# FY 2009 Budget Submission for Congress

February 2008



## DEPARTMENT OF ENERGY BONNEVILLE POWER ADMINISTRATION

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#### **Bonneville Power Administration**

## **Proposed Appropriations Language**

Expenditures from the Bonneville Power Administration Fund, established pursuant to Public Law 93-454, are approved for [the Lower Granite Dam fish trap, the Kootenai River White Sturgeon Hatchery, the Nez Perce Tribal Hatchery, Redfish Lake Sockeye Captive Brood expansion, hatchery production facilities to supplement Chinook salmon below Chief Joseph Dam in Washington, Hood River Production Facility, Klickitat production expansion, Mid Columbia Coho restoration, and Yakama Coho restoration, and, in addition, for official reception and representation expenses in an amount not to exceed \$1,500.

During fiscal year [2008]2009, no new direct loan obligations may be made.

## **Explanation of Changes**

The proposed appropriations language restricts new direct loans in FY 2009 as in FY 2008

#### **Bonneville Power Administration**

#### Overview

#### **Summary by Program**

FY	2007	FY	2008	FY	2009
	150,492		236,675		215,330
	140,965		242,370		293,533
	20,610		31,017		51,123
	312,067		510,062		559,986
	312,067		510,062		559,986
	,		,		227,223
	2,349,791		2,718,980		2,865,884

(accrued expenditures in thousands of dollars)

71,775

408,264

42,000

3,000

125,318

275,723

23,000

3,000

# Outyear Summary

(accrued	lavnanditurac	in	thousande	of dollars)	

107,269

623,400

(508,000)

2,896

	(accrued expenditures in thousands of dollars)							
	FY	2010	FY	2011	FY	2012	FY	2013
CAPITAL INVESTMENTS								
Power Services		219,325	;	224,314		234,236		239,181
Transmission Services		278,184		369,836		419,059		319,631
Capital Equipment & Bond Premium		54,798	;	28,363		28,431		29,501
Total, Capital Investments		552,307	•	622,513		681,726		588,313
Accrued expenditures will require budget								
obligations of		552,307	,	622,513		681,726		588,313
Operating Expenses		2,695,594		2,789,216		2,708,184		2,667,493
Projects Funded in Advance		65,856		78,966		72,242		72,603
Capital Transfers (cash)		423,976	i	417,680		293,841		246,661
BPA Net Outlays		30,000	)	17,000		(4,000)		(10,000)
BPA Staffing (FTE)		3,000	)	3,000		3,000		3,000

Capital Investments Power Services Transmission Services

obligations of

Operating Expenses

BPA Net Outlays

BPA Staffing (FTE)

Total, Capital Investments

Projects Funded in Advance

Capital Transfers (cash)

Capital Equipment & Bond Premium

Accrued expenditures will require budget

#### Overview

#### The accompanying notes are an integral part of this table.

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

Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses. Actual Net Outlays are volatile and are reported in SF-133. Estimated Net Outlays could change 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 NW Power Act are also assumed.

The cumulative amount of actual advance amortization payments as of the end of FY 2007 is \$2,091 million.

FTE outyear data are estimates and may change.

#### **Preface**

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

The organization of Bonneville's FY 2009 budget reflects Bonneville's business services basis for utility enterprise activities. Bonneville's two major areas of activity on a consolidated budget and accounting basis include Power Services (PS) and Transmission Services (TS) with administrative costs included. The PS includes line items for Fish and Wildlife, Conservation and Energy Efficiency, Residential Exchange Program (REP), Associated Projects O&M Costs, and Northwest Power and Conservation Council (Planning Council).

#### Mission

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

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

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

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

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

#### **Benefits**

Bonneville provides electric power (about one third of the electricity consumed in the region), transmission (about three-fourths of the region's high voltage transmission capacity), and energy efficiency throughout the Pacific Northwest, a 300,000 square mile service area. Bonneville markets the electric power produced from 31 operating Federal hydro projects in the Pacific Northwest owned by the U.S. Corps of Engineers (Corps) and the U.S. Department of Interior, Bureau of Reclamation (Reclamation), and also acquires non-Federal power, including the power from the Columbia Generating Station (CGS), to meet the needs of its customer utilities. Bonneville owns and operates over 15,000 circuit miles of lines, 237 substations and associated power system control and communications

Bonneville Power Administration/ Overview

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

Bonneville's strategic direction establishes the agency's most important long-term objectives and the actions that will help it manage to these objectives. The strategic direction calls on BPA to advance the Pacific Northwest's future leadership in three core values: trustworthy stewardship of the FCRPS, collaborative relationships, and operational excellence.

#### Strategic Themes and Goals and GRPA Unit Program Goals

The Department of Energy's (Department or DOE) Strategic Plan identifies five Strategic Themes (one each for nuclear, energy science, management, and environmental aspects of the mission plus sixteen Strategic Goals that tie to the Strategic Themes). The Bonneville program supports the following goal:

Strategic Theme 1, Energy Security: Promoting America's energy security through reliable, clean, and affordable energy.

Strategic Goal 1.3 Energy Infrastructure: Create a more flexible, more reliable, and higher capacity U.S. energy infrastructure.

Bonneville's Government and Results Performance Act (GRPA) Unit Program Goal contributes to the Strategic Goals in the "goal cascade." This goal is to Market and Deliver Federal Power:

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

#### **Contribution to Strategic Goal**

Bonneville contributes to this strategic goal through its strategic vision to advance a Northwest power system that is a national leader in providing reliability, low rates consistent with sound business principles, environmental stewardship, and accountability to the region. BPA is continuing its emphasis on performance with 27 agency-wide long-term objectives for FYs 2008-2014 that are key to achieving its mission. These objectives, aligned using the balanced scorecard model, are focused on stakeholder value, financial performance, internal operations, and people and culture. Bonneville's infrastructure investments in the Pacific Northwest to meet power and transmission needs continue to support DOE's strategic goal on energy infrastructure.

Bonneville's strategic direction has helped to identify a number of key long-term issues. These issues center on providing Bonneville customers with certainty over load service obligations and enabling customers and the market to respond with the necessary electric industry infrastructure investments. Other key strategic interests include general market stability, BPA risk management, and long-term assurance of funding to repay the U.S. Treasury (Treasury) investment in infrastructure. Bonneville is now addressing these key issues through the Regional Dialogue, BPA's post-2011 power marketing planning process.

Bonneville Power Administration/ Overview

## Funding by Strategic and GRPA Unit Program Goal

	(accrued expenditures in thousands of dollars)						
	FY 2007	FY 2008	FY 2009				
Strategic Theme 1, Energy Security							
Strategic Goal 1.3 Energy Infrastructure							
GRPA Unit Program Goal 01.03.18.00, Market and Deliver Federal P	ower						
Bonneville Power Administration							
Capital Investments							
Power Services	150,492	236,675	215,330				
Transmission Services	140,965	242,370	293,533				
Capital Equipment & Bond Premium	20,610	31,017	51,123				
Total Capital Investments							
A 1 12 21 11 1 1 1	312,067	510,062	559,986				
Accrued expenditures will require budget							
obligations of	312,067	510,062	559,986				
Operating Expenses	2,349,791	2,718,980	2,865,884				
Projects Funded in Advance	107,269	71,775	125,318				
Capital Transfers (cash)	623,400	408,264	275,723				
Net Outlays	(508,000)	42,000	23,000				
BPA Staffing (FTE)	2.006	2.000	2.000				
DI A Starring (FTE)	2,896	3,000	3,000				

## Outyear Funding by Strategic and GRPA Unit Program Goal

	(accrued expenditures in thousands of dollars)								
	FY	2010	FY	2011	FY	2012	FY	2013	
Strategic Theme 1, Energy Security	•				•			•	
Strategic Goal 1.3 Energy Infrastructure									
GRPA Unit Program Goal 01.03.18.00, Market	and De	liver Federal	Power						
Capital Investments									
Power Services		219,325		224,314		234,236	j	239,181	
Transmission Services		278,184		369,836		419,059	)	319,631	
Capital Equipment & Bond Premium		54,798		28,363		28,431		29,501	
Total Capital Investments		552,307		622,513		681,726	5	588,313	
Accrued expenditures will require budget									
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(accrued expenditures in thousands of dollars)

	(							
	FY	2010	FY	2011	FY	2012	FY	2013
Operating Expenses		2,695,594		2,789,216		2,708,184		2,667,493
Projects Funded in Advance		65,856		78,966		72,242		72,603
Capital Transfers (cash)		423,976		417,680		293,841		246,661
Net Outlays		30,000		17,000		(4,000)		(10,000)
BPA Staffing (FTE)		3,000		3,000		3,000		3,000

#### **Funding by General and Program Goal**

#### The accompanying notes are an integral part of this table.

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 SF-133. Estimated Net Outlays could change 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 NW Power Act are also assumed.

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.

FTE outyear data are estimates and may change.

## **Annual Performance Results and Targets**

FY 2004 Results	FY 2005 Results	FY 2006 Targets	FY 2007 Targets	FY 2008 Targets	FY 2009 Targets
Strategic Goal.3.1, Energy	I				
System Reliability Performance: Met Goal Actual: CPS1: 198.5% CPS2: 94.3%	System Reliability Performance: Met Goal Actual: CPS1: 196.6% CPS2: 93.9%	System Reliability Performance: Met Goal Actual: CPS1: 193.3% CPS2: 96.1%	System Reliability Performance: Met Goal Actual: CPS1: 193.9% CPS2: 96.01%	System Reliability Performance: Attain average North American Reliability Council (NERC) compliance ratings for the following NERC Control Performance Standards (CPS) measuring the balance between power generation and load, including support for system frequency: (1) CPS1, which measures generation/load balance on one-minute intervals (rating > or =100); and (2) CPS2, which limits any imbalance magnitude to acceptable levels (rating > or =90).	System Reliability Performance: Attain average North American Reliability Council (NERC) compliance ratings for the following NERC Control Performance Standards (CPS) measuring the balance between power generation and load, including support for system frequency: (1) CPS1, which measures generation/load balance on one-minute intervals (rating > or =100); and (2) CPS2, which limits any imbalance magnitude to acceptable levels (rating > or =90).
Repayment of Federal Power Investment Performance: Met Goal (\$246 million) Actual: \$592 million	Repayment of Federal Power Investment Performance: Met Goal (\$303 million) Actual: \$618 million	Repayment of Federal Power Investment Performance: Met Goal (\$304 million) Actual: \$646 million	Repayment of Federal Power Investment Performance: Met Goal (\$387 million) Actual: \$618 million	Repayment of Federal Power Investment Performance: Meet planned annual repayment of principal on Federal power investments.	Repayment of Federal Power Investment Performance: Meet planned annual repayment of principal on Federal power investments.
	Hydropower Generation Efficiency Performance: Met Goal (97%) Actual: 100% (EOY)	Hydropower Generation Efficiency Performance: Met Goal (97%) Actual: 100% (EOY)	Hydropower Generation Efficiency Performance: Met Goal (97%) Actual: 99.6% (cumulative for the four quarters of FY 2007)	Hydropower Generation Efficiency Performance: Achieve > or = 97.5% Heavy- Load-Hour Availability (HLHA) through efficient performance of Federal hydro- system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700-2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.	Hydropower Generation Efficiency Performance: Achieve > or = 97.5% Heavy- Load-Hour Availability (HLHA) through efficient performance of Federal hydro- system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700-2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.

