POWER ADMINISTRATION
BPA STATUS of TREASURY BORROWING
CURRENT SERVICES**

(in millions of dollars)

BP-4D

	Fiscal Year			
	2018			
	Net Capital Obs	Net Capital Subject to BA Obs	Net Capital Expend.	Bonds Out- Standing
Start-of-Year: Total	7,619	7,077	8,518	8,414
Plus: Annual Increase				
Cum.-Annual Treasury Borrowing	820	820	820	
Treasury Borrowing (Cash)				820
Less:				
Total BPA Bond Amortization	100	100	100	100
Net Increase/(Decrease):				
Total	720	720	720	720
Cum.-End-of-Year: Total	8,339	7,797	9,238	9,134
Total Remaining Treasury Borrowing Amount				(1,434)
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 2014 budget, BPA "bond(s)" refers to all bonds issued by Bonneville 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.

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.

Bonneville reserve financing of \$15 million annually is assumed as part of TS capital-PFIA for FYs 2012-2018.

BONNEVILLE POWER ADMINISTRATION
POTENTIAL THIRD PARTY FINANCING TRANSPARENCY
(in millions of dollars)

BP-5

		Fiscal Year						
		2012	2013	2014	2015	2016	2017	2018
Transmission Services - Capital	Requirements							
	Main Grid	64	213	233	279	277	54	64
	Area & Customer Services	7	33	21	15	15	14	15
	Upgrades & Additions	96	237	276	218	134	100	71
	System Replacements	87	234	217	200	196	235	242
	Projects Funded in Advance	305	72	61	49	50	57	69
	Total, Transmission Services - Capital	560	789	807	760	670	459	461

Federal and Non-Federal Funding

	Sources	2012	2013	2014	2015	2016	2017	2018
Projects Funded in Advance		305	72	61	49	50	57	69
Treasury Borrowing Authority		255	717	746	711	621	403	391

Scenario

	Scenario	2012	2013	2014	2015	2016	2017	2018
Projects Funded in Advance ^{1/}			100	150	100	100	100	100
Third Party Financing		235	250	250	250	250	250	250
Alternate Treasury Borrowing Authority		NA	150	100	150	150	150	150

The accompanying notes are an integral part of this table.

^{1/}In this scenario the Projects Funded in Advance represents potential prepayment of Power customers' bills reimbursed by future credits and third party non-federal financing for Conservation initiatives. Power Prepays will be included in this category in the future, depending on customer interest in participation. The table above shows both the potential use of Treasury borrowing authority for transmission capital projects based on this FY 2014 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 2014 budget are uncertain and may change due to revised capital investment plans, 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 & PFIA 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						
		2012	2013	2014	2015	2016	2017	2018
Start-of-Year: Total Bonds Outstanding		2,943	3,420	4,113	4,788	5,496	6,140	6,614
Plus:								
Treasury Borrowing (Cash)		783	1,166	1,179	1,138	1,048	824	820
Less:								
Potential Third Party Financing & PFIA		NA	350	400	350	350	350	350
BPA Bond Amortization		329	123	103	80	55	-	100
Net Increase/(Decrease) Bonds Outstanding:		454	693	676	708	643	474	370
Cum.-End-of-Year: Total		3,420	4,113	4,788	5,496	6,140	6,614	6,984
Total Remaining Treasury Borrowing Amount		4,280	3,587	2,912	2,204	1,560	1,086	716
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						
		2012	2013	2014	2015	2016	2017	2018
A. INTEREST ON BONDS & APPROPRIATIONS								
Bonneville Bond Interest								
1	Bonneville Bond Interest (net)	78	123	168	209	267	318	362
2	AFUDC ^{1/}	47	40	40	40	36	34	35
Appropriations Interest								
3	Bonneville	27	21	17	16	10	6	0
4	Corps of Engineers ^{2/}	147	157	163	167	169	172	176
5	Lower Snake River Comp.	17	17	17	17	17	17	17
6	Bureau of Reclamation ^{3/}	44	44	44	44	44	44	44
Bond Premium paid								
7	Total Bond and Approp. Interest	358	402	449	492	543	590	633
B. ASSOCIATED PROJECT COST								
8	Bureau of Reclamation Irrigation Assistance	1	59	52	52	61	51	28
9	Bureau of Rec. O & M ^{4/}	0	0	0	0	0	0	0
10	Corps of Eng. O & M ^{4/}	-1	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	0	59	52	52	61	51	28
C. CAPITAL TRANSFERS								
Amortization								
13	Bonneville Bonds ^{6/}	329	123	103	80	55	0	100
14	Bureau of Reclamation Appropriations	0	0	0	0	0	0	0
15	Corps of Engineers Appropriations	53	0	10	0	0	0	0
16	Lower Snake River Comp. Plan	0	0	0	0	0	0	0
17	Bonneville Appropriations	112	56	19	71	61	84	2
Total Capital Transfers		493	179	132	151	116	84	102
D. OTHER PAYMENTS								
18	Unfunded CSRS Liability ^{5/}	34	35	37	38	38	39	39
21	TOTAL TREASURY PAYMENTS	886	675	671	732	758	764	802