## **Annual Outyear Performance Targets**

FY 2010 Targets	FY 2011Targets	FY 2012 Targets	FY 2013Targets
Strategic Goal.3.1, Energy Infrastruc	ture		
System Reliability Performance: Attain average NERC compliance ratings for the NERC CPS measuring the balance between power generation and load, including support for system frequency.	System Reliability Performance: Attain average NERC compliance ratings for the NERC CPS measuring the balance between power generation and load, including support for system frequency.	System Reliability Performance: Attain average NERC compliance ratings for the NERC CPS measuring the balance between power generation and load, including support for system frequency.	System Reliability Performance: Attain average NERC compliance ratings for the NERC CPS measuring the balance between power generation and load, including support for system frequency.
Repayment of Federal Power Investment Performance: Meet planned annual repayment of principal on Federal power investments.	Repayment of Federal Power Investment Performance: Meet planned annual repayment of principal on Federal power investments.	Repayment of Federal Power Investment Performance: Meet planned annual repayment of principal on Federal power investments.	Repayment of Federal Power Investment Performance: Meet planned annual repayment of principal on Federal power investments.
Hydropower Generation Efficiency Performance: Achieve > or = 97.5% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700- 2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.	Hydropower Generation Efficiency Performance: Achieve > or = 97.5% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700- 2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.	Hydropower Generation Efficiency Performance: Achieve > or = 97.5% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700- 2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.	Hydropower Generation Efficiency Performance: Achieve > or = 97.5% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700-2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.

BPA is continuing to assess target measures that achieve the best alignment with its strategic objectives.

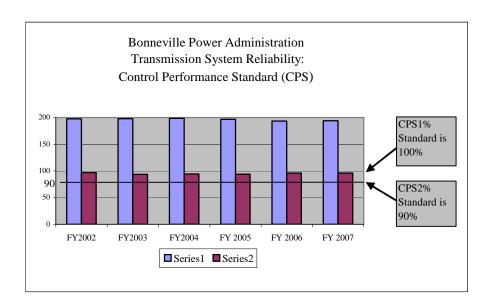
The Hydropower Generation Efficiency Performance Target is included in this FY 2009 budget as a performance measure starting in FY 2005. For FY 2004, the goal for this measure was 97% with actual results of 100%.

#### **Transmission System Reliability Performance Indicator**

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

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

Transmission System Reliability Target in FY 2009: Attain average NERC compliance ratings for the following NERC CPS measuring the balance between power generation and load, including support for system frequency: (1) CPS-1, which measures generation/load balance on one-minute intervals (rating >=100); and (2) CPS-2, which limits any imbalance magnitude to acceptable levels (rating >=90).



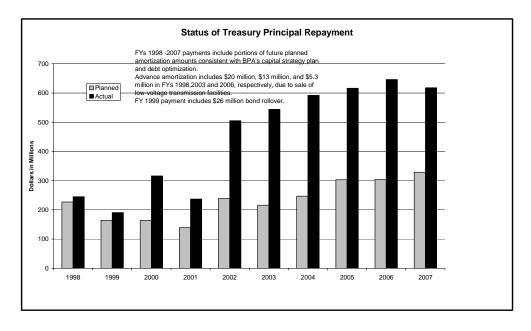
#### **Repayment of Federal Power Investment Performance Indicator**

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

Treasury payment outyear estimates for planned amortization of principal are based on rate case estimates when available and planned amortization for future rate case periods. These estimates may change due to revised capital investment plans, actual Treasury borrowing, and advanced amortization payments. In recent years, BPA has made amortization payments in excess of those scheduled in its Federal Energy Regulatory Commission (FERC)-approved rate filings, resulting in a balance of advance repayment. Bonneville made its full FY 2007 payment of \$1,045 million to the Treasury comprised of \$618 million in amortization that includes \$289 million in advanced amortization, \$395 million in interest, and \$32 million of unfunded CSRS liabilities and other costs.

Repayment target in 2009 – Meet planned repayment of principal on Federal power investments in FY 2009.





For FY 2007, the planned repayment of principal of Federal power investment reflects the amount calculated in the most recent Power Rate Case that was scheduled to be the lowest level of amortization satisfying the repayment requirements. This display of planned repayment of principal is consistent with all prior years shown on the table. The most recent Power Rate Case also included some amount of advanced repayment of principal to the U.S. Treasury that resulted from the way the debt optimization program was designed to repay a relatively small portion of the Energy Northwest debt.

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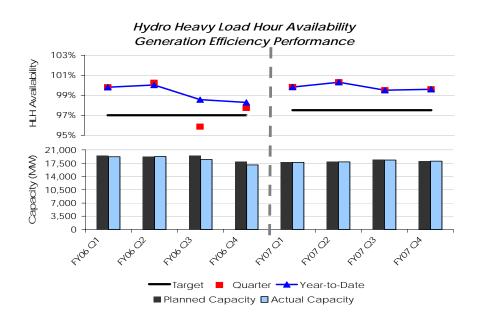
#### **Hydropower Generation Efficiency Performance Indicator**

The fundamental programmatic role of Bonneville within the FCRPS is the marketing of electricity generated at the multi-purpose hydro projects owned and operated by the Corps and Reclamation in the Pacific Northwest. HLHA concerns the actual effective performance of the hydroelectric generating system, reflecting joint work between BPA, the Corps, and Reclamation to optimize the operational performance of these generating projects to ensure they are available when they are needed most for meeting the region's firm power loads. It is important from a reliability and economic standpoint to have power generation available when loads are high.

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

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

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



As represented above, FCRPS hydro generating performance tracked very closely to the HLHA targets for all of FY2007, meeting the target in all four quarters.

Bonneville Power Administration/ Overview

#### Means and Strategies

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

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

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

For FY 2009 BPA's total transmission capital budget includes a total of \$419 million for main grid additions, upgrades and additions, system replacements, area and customer services, and projects funded in advance. These investments, repaid entirely by revenues from BPA's transmission customers or benefiting third parties, are foundational to BPA's transmission performance.

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

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

Bonneville initiatives are impacted by external factors such as continually changing economic and institutional conditions in the electric utility industry, competitive dynamics, and the continued restructuring of the electric industry.

Private and public sector partners have been and continue to be an important part of BPA's collaborative efforts to promote and foster efficient use of energy. BPA has initiated efforts to

Bonneville Power Administration/ Overview

explore non-Federal financial participation in its transmission infrastructure projects with transmission customers and others in the region. The most recent BPA power rate setting process supported a high level of cooperation and collaboration with customers and other rate case parties resulting in significant cost efficiencies and enhanced risk management approaches. Additionally, BPA is partnering with and assisting a DOE Wind Power crosscutting initiative to strengthen energy security by adding alternative sources of renewable energy.

Additional activities and products contributing to BPA's long-term achievement of its mission include the Regional Dialogue, an enhanced capital asset management plan, a workforce plan that addresses the long-term staffing needs of the agency, and continuing efforts to increase operational efficiencies. A separate Innovative Technology office within BPA leads the long-term strategy development and management for research, development, demonstration and deployment of new technology by BPA. BPA is also working to incorporate the numerous aspects of the Energy Policy Act of 2005 related to its business, in particular transmission reliability, energy supply, conservation, and new energy technologies for the future.

#### **Validation and Verification**

To validate and verify program performance, Bonneville conducts various internal and external reviews and audits. Bonneville's programmatic activities are subject to review by Congress, the General Accountability Office (GAO), the Department's Inspector General, and other governmental entities. Bonneville accounts are reviewed annually by an independent outside auditor. In addition, BPA uses Institute of Electrical and Electronics Engineers standard measures to monitor and evaluate system reliability performance, and participates yearly in an independent reliability benchmarking study.

#### **Program Assessment Rating Tool (PART)**

The Department implemented a tool to evaluate selected programs. PART was developed by the Office of Management and Budget (OMB) to provide a standardized way to assess the effectiveness of the Federal government's portfolio of programs. The structured framework of the PART provides a means through which programs can assess their activities differently than through traditional reviews.

The current focus is to establish outcome- and output-oriented goals, the successful completion of which will lead to benefits to the public, such as increased national security and energy security, and improved environmental conditions. BPA has incorporated feedback from OMB into the FY 2009 budget submission, and will take the necessary steps to continue to improve performance.

In the 2004 PART review by OMB, Bonneville received high scores of 89 and 100 in the Planning and Management sections. These high scores reflect Bonneville's strong program management system and internal and external program and management reviews. Bonneville's somewhat lower scores in the Purpose and Results sections were attributed in part to its rate

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setting processes and the need for improved performance measures. Enactment of the adjustable BPA power rates to accommodate changing water conditions and financial performance is an example of how BPA is working to continuously improve its rate setting as a tool to protect the taxpayer's investment in the FCRPS. This rate adjustment helped BPA establish its rates with a targeted Treasury payment probability over 90 percent for the FY 2007-2009 rate period. BPA's FY 2007 Treasury payment marks the 24th consecutive year that BPA has made its payment on time and in full.

Regarding PART feedback on performance measurement, BPA annually reviews its overall strategic vision and associated performance measures, enhancing the linkage between its financial performance and strategy.

With respect to the marketing and cost recovery findings, BPA has initiated a multi-year, agencywide efficiency drive—the Enterprise Process Improvement Program (EPIP). The EPIP has already led to consolidation and centralization of several agency functions, elimination of redundancies and establishment of consistent processes. The resulting transition from a business line basis of organization to a services structure is reflected in this FY 2009 budget. The second phase of the EPIP program is focusing on asset management, marketing and sales, and the materials supply chain. Each EPIP area of focus undergoes an assessment of the current state, benchmarking to identify best practices, designing of the desired future state, and conducting gap analysis to determine changes needed.

#### **Program Perspectives**

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

#### **Introduction:**

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

The Bonneville Project Act of 1937 provided the foundation for Bonneville's statutory utility responsibilities and authorities. In 1974, passage of the Federal Columbia River Transmission System Act (Transmission System Act) placed Bonneville under provisions of the Government Corporation Control Act (31 U.S.C. 9101-9110). The legislation provided Bonneville with "self-financing" authority and established the Bonneville Fund, a permanent, indefinite

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appropriation, allowing Bonneville to use its revenues from electric power and transmission ratepayers to directly fund all programs and to sell bonds to the Treasury to finance the region's high-voltage electric transmission system requirements. In 1980, enactment of the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) expanded Bonneville's utility obligations and responsibilities to encourage electric energy conservation; develop renewable energy resources; and protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries. In support of these responsibilities, Bonneville's Treasury borrowing authority was expanded to allow the sale of bonds to finance conservation and other resources and to carry out fish and wildlife capital improvements. The Northwest Power Act also required regional energy plans and programs and created the Pacific Northwest Electric Power and Conservation Planning Council, now commonly called the Northwest Power and Conservation Council.

Bonneville's program is treated as mandatory and nondiscretionary. As such, Bonneville is "self-financed" by the ratepayers of the Pacific Northwest and is not annually appropriated by Congress. Under the Transmission System Act, Bonneville funds the expense portion of its budget and repays the Federal investment with revenues from electric power and transmission rates. Bonneville's revenues fluctuate primarily in response to market prices for fuels and stream flow variations in the Columbia River System due to weather conditions and fish recovery needs. Bonneville's permanent statutory borrowing authority authorizes the agency to sell bonds to the Treasury up to a cumulative total of \$4.45 billion outstanding at any one time. Through FY 2007, Bonneville has returned approximately \$23.7 billion to the Treasury for payment of FCRPS O&M and other costs (about \$3.0 billion), interest (about \$12.2 billion), and amortization (about \$8.5 billion) of appropriations and bonds.

#### **Treasury Payments and Budget Overview:**

Bonneville made its full planned FY 2007 payment of \$1,045 million to the Treasury, including \$289 million in advanced amortization (as part of BPA's debt optimization program). Total FY 2007 4(h)(10)(C) credits applied to the Treasury payment for fish mitigation were about \$71 million. For FY 2008, Bonneville plans to pay the Treasury \$774 million: \$408 million to repay investment principal, \$348 million for interest, and \$18 million for Associated Project costs and pension and post-retirement benefits. The FY 2009 Treasury payment is currently estimated at \$673 million. FYs 2008 and 2009 4(h)(10)(C) credits, associated with fish recovery and to be applied toward BPA's Treasury payment, are estimated at \$85 million annually, consistent with power rate case documentation.

Estimates of interest levels for outyear Treasury payments are based on FY 2007 Power Rate Case estimates and TS's FY 2008 Rate Case estimates updated to reflect current capital estimates. Bond and Appropriations Interest will continue to be revised based on upcoming capital investments and debt management actions. Amortization estimates are based on existing rate case plans and estimated amortization for future rate case periods. These estimates may change due to revised capital investment plans and actual Treasury borrowing. In recent years, BPA has made amortization payments in excess of those scheduled in its FERC-approved rate filings resulting in a balance of advance repayment. The cumulative

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amount of advance amortization payments as of the end of FY 2007 is about \$2,091 million. Amortization estimates in this FY 2009 budget include planned amortization amounts in advance of scheduled amortization (due to earlier Energy Northwest [EN] refinancing) in FYs 2008 and 2009 of \$63 million and \$78 million, respectively, consistent with power rate case documentation.

Starting in FY 1997, Bonneville began direct funding the Reclamation's Pacific Northwest power O&M costs, and in FY 1999 Bonneville began direct funding Corps Pacific Northwest power O&M costs. Bonneville began direct funding the U.S. Fish and Wildlife Service (USFWS) in FY 2001 to pay for O&M costs of the Lower Snake River Compensation Plan facilities. Bonneville's direct funding arrangement includes a portion of power O&M capital investments. Direct funded capital costs, previously funded through appropriations, are now being paid through BPA borrowing from the Treasury. BPA's total O&M direct funding, including the small capital program, was \$244 million in FY 2007.

This FY 2009 budget proposes Bonneville accrued expenditures of \$2,865 million for operating expenses, \$125 million for Projects Funded in Advance, \$560 million for capital investments, and \$276 million for capital transfers in FY 2009. The budget has been prepared on the basis of Bonneville's major areas of activity, power and transmission. This business structure arose as a response to FERC Orders 888 and 889 requiring separation of public utilities' power and transmission functions. As a Federal agency, Bonneville is not subject to FERC's jurisdiction (except for the new requirements of the Energy Policy Act of 2005) but chooses to voluntarily comply with FERC open-access policy. Further, Bonneville supports DOE's October 1995 "Power Marketing Administration Open Access Policy" which states the Power Marketing Administrations' commitment to offer transmission services to eligible entities in a manner comparable to the services offered by FERC-jurisdictional transmission providers to the extent not otherwise inconsistent with Federal law.

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

#### **Current Financial Status**

Bonneville's FY 2009 budget reflects the significant financial and business events that have shaped Bonneville's response to the physical and competitive pressures of the region's electricity environment. BPA is striving to enhance its competitive, cost-effective delivery of utility products and services and continued delivery of the public benefits of its operations, while ensuring its ability to make its payments to the Treasury on time and in full. BPA utilizes a strategic planning process using the balanced scorecard model to align all business units around specific goals and align resources to achieve these goals. Additionally, BPA continues to recognize PART feedback from OMB in the areas of planning, performance measurement, and results and marketing. From these efforts, results include continued efficiency gains, performance integration improvements, and a high assurance for repayment of Treasury borrowing.

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- After several years of sustained effort, BPA has recovered from the financial effects of the 2000-2001 west coast power crisis. FY 2007 financial results were strong despite a below average water year. Continued cost management efforts helped BPA end FY 2007 with strong reserve levels. These gains are helping BPA continue its efforts to assure full recovery of its costs and to assure long-term financial stability while meeting its overall responsibilities to the Pacific Northwest and the U.S. taxpayer. BPA is well positioned as it moves through the FY 2007-2009 power rate period.
- BPA conducted an extensive consultation process with stakeholders on its power cost structure for the 2007 through 2009 power rate period. This process, called a Power Function Review (PFR), gave the region the opportunity to examine and provide input on the cost projections that formed the basis for BPA's 2007-2009 power rates. The PFR helped BPA identify total estimated rate period savings forecasted to be \$122 million per year. BPA submitted its FYs 2007-2009 power rate to FERC and on September 21, 2006 received interim approval of the new rates that took effect October 1, 2006.
- In anticipation of establishing transmission rates for the FY 2008-2009 period, BPA initiated Programs in Review (PIR), a separate public process with customers, constituents and others designed to share proposed transmission program funding levels. Results from the PIR process served as the basis for development of costs in BPA's final 2008 transmission rate proposal and Record of Decision issued in April 2007. The Record of Decision establishes transmission and ancillary services rates for FYs 2008 and 2009 and results in no overall rate increase for the rate period. BPA submitted its transmission rates to FERC for approval in May 2007 and received final approval in September 2007.
- By 2008, BPA intends to align its transmission and power rate cases and consolidate its public processes on agency wide expenses and capital plans as part of its efforts to increase transparency for customers and stakeholders.
- Bonneville released its Long-Term Regional Dialogue Policy and Record of Decision in July 2007. The Regional Dialogue Policy is focused on defining how Bonneville will market its wholesale power after 2011 and to ensure it does so in a way that meets key regional and national energy goals and ensures BPA's ability to meet its Treasury obligations.

In the Regional Dialogue Policy, BPA committed to updating its Financial Plan. BPA is planning to update the current 10-year Financial Plan in 2008 to reflect current policies and strategies as well as those for the future.

#### **Infrastructure Investment:**

Bonneville is planning infrastructure investments in the Pacific Northwest to meet Northwest transmission needs that will also continue to support a competitive wholesale

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market in the Western Interconnection that encompasses 14 western States, two Canadian provinces and one Mexican State. These efforts will help to buffer against escalating fossil fuel prices. BPA continues to target transmission investments in those areas with reliability needs.

- Bonneville has identified a number of actions that it is taking or could take over the next several years to provide additional electric system infrastructure relief. These actions include Federal hydro generation efficiencies and additions, additional renewable resource generation and conservation efforts, long-term and short-term power purchases, and construction of transmission projects that reinforce the grid and integrate new generation. As part of these efforts, Bonneville is implementing a process to review and approve certain proposed FCRPS investments.
- Bonneville received an additional \$700 million in available Treasury financing through the FY 2003 Appropriations Act to help assure a sufficient level of infrastructure planning. For efficient use of this newly available Treasury financing, BPA will encourage private-sector or other non-Federal financing or joint financing of transmission line expansions and additions, develop a five-year investment plan with the participation of the regional Infrastructure Technical Review Committee or its successor in the region, continue to use funds only for authorized purposes, continue to include the proposed use of the funds in its annual budget submissions and select projects based on cost-effectiveness criteria for achieving the objective. The FY 2003 Appropriations Act increases to \$4.45 billion the aggregate amount of bonds Bonneville is authorized by statute to sell to the Treasury and have outstanding at any one time.
- Bonneville considers other strategies to sustain funding for its infrastructure investment requirements as well. These additional strategies include restructuring of EN debt, reserve financing of some amount of transmission investments, and seeking, when feasible, third party financing sources. See the BP-5 Potential Third Party Financing Transparency table in the budget schedules section of this budget. This FY 2009 budget assumes \$15 million of annual reserve financing in FYs 2008-2009 for transmission infrastructure capital that is included in this budget in Projects Funded In Advance.
- As part of its continuing efforts, Bonneville is working to further optimize debt service costs (often referred to as debt optimization elsewhere in this budget). BPA, in collaboration with EN, is pursuing the refinancing of certain EN bonds as part of an ongoing debt optimization program. Through this program, BPA uses the reductions in debt service for its EN bonds to make advance payments on its Federal debt. Implementation of the refinancing components will be subject to favorable market conditions and interest rate environment.

#### **Budget Estimates and Planning:**

- This FY 2009 budget includes capital and expense estimates for PS based on forecasts in the FY 2007 Final Power Rate proposal, and associated outyear estimates for FYs 2010-2013. TS capital and expense estimates are based on 2008 Transmission Rate Case estimates and associated outyear estimates for FYs 2010-2013. FY 2007 costs are based on BPA's audited actual financial results.
- Capital funding levels also reflect BPA's Capital Planning Review 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 2009 budget also reflect executive management decisions from BPA's Capital Allocation Board.
- The FYs 2007-2013 revenue estimates in this budget, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools; for example, upcoming rate adjustment mechanisms, reduced cost estimates, a net revenue risk adjustment, debt management strategies, and/or short-term financial tools to manage net revenues and cash.
- Revenue calculations include depreciation and 4(h)(10)(C) credit assumptions. These credits offset BPA's fish and wildlife program costs allocable to the non-power project purposes of the FCRPS, consistent with the Northwest Power Act. FYs 2008-2009 credits for 4(h)(10)(C) included in this FY 2009 budget are estimated at \$85 million annually. Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses.
- Bonneville's efforts to keep its rates as low as possible are augmented by the implementation of the Bonneville Appropriations Refinancing Act (part of the Omnibus Consolidated Rescissions and Appropriations Act of 1996) that refinanced Bonneville's outstanding repayment obligations on appropriations. The legislation called for raising low interest rates on historic appropriations to then current Treasury market rates and resetting the principal of unpaid FCRPS appropriations. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the refinancing to the Treasury. The Treasury then approved the BPA submission in July 1997, thus finalizing the implementation of the Bonneville Appropriations Refinancing Act refinancings.
- The Northwest Power Act created the REP to extend the benefits of low-cost Federal power to the residential and small farm customers of Pacific Northwest electric utilities that meet certain conditions. The 1996 Comprehensive Regional Review (Comprehensive

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Review) recommended that Bonneville engage in settlement discussions regarding the REP. Bonneville then developed a Subscription Strategy based on the recommendations of the Comprehensive Review. That Strategy proposed a comprehensive settlement of REP disputes with IOUs in the Pacific Northwest, which resulted in new contracts with regional IOUs that provided power and monetary benefits to their residential and small farm customers.

The 2000 REP Settlement Agreements and the way the settlement costs were allocated in setting the Priority Firm (PF) rate were challenged by public utilities and others in the Ninth Circuit Court of Appeals. The PF rate is the cost-based rate that preference customers pay for their requirements purchases from BPA. On May 3, 2007, the court held that the REP Settlement Agreements were inconsistent with the Northwest Power Act and that the settlement costs were improperly allocated in setting the PF rate.