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 Replacements, 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	2012	2013	2014	2015	2016	2017	2018
Bureau of Reclamation		167	120	150	153	157	158	165
Corps of Engineers		207	216	231	237	244	251	259
Subtotal Bureau and Corps		374	336	381	390	401	409	424
Lower Snake River Comp. Plan		22	30	31	32	32	33	34
Total		396	365	412	422	433	442	457

^{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 2014 budget, BPA "bond(s)" refers to all bonds issued by Bonneville 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.

Does not include Treasury bond premiums on refinanced Treasury bonds.

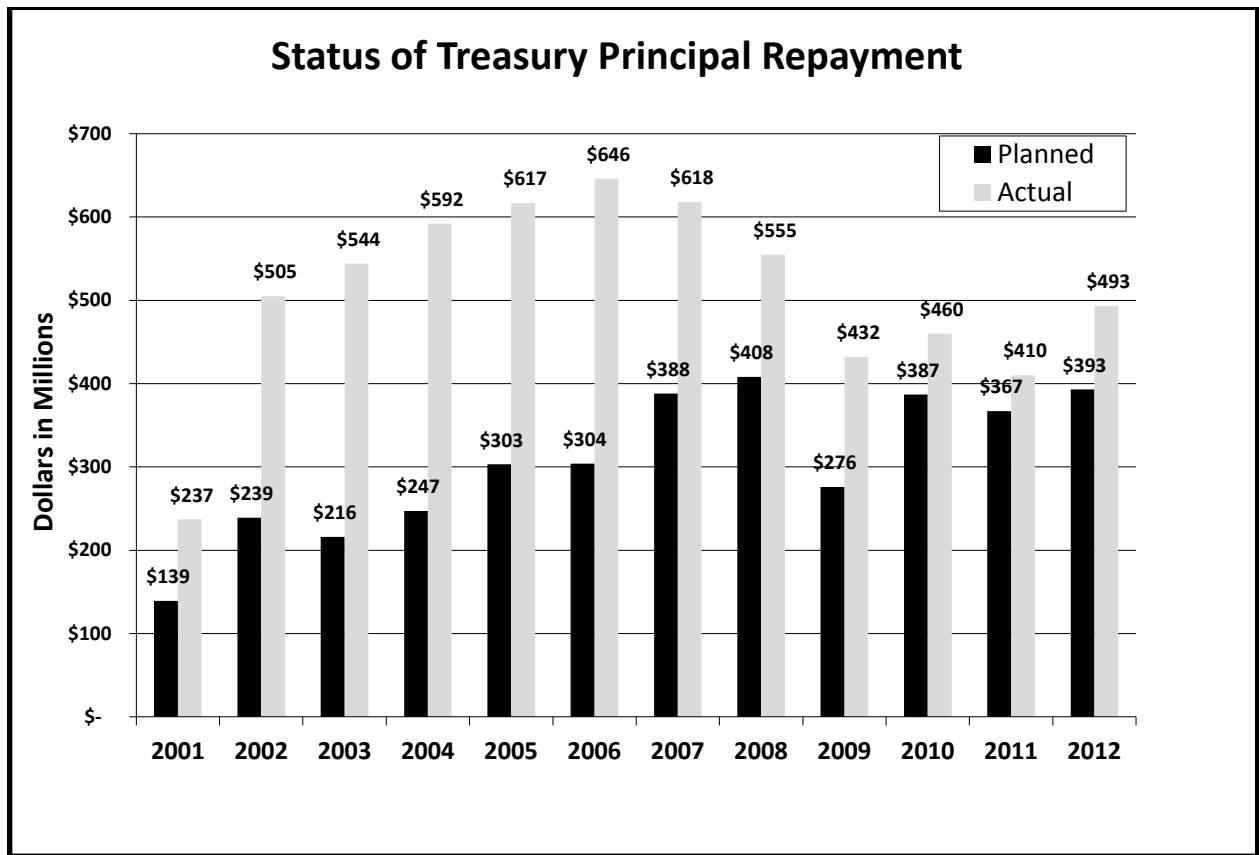


Chart Notes

^{1/} This chart displays principal repayment only.