As a result of these court rulings, payments to the IOUs were suspended in May 2007. Regional discussions continue that could lead to a recommendation to BPA on how best to implement a Residential Exchange Program, beginning in FY 2009. However, the PF rate remains unchanged in the meantime. BPA is planning a section 7(i) rate proceeding during FY 2008 to revise FY 2009 power rates, as well as a public process to review and revise the 1984 Average System Cost Methodology, to respond to the Court's rulings. These processes are expected to conclude in 2008.

- The Energy Policy Act of 2005 authorized FERC to approve and enforce mandatory Electric Reliability Standards with which users, owners and operators of the bulk power system, including traditionally non-jurisdictional entities, are required to comply. These standards became enforceable on June 18, 2007, and compliance is monitored by the North American Electric Reliability Corporation (NERC) and the regional reliability organizations. Because FERC's authority includes the imposition of financial penalties for violations, BPA may be required to pay fines in the event of BPA violations of FERC-approved reliability standards.
- As part of its strategic staffing efforts and implementation of operational efficiency initiatives, Bonneville has shown a downward trend in Full-Time Employee (FTE) levels since FY 2003. BPA expects its succession planning efforts and continuing efficiency initiatives in targeted areas to level out FTE at about 3,000 in the outyears. BPA continues to pursue various authorities, including the use of voluntary separation incentives (VSI) and voluntary early retirement authority (VERA) to help achieve targeted levels. Annual Bonneville FTE projections included in this FY 2009 budget for FYs 2008 and 2009 are 3,000.

#### Fish and Wildlife Program Overview:

Bonneville is committed to continue funding its share of the region's efforts to recover listed Columbia Basin fish and wildlife. To the extent possible, Bonneville is integrating

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the actions implemented in response to the FCRPS Biological Opinions with projects implemented under the Council's Fish and Wildlife Program. Sub-basin Plans that include prioritized strategies for mitigation actions will help guide project selection to meet both BPA's ESA and Northwest Power Act responsibilities.

- Discussion of a minimum cost-sharing requirement for fish and wildlife projects funded by BPA in 2007 and beyond is continuing in ongoing discussions with the Council and the regional fish and wildlife managers and Northwest Tribes. As part of these discussions for the Integrated Fish and Wildlife Program, BPA has recommended a reorientation and transition of the program over FYs 2007 2009 that places greater emphasis on projects that are performance based and deliver more results on-the ground. On-the ground results include habitat protection, enhancement, tributary passage, screening and hatchery efforts.
- Consistent with the PFR, this FY 2009 budget sets an estimated Fish and Wildlife program level of \$36 million in capital and \$143 million in expense for FYs 2007 FY 2009. These estimates, as well as those for other Bonneville fish program costs may change, however, depending upon evolving circumstances including the long-term effect of Federal court decisions on the NOAA Fisheries 2004 Biological Opinion and the successful outcome of the remand collaborative process in shaping a regionally agreed upon new Biological Opinion.
- Many of the actions in the FCRPS Biological Opinions and the Council's program overlap, particularly in the areas of habitat and hatchery offsite mitigation measures. The FCRPS Action Agencies' (Corps, Reclamation, and Bonneville) Biological Opinion Implementation Plans describe an approach that maximizes the use of the Council's regional processes to identify and select projects that avoid jeopardizing the survival of the ESA-listed species and to protect, mitigate and enhance fish and wildlife; both listed and non-listed affected by the operation of the FCRPS. The Council's Fish and Wildlife Program provides the mechanism for integrating activities focused on ESA-listed fish stocks in the 2004 BiOp and USFWS 2000 and 2006 Biological Opinions for the FCRPS with those for non-listed species affected by the Columbia Basin's Federal and non-Federal hydrosystems.
- The FY 1997 Energy and Water Development Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an Independent Scientific Review Panel (ISRP) "to review a sufficient number of projects" proposed to be funded through Bonneville's fish and wildlife budget "to adequately ensure that the list of prioritized projects recommended is consistent with the Council's program." The Northwest Power Act further states that ". . . in making its recommendations to Bonneville, the 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." Consequently, projects funded by Bonneville under the program are typically reviewed and prioritized as part of the Council recommendation process.

Bonneville Power Administration/ Overview Included with the budget schedules section of this budget document is the current tabulation of Bonneville's fish and wildlife costs from FY 1996 through 2007.

#### President's Management Agenda:

■ In the area of the President's Management Agenda (PMA), Bonneville is leveraging the President's initiatives to achieve efficiencies while preserving the long-term value of the FCRPS. Bonneville is self-reporting its Current Status as "green", or successful, on both the Financial Management and the Integrating Budget and Performance initiatives. BPA continues to coordinate closely with DOE to accommodate accelerated budget and financial results reporting requirements.

Bonneville has received a clean audit opinion since the mid-1980s and no material weaknesses have been identified in controls over financial reporting. In accordance with OMB Circular A-123, BPA conducted its assessment of the effectiveness of its controls over financial reporting and is able to make an unqualified attestation. Bonneville's financial management systems and reporting procedures meet Federal standards, comply with Generally Accepted Accounting Principles (GAAP), and are consistent with the President's Management Agenda.

In the area of Expanding E-Government, Bonneville is self-reporting its Progress Toward Implementing the President's Management Agenda as "green." Supporting "E-Gov" initiatives, BPA has expanded its participation and efforts in this area and has consolidated its business and administrative Information Technology (IT) groups to gain operating efficiencies and improve overall performance. Bonneville has developed an Enterprise Resource Planning system that integrates its major business processes and provides its managers and employees with access to timely and accurate financial, personnel, and property reports. BPA will continue to work with DOE to expand and strengthen its E-Gov initiative participation.

Bonneville is self-reporting "green" in Current Status and "green" in Progress toward Implementing the President's Management Agenda in the area of Human Capital. This initiative has served as a catalyst in redefining BPA's organizational strategy, in developing and getting alignment with meaningful objectives, and in assigning clear accountabilities. Development of a new Human Resource Management Information System tool to support organizational development plans focused on closing mission critical skills gaps is underway. Additionally, as a result of efficiency improvement recommendations, developmental cross training programs are being utilized to support succession planning.

#### **Overview of Detailed Justifications:**

Bonneville's Detailed Justification Summaries, included in this FY 2009 budget, follow present budget requirements for budget line items on the basis of accrued expenditures.

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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 accord with OMB Circular A-11.

The organization of BPA's FY 2009 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 power and transmission services, as are reimbursable costs. Bonneville's interest expenses, pension and post-retirement benefits, and capital transfers to the Treasury are shown by program.

The first section of performance summaries, Capital Investments, includes accrued expenditures for investments in electric utility and general plant associated with the FCRPS generation and transmission services, conservation and energy efficiency services, fish and wildlife, and capital equipment. These capital investments will require budget obligations and use of existing borrowing authority of \$560 million in FY 2009.

The near-term forecast capital funding levels have undergone an extensive internal review as a result of BPA's Capital Planning Review process and its associated capital asset management strategy. These capital reviews encompass project cost management initiatives, capital investment assessments, and categorization of capital projects to be funded based on risk and other factors. Consistent with BPA's near-term capital funding review process and BPA's standard operating budget process, this FY 2009 budget includes updated capital funding levels for FY 2008. Utilizing this review process helps Bonneville in its efforts to compete in the deregulated wholesale energy market. Bonneville will continue to work with the Corps and Reclamation to optimize the best mix of projects.

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

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 2009, budget expense obligations are estimated at \$2,865 million. The total program

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requirements of all Bonneville programs include estimated budget obligations of \$3,550 million in FY 2009.

#### **Bonneville Power Administration**

#### Funding Profile by Subprogram 1/

(accrued expenditures in thousands of dollars)

			Fiscal Year		
	2007	2008	2008	2008	2009
	(Audited Actuals)	Original /2	Adjustments	Revised /2	Proposed
Capital Investment Obligations					
Associated Project Costs 3/	108,351	N/A	-	158,675	137,330
Fish & Wildlife	35,186	N/A	-	36,000	36,000
Conservation & Energy Efficiency 3/	6,955	N/A	-	42,000	42,000
Subtotal, Power Services 4/	150,492	N/A	-	236,675	215,330
Transmission Services	140,965			242,370	293,533
Capital Equipment & Bond Premium	20,610	N/A	-	31,017	51,123
Total, Capital Obligations 3/ 5/	312,067	538,480	-	510,062	559,986
Expensed and Other Obligations					
Expensed	2,349,791	2,464,963	-	2,718,980	2,865,884
Projects Funded in Advance	107,269	94,989	-	71,775	125,318
Total, Obligations	2,769,127	3,098,432		3,300,817	3,551,188
Capital Transfers (cash) 5/	623,400	877,573	-	408,264	275,723
BPA Total	3,392,527	3,976,005	-	3,709,081	3,826,911
Full-time Equivalents (FTEs)	2,896	3,000	-	3,000	3,000

#### **Public Law Authorizations include:**

Bonneville Project Act of 1937, Public Law No. 75-329, H.R. 7642 Federal Columbia River Transmission Act of 1974, Public Law No. 93-454 S. 3362 Regional Preference Act of 1964, Public Law No. 88-552

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

#### Outyear Funding Profile by Subprogram 1/

(accrued expenditures in thousands of dollars)

#### Fiscal Year

	2010	2011	2012	2013
	2010	2011	2012	2013
Associated Project Costs 3/	143,325	148,314	153,236	158,181
Fish & Wildlife	36,000	36,000	36,000	36,000
Conservation & Energy Efficiency 3/	40,000	40,000	45,000	45,000
Subtotal, Power Services 4/	219,325	224,314	234,236	239,181
Transmission Services	278,184	369,836	419,059	319,631
Capital Equipment & Bond Premium	54,798	28,363	28,431	29,501
Total, Capital Obligations <sup>3/5/</sup>	552,307	622,513	681,726	588,313
Expensed and Other Obligations				
Expensed	2,695,594	2,789,216	2,708,184	2,667,493
Projects Funded in Advance	65,856	78,966	72,242	72,603
Total, Obligations	3,313,757	3,490,695	3,462,152	3,328,409
Capital Transfers (cash) 5/	423,976	417,680	293,841	246,661
BPA Total	3,737,733	3,908,375	3,755,993	3,575,070
Full-time Equivalents (FTEs)	3,000	3,000	3,000	3,000

#### The accompanying notes are an integral part of this table.

- 1/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of current-law funding estimates.
- 2/ Original estimates reflect BPA's FY 2008 Congressional Budget Submission. Revised estimates, consistent with BPA's annual near-term funding review process, provide notification to the Administration and Congress of updated capital and expense funding levels for FY 2008.
- 3/ Includes infrastructure investments designed to address the long-term needs of the Northwest and to reflect significant changes affecting BPA's power and transmission markets.
- 4/ Power Services includes Fish & Wildlife, Residential Exchange, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.

5/ This FY 2009 budget includes capital and expense estimates for PS based on forecasted FY 2007 Final Power Rate Proposal and associated outyear estimates for FYs 2010-2013. The TS capital and expense estimates are based on forecasted Transmission 2008 Rate Case estimates and associated outyear estimates for FYs 2010-2013.

Capital funding levels also reflect BPA's Capital Planning Review Process and 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. Capital investment levels in this FY 2009 budget have been updated to reflect executive management decisions from BPA's Capital Allocation Board.

The cumulative amount of actual advance amortization payments as of the end of FY 2007 is \$2,091 million.

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

#### **Major Outyear Considerations**

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

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

#### **Power Services - Capital**

#### **Funding Schedule by Activity**

(accrued expenditures) (dollars in thousands)

Power Services - Capital
Associated Project Costs
Fish & Wildlife
Conservation & Energy Efficiency
Total, Power Services - Capital

(Goliula III ullousullus)		
FY 2007	FY 2008	FY 2009
108,351	158,675	137,330
35,186	36,000	36,000
6,955	42,000	42,000
150,492	236,675	215,330

#### **Outyear Funding Schedule**

(accrued expenditures) (dollars in thousands)

(Gollars III tiloustillus)			
FY 2010	FY 2011	FY 2012	FY 2013
219 325	224 314	234.236	239 181

Total, Power Services - Capital.

### **Description**

Associated Project Costs provide for direct funding of additions, improvements and replacements of existing Reclamation and Corps hydroelectric projects in the Pacific Northwest that provide for increased performance and availability of generating units. The Reclamation and Corps hydro projects produce electric power which 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 power supply and is composed of 31 operating Federal hydro electric projects with over 200 generating units. These projects have an average age of over 45 years, with some that exceed 60 years of age. Through direct funding and the close cooperation of the Corps and Reclamation, Bonneville uses its Treasury borrowing authority to make investments needed to restore generation availability and improve efficiency, reducing demand on Corps and Reclamation appropriations for power-related investments. Since the beginning of direct funding, Bonneville along with these joint operating partners have significantly improved system performance. In 1999, at the direction of Congress, Bonneville issued a report that it soon began to implement called the "Asset Management Strategy for the FCRPS." Bonneville concluded in this report that it needed to invest nearly \$1 billion in the projects over the next 12-15 years. Without these investments, which are focused on restoring and maintaining the reliability of the system, history indicates that unit availability may initially decline at a rate of about 1.5 percent per year. Supplementary analyses and experience with the system have revealed additional investment needs above and beyond the levels originally planned under the Asset Management Strategy for this and the next several rate periods.

These planned investments, included in this FY 2009 budget funding estimates, will maintain the output of the FCRPS. Moving forward with these 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.

The Fish and Wildlife program provides for the protection, enhancement and mitigation of Columbia River Basin fish and wildlife due to losses attributed to the development and operation of the Federal hydroelectric projects on the Columbia River and its tributaries from which Bonneville markets power, pursuant to Section 4(h) of the Northwest Power Act. Bonneville satisfies a major portion of its fish and wildlife responsibilities by meeting the Administrator's obligation under the Council's Fish and Wildlife Program.

Bonneville is also mandated to implement measures called for under the ESA. These measures are part of the most recent biological opinions issued in November 2004 by NOAA Fisheries (2004 Biop) and in 2006 by the USFWS (2006 Biop) to address the effects of the operation of the FCRPS on threatened and endangered salmon and steelhead and ESA-listed Kootenai River white sturgeon and bull trout. The biological opinions require the FCRPS Action Agencies to implement actions in the Columbia River Basin that address impacts of the Federal hydrosystem on ESA-listed fish to ensure that operation of the FCRPS does not jeopardize the continued existence of listed species or adversely modify their designated critical habitat. In February 2005, the FCRPS Action Agencies published an implementation plan for their proposed action addressed in the 2004 BiOp. The implementation plan, together with projects undertaken to address mitigation for non-listed species under the Northwest Power Act, and those to address requirements of the USFWS 2000 and 2006 Biological Opinion form the basis for Bonneville's planned capital investment of \$36 million for FYs 2008 and 2009.

The 2004 BiOp was challenged in Federal District Court. In October 2005, the District Court invalidated the 2004 BiOp, although leaving it "in place" during the remand period. The Judge also ordered the sovereign parties to collaborate during the remand process, to try to find an acceptable approach for the 2004 BiOp that would have regional support. In December, the Department of Justice filed a notice to appeal the District Court's October 2005 remand order. However, the Federal parties continue to support the court ordered collaboration on the 2004 BiOp, even though an appeal has been filed. In response to litigation seeking injunctive relief on the FCRPS in 2006, the Court approved the Federal spill plan with two modifications. In 2006 (the timeframe of the injunction), the FCRPS continued to spill during late spring and late August. The 2007 spill plan largely repeats the 2006 plan. The collaboration process has continued to make progress over the past two years and is now scheduled to be completed by spring 2008 when BPA anticipates NOAA Fisheries will complete a final FCRPS BiOp.

There has also been litigation directed at the USFWS Biological Opinions for Libby dam. In 2003, the Corps and BPA reinitiated consultation on the operations at Libby dam to address impacts to recently designated critical habitat for the Kootenai River white sturgeon, and to evaluate information that had been developed on the Kootenai River white sturgeon and bull trout since the 2000 USFWS BiOp. That consultation was completed in February 2006, but was challenged by environmental groups, the Kootenai Tribe, and the State of Montana in the Federal District Court of Montana. However these parties have reached tentative agreement on a long term plan of recovery efforts including a combination of hatchery, habitat and flow regimes that can be implemented by BPA, Corps, Kootenai Tribe, State of Montana and others.

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

The FY 1997 Energy and Water Appropriations Act 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 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." The Conference Report on the FY 1999 Energy and Water Development Appropriations Act included a new assignment for the ISRP and the Council. The ISRP was to review the fish and wildlife projects, programs, or measures included in Federal agency budgets that are reimbursed and/or directly funded by Bonneville and to make funding recommendations to Congress. The ISRP was directed to determine whether the proposals are consistent with the scientific criteria in the Northwest Power Act as amended in 1996, and to provide a report to the Council by April 1 of each year. The Council, in turn, must report to Congress annually by May 15.

The Federal Caucus, a group of eight agencies operating in the Columbia River Basin that have natural resource responsibilities related to ESA, released in December 2000 a comprehensive long-term strategy to restore ESA-listed fish throughout the Columbia Basin. This strategy includes the "All-H" paper that focuses on the establishment of explicit, scientifically based performance standards to gauge the status of salmon and the success of recovery efforts. Consistent with the principles of the All-H Strategy, Bonneville is implementing much of the off-site mitigation actions required by the FCRPS Biological Opinions through the Council's Fish and Wildlife Program.

Under the 1980 Northwest Power Act, the Fish and Wildlife Program is tasked with protecting, mitigating and enhancing Columbia River Basin fish and wildlife affected by any hydroelectric project in the basin. The Council's Fish and Wildlife Program provides the mechanism for integrating activities focused on ESA-listed fish stocks in the 2004 BiOp and USFWS 2006 Biological Opinions for the FCRPS with those for non-listed species affected by the Columbia Basin's Federal and non-Federal hydrosystems. Recently completed Sub-basin Plans that include strategies for mitigation actions will help guide project selection to meet both BPA's ESA and Power Act responsibilities. Additionally, discussion of a minimum cost-sharing requirement for fish and wildlife projects funded by BPA in 2007 and beyond is continuing in currently ongoing discussions with the Council and the regional fish and wildlife managers and Tribes. BPA established a Cost-Sharing Memorandum of Understanding with the US Forest Service in FY 2007 that requires a programmatic 30 percent cost share for fish and wildlife mitigation projects funded by BPA on US Forest Service lands.

As part of discussions for the Integrated Fish and Wildlife Program, BPA recommended a reorientation and transition of the program over FYs 2007 – 2009 that places greater emphasis on projects that are performance based and deliver more results on-the ground. On-the ground results include habitat protection, enhancement, tributary passage, screening and hatchery efforts. Recommended guidelines

are 70 percent of overall program funding for on-the-ground projects; 25 percent to RM&E; and 5 percent for coordination, data management and administration. This FY 2009 budget sets an estimated program level of \$36 million in capital and \$143 million in expense for FYs 2008 – FY 2009. These estimates as well as those for other Bonneville fish program costs may change, however, depending upon evolving circumstances including the long-term effect of the Federal district court decision on the 2004 BiOp and the successful outcome of the remand collaborative process in shaping a regionally agreed upon new Biological Opinion. Additional proposals to be implemented during FY 2009, if any, resulting from the completion of remand collaboration process (by spring of 2008) requiring expenditures above and beyond the \$143 million in expense and \$36 million in capital are uncertain at this time.

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

Long-term investments in energy efficiency help buffer the FCRPS against future resource uncertainties. During periods of price volatility, conservation also helps reduce financial risk associated with relying on the market for energy purchases in the future.

#### **Detailed Justification**

(dollars in thousands)		
FY 2007	FY 2008	FY 2009

158,675

137,330

108,351

#### **Associated Project Costs**

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

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

(dollars in thousands)		
FY 2007	FY 2008	FY 2009

#### ■ Corps of Engineers (known projects to date)

FY 2007: Continued main unit and station service breaker replacements at selected projects. Continued hydro optimization investigations and equipment installations at selected projects. Received spare transformers at four projects. Continued emergency notification system replacement/upgrades at several projects. Completed rehabilitation of bridge crane and continue gantry crane replacement at Bonneville. Continued refurbishment/replacement of head gates at Bonneville. Continued exciter installation and DC and preferred AC upgrades at Bonneville Powerhouse 2. Continued rehabilitation work at Bonneville. Continued HVAC upgrade and completed unwatering pumps replacement at Bonneville. Began the planning/design work for station service upgrades, fire protection upgrades and additional crane refurbishments at Bonneville. Completed exciter replacements at John Day and Willamette Valley projects. Repaired failed linkage for unit 16 at John Day. Began planning for fire protection upgrades and bridge crane refurbishment at John Day. Completed installation of replacement transformer for failed unit at The Dalles. Completed work on oil/water separators at The Dalles.

Completed butterfly valve control replacement at Hills Creek. Evaluated turbine runner replacement at Hills Creek. Continued crane refurbishment at Lookout Point. Awarded contract for turbine runner replacement at Lookout Point. Continued governor replacement project, control system installation, hi-lift pump replacement and protective relay replacements at Albeni Falls. Began exciter replacement at Libby. Continued CO2 system replacement at Chief Joseph. Completed evaluating turbine replacements at Chief Joseph and awarded contract for new runners. Continued design for exciter replacements, protective relay replacements and supervisory control console replacement at Chief Joseph.

Continued crane rehabilitation at Chief Joseph. Completed station air compressor replacements at McNary. Discontinued procurement for turbine runner replacements at McNary due to increased price and unavailability of water for the new units – replacement is no longer economical to pursue. Continued with plant modernization at McNary, including fire protection, external oil cooler installation, station service upgrades, transformer installations, and roof replacement. Completed 480 V switchgear replacement at Dworshak. Completed crane rehabilitation at Ice Harbor. Continued installation of replacement generator windings at Lower Granite. Completed or continued replacement and upgrades on protective relays and fire protection at Lower Snake River and Dworshak projects. Began purchase of diesel generator for Lower Granite, Little Goose and Lower Monumental. Continued elevator refurbishment at Little Goose and Lower Monumental. Began intake crane refurbishment at Lower Granite and Lower Monumental, and tailrace crane refurbishment at Lower Monumental.

(dollars in thousands)		
FY 2007	FY 2008	FY 2009

Continued with purchase of a spare draft tube bulkhead for Lower Snake projects, plus a variety of smaller continuing or new investments and repairs to failed units. Continued intake crane rehabilitation, heat pump replacement and station service improvements at The Dalles. Continued rehabilitation work at The Dalles. Began fire protection design, spare transformer replacement and disconnect replacement at The Dalles. Completed plant upgrade and repair of the turbine replacement which failed during testing at Cougar. Continued fire protection design for all Willamette Valley projects. Completed crane modernization at Detroit and Big Cliff. Continued generator winding replacement at Detroit. Began electric reliability upgrades at Detroit.