^{2/} 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 scheduled FY 2012 payment responsibility to the Treasury. Bonneville’s aggregate Treasury payment was \$886 million, comprised of \$493 million in, \$358 million in interest, and \$34 million of unfunded CSRS liabilities and other costs.

^{3/} FYs 2000-2012 payments include portions of future planned amortization amounts consistent with Bonneville's capital strategy plan and the Bonneville /Energy Northwest debt optimization program.

^{4/} Advance amortization due to sale of low-voltage transmission facilities includes \$13 million and \$5.3 million in FYs 2003 and 2006, respectively.

^{5/} 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. The rate case projections also included some amount of advanced repayment of principal to the U.S. Treasury that resulted from Bonneville’s debt optimization program, which involved restructuring Energy Northwest (EN) debt, the cost of which Bonneville is obligated to pay.

^{6/} The cumulative amount of actual advance amortization payments as of the end of FY 2012 is \$2,697 million.

OBJECT CLASSIFICATION STATEMENT
(in millions of dollars)

ESTIMATES

	2012	2013	2014
11.1 Full-time permanent	253	280	284
12.1 Civilian personnel benefits	65	70	74
13.0 Benefits for former personnel	32	35	37
21.0 Travel and transportation of persons	9	10	10
22.0 Transportation of things	5	7	4
23.2 Rents, other	21	22	25
23.3 Communication, utilities & misc. charges	6	8	5
25.1 Consulting Services	465	507	532
25.2 Other Services	1069	1194	1192
25.5 R & D Contracts	11	12	12
26.0 Supplies and materials	590	658	660
32.0 Lands and structures	69	83	72
41.0 Grants, subsidies, contributions	811	881	928
43.0 Interest and dividends	382	403	450
99.0 Total obligations	3788	4170	4285

Estimate of Receipts
(in millions of dollars)

	Fiscal Year						
	2012	2013	2014	2015	2016	2017	2018
Reclamation Interest	44	44	44	44	44	44	44
Reclamation Amortization	0	0	0	0	0	0	0
Reclamation O&M		0	0	0	0	0	0
Reclamation Irrig. Assist.	1	59	52	52	61	51	28
Revenues Collected by Reclamation Distributed in Treasury Account (credit)	-12	-7	-7	-7	-7	-7	-7
Colville Settlement (credit)	-5	-5	-5	-5	-5	-5	-5
Total 1/ Reclamation Fund	28	90	84	84	92	83	59
Corps O&M							
CSRS	33	35	37	38	38	39	38
Total 2/ Repayments on misc.costs	33	35	37	38	38	39	38

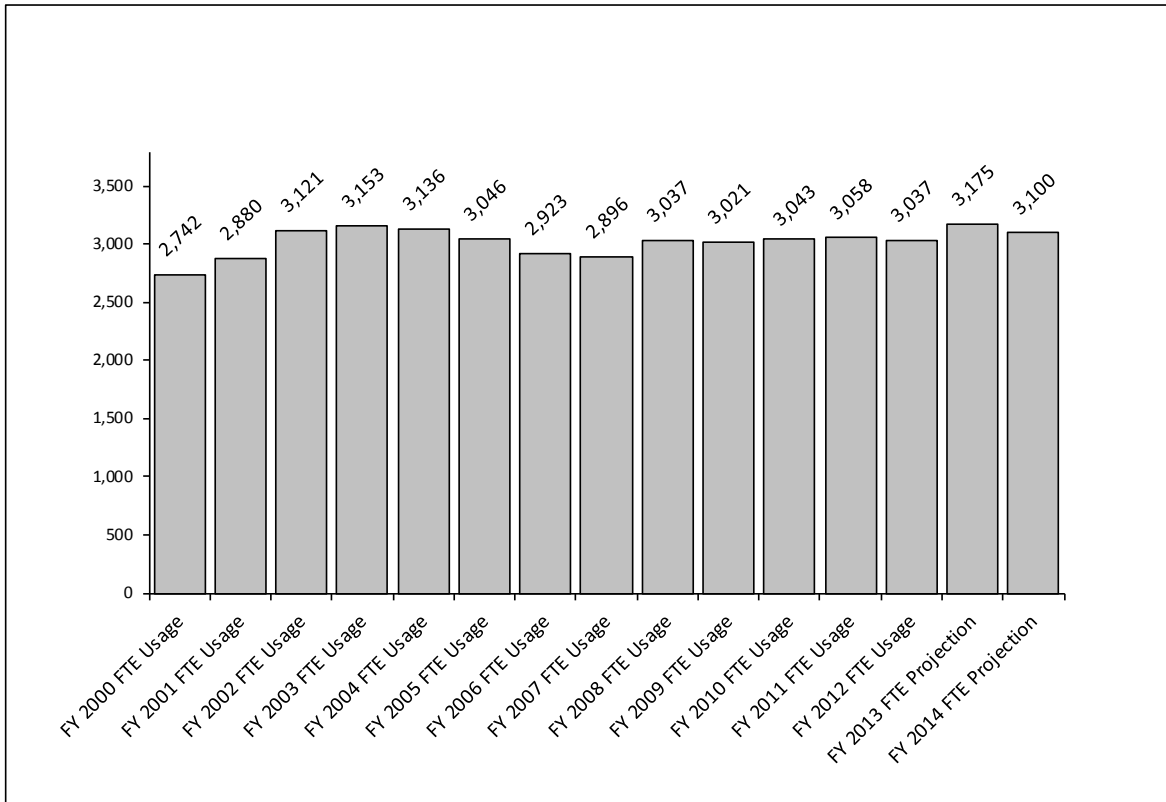
1/ Includes amortization of appropriations and irrigation assistance, and interest costs for Reclamation. The cost of power O&M for Reclamation is no longer included in Proprietary Receipts due to Direct Funding by Bonneville. Represents transfer to Account #895000.26