FY 2008: Complete main unit and station service breaker replacements at selected projects. Continue hydro optimization investigations and equipment installations at selected projects. Complete emergency notification system replacement/upgrades at several projects. Complete replacement of gantry crane at Bonneville. Continue refurbishment/replacement of head gates at Bonneville. Continue exciter installation at Bonneville Powerhouse 2. Continue rehabilitation work at Bonneville. Continue HVAC upgrade at Bonneville. Continue station service upgrades, fire protection upgrades and additional crane refurbishments at Bonneville. Continue fire protection upgrades and bridge crane refurbishment at John Day. Continue intake crane rehabilitation, heat pump replacement and station service improvements at The Dalles. Continue rehabilitation work at The Dalles. Continue fire protection design, spare transformer replacement and disconnect replacement at The Dalles. Continue fire protection upgrades at all Willamette Valley projects. Complete generator winding replacement at Detroit in conjunction with powerhouse fire restoration. Continue electric reliability upgrades at Detroit. Continue turbine runner replacement at Hills Creek. Continue crane refurbishment at Lookout Point.

Continue turbine runner replacement at Lookout Point. Complete governor replacement project, control system installation, hi-lift pump replacement and protective relay replacements at Albeni Falls. Complete exciter replacements at Libby. Continue CO2 system replacement at Chief Joseph. Continue turbine runner replacements at Chief Joseph. Continue exciter replacements, protective relay replacements, and automatic generator synchronizer replacements at Chief Joseph. Complete crane rehabilitation and repair of unit 21 at Chief Joseph. Continue with plant modernization at McNary, including fire protection, external oil cooler installation, station service upgrades, transformer installations, and roof replacement. Begin replacements of generator windings at McNary. Continue bridge crane and elevator refurbishment at Dworshak. Continue installation of replacement generator windings at Lower Granite. Complete or continue fire protection upgrades at Lower Snake River and Dworshak projects. Continue diesel generator purchase for Lower Granite, Little Goose and Lower Monumental. Complete elevator refurbishment at Little Goose and Lower Monumental. Continue intake crane refurbishment at Lower Granite and Lower Monumental, and tailrace and bridge crane refurbishments at Lower Monumental. Continue with purchase of a spare draft tube bulkhead for Lower Snake projects, plus a variety of smaller continuing or new investments and repairs to failed units.

(dollars in thousands)		
FY 2007	FY 2008	FY 2009

FY 2009: Continue hydro optimization investigations and equipment installations at selected projects. Continue refurbishment/replacement of head gates at Bonneville. Complete exciter installation at Bonneville Powerhouse 2. Continue rehabilitation work at Bonneville. Continue HVAC upgrade at Bonneville. Continue station service upgrades, fire protection upgrades and additional crane refurbishments at Bonneville. Continue fire protection upgrades and bridge crane refurbishment at John Day. Continue fire protection upgrades, heat pump replacement and station service improvements at The Dalles. Continue rehabilitation work at The Dalles. Complete fire protection upgrades at all Willamette Valley projects. Continue electric reliability upgrades at Detroit. Continue turbine runner replacement at Hills Creek. Complete crane refurbishment at Lookout Point. Continue turbine runner replacement at Lookout Point. Continue CO2 system replacement at Chief Joseph. Continue turbine runner replacements at Chief Joseph. Continue exciter replacements and protective relay replacements at Chief Joseph. Continue with plant modernization at McNary, including fire protection, external oil cooler installation and station service upgrades. Continue installation of replacement generator windings at Lower Granite. Continue diesel generator purchase for Lower Granite, Little Goose and Lower Monumental. Continue intake crane refurbishment at Lower Granite. Complete with purchase of a spare draft tube bulkhead for Lower Snake projects, plus a variety of smaller continuing or new investments and repairs to failed units.

### **Bureau of Reclamation (known projects to date):**

FY 2007: Continued Grand Coulee runner replacements. Continued main unit breaker replacements and air housing coolers at Grand Coulee. Continued relay and switchgear replacements at Grand Coulee. Continued hydro optimization investigations and equipment installations at Grand Coulee. Continued SCADA replacement at Grand Coulee and Hungry Horse. Completed river bank monitoring system and station service transformer replacements at Grand Coulee. Began failed transformer replacement, 500 kV differential relay replacements, right powerhouse station service upgrade, third powerhouse transformer replacements, third powerhouse exciter replacements, an elevator refurbishment and roof replacements at GCL. Continued or began various breaker replacements at Hungry Horse. Completed exciter replacement at Anderson Ranch. Continued transformer replacements at Green Springs and Roza. Completed DC upgrade at Palisades. Began roof replacement at Palisades. Continued seal ring replacement at Chandler. Began design of exciter replacement at Chandler and Roza, plus a variety of smaller continuing or new investments and repairs to failed units

(dollars in thousands)			
FY 2007	FY 2008	FY 2009	

FY 2008: Continue Grand Coulee runner replacements. Continue main unit breaker replacements and air housing coolers at Grand Coulee. Complete switchgear replacements at Grand Coulee. Continue hydro optimization investigations and equipment installations at Grand Coulee. Continue SCADA replacement at Grand Coulee and Hungry Horse. Complete the elevator refurbishment and roof replacements at GCL. Complete 500 kV differential relay replacements. Continue failed transformer replacement, right powerhouse station service upgrade, third powerhouse transformer replacements and third powerhouse exciter replacements at Grand Coulee. Continue various breaker replacements at Hungry Horse. Complete transformer replacements at Roza. Continue transformer replacement at Green Springs. Complete roof replacement at Palisades. Complete seal ring replacement at Chandler. Complete exciter replacement at Chandler and Roza, plus a variety of smaller continuing or new investments and repairs to failed units.

FY 2009: Continue Grand Coulee runner replacements. Complete main unit breaker replacements and air housing coolers at Grand Coulee. Continue hydro optimization investigations and equipment installations at Grand Coulee. Continue SCADA replacement at Grand Coulee and Hungry Horse. Continue right powerhouse station service upgrade, third powerhouse transformer replacements and third powerhouse exciter replacements at Grand Coulee. Continue or complete various breaker replacements at Hungry Horse. Complete transformer replacements at Green Springs. Complete seal ring replacement at Chandler. Complete exciter replacement at Chandler, plus a variety of smaller continuing or new investments and repairs to failed units.

Fish and Wildlife 35,186 36,000 36,000

Specific project solicitation and funding decisions were completed in early 2007. The following projects may be candidates for capital funding in FY 2009. It is Bonneville's intention to proceed with design, environmental review, and construction of those projects from this list and that are recommended for funding within the available budget. The costs indicated are preliminary estimates only and actual costs may be greater or lower than those estimates, depending on final environmental review decisions and design and construction costs.

(dollars in thousands)			
FY 2007	FY 2008	FY 2009	

FY 2007-2009 efforts include continued implementation of high priority ESA-related projects and activities associated with the 2004 BiOp and USFWS 2000 and 2006 Biological Opinions and amended FCRPS Action Agency proposal, consistent with the successful outcome of the remand collaborative process in shaping a regionally agreed upon new Biological Opinion.

Implementation of reforms to hatchery programs that help reduce impacts upon ESA-listed populations may also be warranted as information on the types of changes to these facilities are established and priorities for sequencing implementation are developed. Projects that implement the NOAA Fisheries 2004 and USFWS 2006 Biological Opinions are also described in the updated FCRPS Action Agencies' Implementation Plans. Although not subject to the Northwest Power Act's section 4(h)(10)(B) for capital construction projects, Bonneville may include capitalization of investment in some wildlife habitat acquisitions and in land acquisition for fish and wildlife provided such land acquisition costs exceed \$1 million, such investment provides a creditable and quantifiable benefit against a defined obligation for Bonneville, and is consistent with Bonneville's Capital Policy.

The five types of capital projects as defined by the FY 2007 Power Rate Case are as follows:

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

(dollars in thousands)			
FY 2007	FY 2009		

Anadromous fish supplementation, production and related facilities, and/or juvenile and adult passage improvement projects that may require capital funds in FY 2009 include the following:

- Yakima River Spring Chinook Supplementation Facility, located in Cle Elum, Washington: This project includes the construction of an interpretive building for public education at Bonneville's existing hatchery and for the design and construction of a monitoring and evaluation building at Nelson Springs for use by project biologists.
- -Snake River Spring Chinook Salmon artificial propagation facilities (known as the Northeast Oregon Hatchery or NEOH); to be located on the Upper Grande Ronde River near La Grande, Oregon, on Catherine Creek near Union, Oregon, and on Lostine River near Enterprise, Oregon: The design and construction is expected to continue. 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.
- -Kootenai River Hatchery: The Kootenai River sturgeon hatchery, in Bonners Ferry, Idaho, is in need of hatchery upgrades and expansion to improve temperature control and rearing conditions that will result in the increased overall survival of these ESA-listed fish after release from this facility. In addition this may also include development of a burbot production facility to offset the loss of natural production below Libby Dam. The project requires development and review of a Master Plan prior to implementation. Fish and wildlife resources in the Kootenai drainage were historically abundant and were used by the Kootenai Tribe for cultural and subsistence purposes. Over the past decades, native fish and wildlife populations have declined significantly due to large-scale habitat and ecosystem changes. Native kokanee from the South Arm of Kootenay Lake are considered "functionally extinct," burbot from the lower Kootenai River are on the verge of extinction, and the white sturgeon population in the Kootenai River was listed as endangered by the U.S. Fish and Wildlife Service in 1994. The Kootenai River White Sturgeon Study and Conservation Aquaculture Project was initiated by the Kootenai Tribe of Idaho as a stopgap measure in 1989 to produce fish from wild Kootenai River adults until effective habitat restoration measures could be identified and implemented. Only the long life span of the sturgeon has forestalled extinction to date. Natural recruitment has been absent or limited for decades and the current population of large old fish is steadily dwindling. Continued failure of natural recruitment means that the next generation of Kootenai white sturgeon will come almost entirely from the hatchery.

(dollars in thousands)			
FY 2007 FY 2008		FY 2009	

-Nez Perce Tribal Hatchery: Additional rearing and acclimation facilities are requested as part of the existing Nez Perce Tribal Hatchery in Clearwater County, Idaho, for reintroduction of up to 700,000 coho smolts into the Clearwater River in Idaho. Requires development and review of Master Plan prior to implementation. The Nez Perce Tribe (NPT) is motivated to implement the Clearwater Coho Restoration Project (CCRP) for the following reasons: 1) historically, coho salmon were one of the species making up a complex multi-species anadromous ecosystem within the Clearwater; 2) the 1855 Treaty with the United States reserved harvest rights at all usual and accustomed places; 3) coho salmon are a cultural resource to the NPT; and 4) the extirpation of coho salmon from the Snake River Basin remains unmitigated. The NPT goal is to restore coho salmon to the Clearwater subbasin measured by 14,000 adults at Lower Granite Dam annually. The 2007-2009 proposal is for completing the Step planning process and construction based on the 2004 Master Plan. Plans are to develop an integrated management plan to optimize the use of hatchery fish to meet recovery and harvest objectives.