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)

	2012	2013	2014	2015	2016	2017	2018
Bureau of Reclamation	167	120	150	153	157	158	165
Corps of Engineers	207	216	231	237	244	251	259
Lower Snake River Comp. Plan	22	30	31	32	32	33	34

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



Actual FTE data is consistent with DOE personnel reports.
FTE outyear data are estimates and may change.

Total Cost of BPA Fish & Wildlife Actions

COST ELEMENT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CAPITAL INVESTMENTS ^{1/}										
BPA FISH AND WILDLIFE	11.6	8.5	12.2	35.4	35.2	25.5	27.4	40.0	90.2	57.5
BPA SOFTWARE DEVELOPMENT COSTS	-	-	-	0.9	1.0	1.3	0.6	1.2	0.8	0.4
ASSOCIATED PROJECTS (FEDERAL HYDRO)	68.4	75.9	53.8	360.0	60.4	37.3	135.7	56.4	103.0	114.5
TOTAL CAPITAL INVESTMENTS	80.0	84.4	66.0	396.3	96.6	64.2	163.7	97.6	193.9	172.3
PROGRAM EXPENSES										
BPA DIRECT FISH AND WILDLIFE PROGRAM	140.7	137.9	135.8	137.9	139.5	148.9	177.9	199.6	221.1	248.9
SUPPLEMENTAL MITIGATION PROGRAM EXPENSES ^{2/}	6.5	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REIMBURSABLE/DIRECT-FUNDED PROJECTS ^{3/}										
O & M LOWER SNAKE RIVER HATCHERIES	15.1	17.3	17.2	20.1	19.3	19.4	20.8	23.3	24.5	22.0
O & M CORPS OF ENGINEERS	30.3	32.3	32.5	31.8	32.9	34.4	34.3	36.5	40.3	41.1
O & M BUREAU OF RECLAMATION	3.1	3.9	3.9	4.5	3.9	4.3	4.5	5.2	5.0	5.3
NW POWER AND CONSERVATION COUNCIL ALLOCATED @ 50%	4.0	3.7	4.3	4.3	4.2	4.1	4.7	4.7	4.5	4.6
SUBTOTAL (REIMB/DIRECT-FUNDED)	52.6	57.2	57.9	60.7	60.3	62.2	64.3	69.7	74.3	73.0
TOTAL OPERATING EXPENSES	199.8	202.9	193.7	198.6	199.7	211.1	242.1	269.3	295.3	321.9
PROGRAM RELATED FIXED EXPENSES ^{4/}										
INTEREST EXPENSE	49.9	53.3	56.4	53.4	76.0	76.9	78.7	80.5	79.2	80.6
AMORTIZATION EXPENSE	17.4	17.5	17.4	17.4	22.9	24.4	24.6	25.0	28.3	30.2
DEPRECIATION EXPENSE	13.2	14.6	15.9	16.7	14.0	14.9	16.7	18.0	19.6	20.7
TOTAL FIXED EXPENSES	80.5	85.4	89.7	87.5	112.9	116.2	120.0	123.5	127.2	131.5
GRAND TOTAL PROGRAM EXPENSES	280.3	288.3	283.4	286.1	312.7	327.3	362.1	392.8	422.5	453.4
FORGONE REVENUES AND POWER PURCHASES										
FOREGONE REVENUES	79.2	21.7	182.1	397.4	282.6	273.5	142.8	99.4	156.7	152.2
BPA POWER PURCH. FOR FISH ENHANCEMENT	171.1	191.0	110.8	168.2	120.7	274.9	240.3	310.1	70.7	38.5
TOTAL FOREGONE REVENUES AND POWER PURCHASES	250.3	212.7	292.9	565.6	403.3	548.5	383.1	409.5	227.4	190.7
TOTAL PROGRAM EXPENSES, FOREGONE REVENUES, & POWER PURCHASES	530.6	501.0	576.3	851.7	716.0	875.8	745.3	802.3	649.9	644.1
CREDITS										
4(h)(10)(C)	(73.6)	(77.0)	(57.7)	(76.4)	(66.1)	(100.5)	(99.5)	(122.8)	(85.3)	(77.0)
FISH COST CONTINGENCY FUND	(78.7)	-	-	-	-	-	-	-	-	-
TOTAL CREDITS	(152.3)	(77.0)	(57.7)	(76.4)	(66.1)	(100.5)	(99.5)	(122.8)	(85.3)	(77.0)