-Redfish Lake Sockeye Captive Brood expansion: Project would expand the sockeye captive broodstock program by constructing new or additional facilities at Eagle Hatchery in Eagle, Idaho, Oxbow Hatchery in Multnomah County, Oregon, and at an additional site to be selected in Idaho to increase production annually to between 150,000 and 1,000,000 smolts, depending upon the outcome of the BiOp Remand Collaborative Process. Project requires development and review of a Master Plan prior to implementation. Precipitous declines of Snake River sockeye salmon led to their Federal listing as endangered in 1991 (56 FR 58619). In that same year, the Idaho Department of Fish and Game (IDFG) initiated a Captive Broodstock Program to maintain Snake River sockeye salmon and prevent species extinction. The ultimate program goal is to reestablish sockeye salmon runs to Stanley Basin waters and to provide for sport and treaty harvest opportunities. The program's near-term goal is to prevent species extinction, slow the loss of critical population genetic diversity and heterozygosity, and increase the number of individuals in the population.

-Chief Joseph Dam Hatchery: BPA is proposing to fund the Chief Joseph Dam Hatchery Program, a comprehensive management program for supplementing Chinook salmon below Chief Joseph Dam, in Washington in the Okanogan subbasin and the Columbia River 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) and acclimation ponds (throughout the Okanogan River subbasin), broodstock collection, egg incubation, rearing, release, and selective broodstock collection method development. The objective is to improve production of spring/summer and fall Chinook salmon in the Okanogan River Subbasin below Chief Joseph Dam. Planned production levels are 2 million summer/fall chinook and 0.9 million spring chinook smolts. Exploration of potential cost sharing for O&M and capital is underway with three public utility districts having some level of mitigation responsibility for their hydro projects within this geographic area.

(dollars in thousands)			
FY 2007	FY 2008	FY 2009	

-Hood River Production Facility: This project includes expansion of existing Parkdale fish facility to accommodate spring chinook rearing, construction of new Hood River adult salmonid trapping facilities, and development of alternative adult trapping sites. Powerdale Dam, which is owned and operated by PacifiCorp, is scheduled for decommissioning during the summer of 2010. The dam forms an integral part of the Powerdale Dam Fish Trap (PDFT), as fish are shunted into the fish trap as they ascend the fish ladder at the facility. Removal of the dam will also remove the fish trapping facility. The PDFT currently provides the foundation for many of the activities associated with implementation of the Hood River Production Program (HRPP). These include: monitoring escapement, collecting life history characteristics, and broodstock acquisition. In order to continue implementing the HRPP, alternative trapping sites will need to be developed. The HRPP 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 natural coho salmon no longer occupy the mid-Columbia river basins. Columbia coho salmon populations were decimated in the early 1900s. For several reasons, including the construction and operation of mainstem Columbia River hydropower projects, habitat degradation, release locations, harvest management, and hatchery practices and genetic guidelines, self-sustaining coho populations were not re-established in mid-Columbia basins. Currently, the lack of locally adapted stock and in-basin habitat degradation may be the biggest challenges to coho reintroduction in mid-Columbia tributaries. This program's vision is to re-establish naturally reproducing coho salmon populations in the Wenatchee and Methow subbasins at biologically sustainable levels which provide significant harvest in most years.

Cultural, socio-economic, and ecological benefits are expected from the return of this species to areas where it once occurred in abundance. The phased approach 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.

-Yakama Coho restoration: 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, the Yakima Subbasin 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 Subbasin ecosystem functions and processes, out of subbasin impacts, and harvest of salmon have resulted in a significant decline of fish and wildlife abundance from historic levels. Over the last ten years, Yakima River mouth returns of coho have ranged from about 800 to 6,200 salmon. The significant decrease in abundance of these fish is mirrored on the terrestrial landscape. The goal of this restoration project is to restore extirpated coho salmon to the Yakima River basin at biologically sustainable levels.

(dollars in thousands)		
FY 2007	FY 2009	

- -Walla Walla River Juvenile and Adult Passage Improvements: This project would provide safe passage for migrating juvenile and adult salmonids in the Walla Walla Basin by constructing and maintaining passage facilities at irrigation diversion dams and canals.
- -Walla Walla Hatchery planning and design. Project requires development and review of a Master Plan prior to implementation.
- -Okanogan Basin Locally-Adapted Steelhead Supplementation Program: This project will expand Cassimer Bar Hatchery to meet the estimated production level of 200,000 summer steelhead smolts to supplement natural production within the Okanogan River Basin. The goal is to increase abundance and accelerate recovery of endangered steelhead in the Basin. The Colville Tribes will operate the hatchery program using locally-adapted broodstock collected at weirs in the Basin. Project will require development and review of a Master Plan and completion of the other steps of the Council's 3-Step Review Process.

The FCRPS BiOp Remand Collaboration Process is currently assessing potential hatchery reform actions for all Federally funded hatcheries including those funded by BPA as part of the Council Integrated Fish and Wildlife Program and those programs funded directly by BPA through the Corps, USFWS and Bureau. Specific actions designed to benefit ESA-listed stocks to be funded have not yet been identified and depend upon the outcome of this regional collaborative process, anticipated to conclude in spring 2008. Any new efforts will be identified at that time in the Action Agencies Updated Proposed Action and in updates to yearly implementation plans.

Potential non-construction Wildlife Habitat Acquisitions (Including Conservation Easements):

- Grand Coulee and Chief Joseph Wildlife Habitat Acquisition
- Couer d'Alene Fish and Wildlife Habitat Acquisition
- Albeni Falls Wildlife Mitigation.
- Blue Creek Winter Range Wildlife Habitat Acquisition
- Yakima Valley Fish and Wildlife Habitat Acquisition
- Grande Ronde Wildlife Habitat Acquisition
- Salmon River Fish Habitat Acquisition
- Fish and Wildlife Land Acquisition Selah Gap to Union Gap
- Palisades and Minidoka Wildlife Habitat Acquisition
- Black Canyon, Boise Diversion, Anderson Ranch Wildlife Habitat Acquisition
- Willamette Fish and Wildlife Habitat Acquisition
- Libby and Hungry Horse Reservoirs Resident Fish Acquisitions

# (dollars in thousands) 2007 FY 2008 FY 2009

FY 2007	FY 2008	FY 2009 <b>42,000</b>	
6,955	42,000		

### **Conservation and Energy Efficiency**

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

**Total Power Services – Capital** 

150,492 236,675 215,330

### **Explanation of Funding Changes**

FY 2009 vs. FY 2008 (\$000)

### **Associated Project Costs**

• Reflects a reshaping of funding requirements based on the need to maintain a minimum level of generation each year.

-21,345

### Fish and Wildlife

Program costs average \$36 million annually for FYs 2007 through the rate period.

0

# **Conservation and Energy Efficiency**

Funding is consistent with the Council's most recent Power Plan, finalized in 2005.

0

### **Total Funding Change, Power Services - Capital**

-21.345

#### **Transmission Services – Capital**

#### **Funding Schedule by Activity**

(accrued expenditures)

Transmission Services - Capital
Main Grid
Area & Customer Services
Upgrades & Additions
System Replacements
Projects Funded in Advance
Total, Transmission Services - Capital

(dollars in thousands)			
FY 2007	FY 2009		
5,261	32,333	70,474	
2,635	38,684	31,766	
50,854	70,729	65,108	
82,215	100,624	126,185	
107,269	71,775	125,318	
248,234	314,145	418,851	

### **Outyear Funding Schedule**

(accrued expenditures)
(dollars in thousands)

	(donars in thousands)				
FY 2010 FY 2011		FY 2011	FY 2012 FY 2013		
	344.040	448.802	491.301	392,234	

Total, Transmission Services - Capital

# **Description**

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

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

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

being 'pushed' to its limits of capacity to carry power. The completions of the Grand Coulee-Bell, Kangley-Echo Lake, and Schultz-Wautoma lines projects have provided dispatchers with a greater Operator's Transfer Capability, and have reduced the likelihood of outages or reduction of transmission capacity for outage situations.

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

These projects relieve congestion and contribute toward restoring an adequate reliability margin back into the grid. These additional margins will be used to respond to a competitive market, meet regional load during outages, move power to meet changing loads, perform maintenance without harming the market, and allow Columbia Grid (formerly referred to as Grid West) to start with the regional grid less congested.

In 2005, with the Congressional approval of wind tax credits, a number of potential wind generation companies have made requests for connection to the BPA transmission grid. In 2007 BPA connected 200 MWs and it is expected that in 2008 1100 MWs will be connected and 1300 MWs by FY 2009. The wind generation being proposed is in addition to the 1200 MW of gas and geothermal generation already being proposed in 2008 and 2009.

Bonneville assumes that some generators will seek to interconnect their power projects into the Federal transmission system. Depending on which generators build on sites in the Northwest, and depending on the project locations, between 1000 and 1,600 MW can be interconnected and integrated with the completion of the above additions and improvements. Integration directly into the Federal transmission system will be consistent with BPA's open access transmission tariff.

As a means to sustain BPA's limited Treasury financing, third-party funding partnerships are currently being explored as a financing option for some investments.

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

Bonneville will continue to fund fiber optic communications facilities needed to meet Bonneville's projected operational needs. To the extent that these investments create temporary periods of excess fiber optic capacity, such dark fiber capacity can be made available to telecommunications providers and to non-profits to meet public benefit Internet access needs for rural areas and other needs in Bonneville's service area. Bonneville's investments in fiber optics, including the role of the private sector in building fiber optic networks, is consistent with the "Fiber Optic Cable Plan" submitted to Congress on May 24, 2000, accompanying the FY 2000 Energy and Water Development Appropriations Act. In accordance with this plan, when possible, Bonneville will establish partnerships with fiber optic facility and service providers to meet its needs.

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

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

#### **Detailed Justification**

	(	(dollars in thousands)	
	FY 2007	FY 2008	FY 2009
Main Grid	5,261	32,333	70,474

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

- FY 2007: (1) Began the planning and design of I-5 Corridor reinforcements; (2)Began the design, material ordering and construction of the Libby-Troy 115kv transmission line upgrade; (3) Completed the environmental work and began the design for the Olympia Peninsula Reinforcement project(formerly known as the Olympic Peninsula Addition project); (4) Began the Preliminary Engineering and Environmental Impact Statement (EIS) for West of McNary Generation Integration Project; (5) Continued planning studies to identify and clarify needed infrastructure additions; (6) Continued planning studies to identify projects driven by NERC/ WECC reliability Standards; (7) Continued planning and design studies to comply with the N-2 outage criteria; (8) Continued planning studies to identify additional system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (9) Continued planning studies to relieve the transmission system capacity congestion and to integrate new generation facilities.
- FY 2008: (1) Continue design and begin the material ordering of I-5 Corridor reinforcements; (2) Continue the design, material ordering and construction of the Libby-Troy 115KV transmission line upgrade; (3) Continue the construction for the Olympic Peninsula Reinforcement project (formerly know as the Olympic Peninsula Addition project); (4) Continue the preliminary engineering

FY 2007	FY 2008	FY 2009
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1 1 2007	1 1 2000	1 1 2007

and complete the EIS for the West of McNary Generation Integration Project; (5) Complete the design and begin ordering materials and start construction for the Tri – Cities Reinforcement project; (6) Begin the design and material ordering for the Redmond 230/115 kv bank #2; (7) Continue planning studies to identify and clarify needed infrastructure additions; (8) Continue planning studies and design to identify projects driven by NERC/ WECC reliability Standards; (9) Continue planning and design studies to comply with the N-2 outage criteria; (10) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (11) Continue planning studies to relieve the transmission system capacity congestion and for integrating potential new generation facilities.