1/ 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 Corps of Engineers' and Bureau of Reclamation projects, funded by appropriations and repaid by BPA. The negative amount in FY 1997 reflects a decision to reverse "plant-in-service" investment that was never actually placed into service. The annual expenses associated with these investments are included in "Program-Related Fixed Expenses", below.

2/ Includes High Priority and Action Plan Expenses and other supplemental programs.

3/ "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.

4/ "Fixed Expenses" include depreciation, amortization and interest on investments on the Corps of Engineers' projects, and amortization and interest on the investments associated with BPA's direct

GENERAL PROVISIONS

(including cancellation and transfer of funds)

Sec. 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. 302. 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 2014 until the enactment of the Intelligence Authorization Act for fiscal year 2014.

Sec. 303. Not to exceed 5 percent, 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 Appropriations Acts may be transferred between such appropriations, but no such appropriation, except as otherwise provided, shall be increased or decreased by more than 5 percent by any such transfers, and any such proposed transfers shall be submitted promptly to the Committees on Appropriations of the House and Senate.

Sec. 304. None of the funds made available in this title shall be used for the construction of facilities classified as high-hazard nuclear facilities under 10 CFR Part 830 unless independent oversight is conducted by the Office of Health, Safety, and Security to ensure the project is in compliance with nuclear safety requirements.

Sec. 305. None of the funds made available in this title may be used to approve critical decision-2 or critical decision-3 under Department of Energy Order 413.3B, or any successive departmental guidance, for construction projects where the total project cost exceeds \$100,000,000, until a separate independent cost estimate has been developed for the project for that critical decision.

Sec. 306. (a) The set-asides included in Division C of Public Law 111-8 for projects specified in the explanatory statement accompanying that Act in the following accounts shall not apply to such funds: "Defense Environmental Cleanup", "Electricity Delivery and Energy Reliability", "Energy Efficiency and Renewable Energy", "Fossil Energy Research and Development", "Non-Defense Environmental Cleanup", "Nuclear Energy", "Other Defense Activities", and "Science". (b) The set-asides included in Public Law 111-85 for projects specified in the explanatory statement accompanying that Act in the following accounts shall not apply to such funds: "Electricity Delivery and Energy Reliability", "Energy Efficiency and Renewable Energy", "Fossil Energy Research and Development", "Nuclear Energy", and "Science".

Sec. 307. [Of the unobligated balances from prior year appropriations available under the heading "Energy Efficiency and Renewable Energy", \$69,667,000 are hereby permanently cancelled: Provided, That no amounts may be cancelled from amounts that were designated by the Congress as an emergency requirement pursuant to the Concurrent Resolution on the Budget or the Balanced Budget and Emergency Deficit Control Act of 1985, as amended]The Secretary of Energy may transfer up to \$48,000,000 from any appropriation or combination of appropriations made available to the Department of Energy in this or prior Acts to any other appropriation, for the purpose of carrying out domestic uranium enrichment research, development, and demonstration activities: Provided, That any transfer pursuant to this section does not transfer funds from the national defense (050) budget function to any other budget function, or from any other budget function to the national defense (050) budget function. Note.--A full-year 2013 appropriation for this account was not enacted at the time the budget was prepared; therefore, this account is operating under a continuing resolution (P.L. 112-175). The amounts included for 2013 reflect the annualized level provided by the continuing resolution.