FY 2009: (1) Continue design and material ordering and begin the construction of I-5 Corridor reinforcements; (2) Complete construction of the Libby-Troy 115KV transmission line upgrade; (3) Complete the construction for the Olympic Peninsula Reinforcement project (formerly known as the Olympic Peninsula Addition project); (4) Begin design and material ordering for the West of McNary Generation Integration Project; (5) Begin the design and material ordering for the Redmond 230/115 kv Bank #2; (6) Begin the design for the Mid – Columbia Area Reinforcement project; (7) Continue planning studies to identify and clarify needed infrastructure additions; (8) Continue planning studies and design to identify projects driven by NERC/ WECC reliability Standards; (9) Continue planning and design studies to comply with the N-2 outage criteria; (10) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (11) Continue planning studies to relieve the transmission system capacity congestion and for integrating potential new generation facilities.

#### **Area and Customer Services**

2,635

38,684

31.766

Bonneville's strategic objective for Area and Customer Service projects is to assure that Bonneville meets the reliability standards and the contractual obligations we have to our customers for serving load.

- FY 2007: (1) Began design of the SVC at Rogue Substation to serve Southern Oregon Coast; (2) Cancelled the design for shunt capacitor addition at Fords Prairie area; (3) Continued design and material ordering and begin construction of the new Hooper Springs (formerly know as Lower Valley Reinforcement, Caribou Substation); (4) Began the design, material ordering and construction of the City of Centralia Reinforcement Project; (5) Continued preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.
- FY 2008: (1) Complete design and begin material ordering for the SVC at Rogue Substation; (2) Cancelled the addition of the SVC at Port Angeles Substation; (2) Continue construction on Hooper Springs; (3) Complete the City of Centralia Reinforcement Project; (4) Begin the design and material ordering of the Drummond Shunt Capacitors; (5) Begin design and material ordering of the Albany- Eugene Rebuild; (6) Begin the design and material ordering for the Lebanon 115 kv shunt capacitors; (7) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.

<u> </u>	·	
FY 2007	FY 2008	FY 2009

FY2009: (1) Complete construction on Hooper Springs; (2) Complete design and construction of the Drummond Shunt Capacitors; (3) Complete the construction of the Albany- Eugene Rebuild; (4) Complete the construction of the Lebanon 115 kv shunt capacitors; (5) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.

### **Upgrades & Additions**

50.854

70,729

65,108

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

- FY 2007: Continued developing project scope and agreement for the Maple Valley SnoKing Snohomish fiber optic project; (2) Completed design for the 2 mile taps for Sifton and Kennewick Fiber optic projects; (3) Designed 1 mile tap for Augspunger fiber project; (4) Designed 2 miles of fiber between Bonneville power house and Bonneville control house; (5) Continued construction of secondary fiber related projects and digital radio system upgrades to improve the operational telecommunication system; (6) Continued replacement and upgrade of operational and marketing business tools at the Dittmer and Munro control centers; (7) Completed design and construction of seismic upgrade projects; (8) Continued planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (9) Continued planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area.
- FY 2008: (1) Begin the design and material acquisition for Maple Valley SnoKing Snohomish fiber project; (2) Order materials and construct 2 mile taps for Sifton and Kennewick fiber projects; (3) Order materials and construct 1 mile tap for Augspunger fiber project; (4) Order materials and construct 2 miles of fiber between Bonneville power house and Bonneville control house; (5) Continue planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (6) Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area.
- FY 2009: (1) Continue negotiations for joint use fiber project from SnoKing to Intalco; (2) Continue

FY 2007	FY 2008	FY 2009

planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (3) Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area.

### **System Replacements**

82,215

100,624

126,185

Bonneville's strategic objectives for System Replacement 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.

### Non-Electric Replacements:

- FY 2007: (1) Completed other non-electric replacements as necessary; (2) Continued the design, material acquisition, and construction for the Access Road Program; (3) Completed 12 security enhancement projects at various substations; (4) Completed order for replacement of three BPA helicopters for future delivery utilizing General Services Administration exchange sale authority; (5) Completed order for two fixed wing and receive delivery of one aircraft utilizing General Services Administration exchange sale authority.
- FY 2008: (1) Complete seismic upgrades to substations and buildings; (2) Complete other non-electric replacements as necessary; (3) Continue the design, material acquisition, and construction for the Access Road Program; (4) Complete 12 security enhancement projects at various substations; (5) Receive delivery of two helicopters; (6) Receive delivery of one fixed wing aircraft utilizing General Services Administration exchange sale authority.
- FY 2009: (1) Complete other non-electric replacements as necessary; (2) Continue the design, material acquisition, and construction for the Access Road Program; (3) Complete 12 security enhancement projects at various substations; (4) Receive delivery of one helicopter.

#### Electric Replacements:

FY 2007: (1) Continued replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using Reliability Centered Maintenance (RCM) criteria. Such replacements include relays, annunciators, oscillographs, metering and replacing and migrating analog to digital technology and Supervisory Control and Data Acquisition (SCADA) equipment; (2) Continued replacement of under-rated and high maintenance substation equipment; (3) Continued replacing spacer dampers on various 500kV lines; (4) Continued replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (5) Continued replacing deteriorating wood pole transmission line structures and insulators with Non-Ceramic Insulators (NCI).

FY 2007	EV 2008	EV 2000
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- FY 2008: (1) Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCM criteria. Such replacements include relays, annunciators, oscillographs, metering and various types of communication related equipment replacing and migrating analog to digital technology and SCADA equipment; (2) Continue replacement of under-rated and high maintenance substation equipment; (3) Continue replacing spacer dampers on various 500kV lines; (4) Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (5) Continue replacing deteriorating wood pole transmission line structures, spacer dampers and insulators with NCI.
- FY 2009: (1) Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCM criteria. Such replacements include relays, annunciators, oscillographs, metering and various types of communication related equipment replacing and migrating analog to digital technology and SCADA equipment; (2) Continue replacement of under-rated and high maintenance substation equipment; (3) Continue replacing spacer dampers on various 500kV lines; (4) Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (5) Continue replacing deteriorating wood pole transmission line structures, spacer dampers and insulators with NCI.

### **Projects Funded in Advance**

107,269

71,775

125,318

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

- FY 2007: (1) Continued to integrate various new wind generation projects into BPA transmission grid per Transmission Service Request via the Open Access Tariff; (2) Completed planning studies to identify system impacts and needs regarding proposed new generation projects; (3) Completed environmental cleanup and other work necessary for the sale of BPA facilities; (4) Completed other projects as agreed to with customers; (5) Began preliminary engineering for the radio replacements associated with the CSE Act; (6) Began the design of the California-Oregon Intertie (COI) reinforcement project.
- FY 2008 (1) Continue to integrate various new wind generation projects into BPA transmission grid per Transmission Service Request via the Open Access Tariff; (2) Continue planning studies to identify system impacts and needs regarding proposed new generation projects; (3) Continue environmental cleanup and other work necessary for the sale of BPA facilities; (4) Complete other projects as agreed to with customers; (5) Begin the design and construction for various radio replacements at accessible sites associated with the CSE Act; (6) Continue the design, order materials and start construction of the COI reinforcement project.
- FY 2009: (1) Continue to integrate various new wind generation projects into BPA transmission grid per Transmission Service Request via the Open Access Tariff; (2) Continue planning studies to

				FY 2007	FY 2008	FY 2009
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identify system impacts and needs regarding proposed new generation projects; (3) Continue environmental cleanup and other work necessary for the sale of BPA facilities; (4) Complete other projects as agreed to with customers; (5) Continue the design and construction for various radio replacements at accessible sites associated with the CSE Act; (6) Continue the design, order materials and continue construction of the COI reinforcement project.

Total, Transmission Services – Capital	248,234	314.145	418.851

### **Explanation of Funding Changes**

FY 2009 vs. FY 2008 (\$000)

### **Main Grid**

Reflects increase in design, material and construction costs and to
 accommodate new projects associated with updated power flow study results.

+38,141

#### **Area & Customer Services**

 Reflects decrease in design, material and construction costs and to accommodate new customer service projects. -6,918

#### **Upgrades & Additions**

 Reflects decrease on both system wide controls schemes, fiber projects and communications upgrades and improvements and additions to other transmission facilities.

-5,621

### **System Replacements**

• Reflects continuing focus on system replacements.

+25,561

#### **Projects Funded in Advance**

 Reflects increase of large customer funded projects related to generation integration.

+53,543

### **Total Funding Change, Transmission Services - Capital**

+104.706

### Capital IT & Equipment/Capitalized Bond Premium

### **Funding Schedule by Activity**

(accrued expenditures) (dollars in thousands)

Capital IT & Equipment/Capitalized Bond Premium
Capital Information Technologies (IT) & Equipment
Capitalized Bond Premium
Total, Capital IT & Equipment/Capitalized Bond Premium

(donars in thousands)					
FY 2007	FY 2008	FY 2009			
20,610	31,017	51,123			
0	0	0			
20,610	31,017	51,123			

# **Outyear Funding Schedule**

(accrued expenditures)

(donars in thousands)					
	FY 2010	FY 2011	FY 2012	FY 2013	
	54.798	28.363	28.431	29.501	

Total, Capital IT & Equipment/Capitalized Bond Premium

### **Description**

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

As part of a major efficiency effort and in support of the President's Management Initiative on Expanded Electronic Government, BPA is moving its IT infrastructure to a more efficient architecture. This FY 2009 budget incorporates the results of this effort. IT is seeking 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, improve IT project management, and formulate an agency IT portfolio cost management strategy. The IT estimates in this FY 2009 budget, under Capital Information Technologies and Equipment include all IT functions within the agency except TS grid operations. See the Capital Program – Transmission Services section of this budget for additional discussion of transmission-related IT requirements acquisitions.

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

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

# **Detailed Justification**

	· · · · · ·	rs in thousar				
	FY 2007	FY 2008	FY 2009			
Capital Information Technology/Equipment	20,610	31,017	51,123			
Includes enhancements to Bonneville's information technology processes to provide cost effective efficiencies for secure, timely and accurate information. Continue enhancements to Bonneville's Enterprise systems that are designed to link key information systems throughout Bonneville and improve business processes. Current efforts include continued functional process improvement in areas not included in the initial development phase. Acquire capital office furniture and equipment, capital automatic data processing (ADP) -based administrative telecommunications equipment, ADP equipment (hardware), and support capital software development for certain Bonneville programs.						
Capitalized Bond Premium.	0	0	0			
Continue to assess financial market and when cost-effective prudent.	ctive, refinanc	e available l	oonds as			
Total, Capital IT & Equipment/Capitalized Bond Premium	20,610	31,017	51,123			
<b>Explanation of Funding C</b>	hanges					
			7 2009 vs. FY 2008 (\$000)			
Capital Information Technology & Equipment						
■ Reflects increasing emphasis on BPA business resilience	cy efforts.		+20,106			
Capitalized Bond Premium						
<ul><li>No change</li></ul>			0			
Total Funding Change, Capital Equipment/Capital Bon	nd Premium		+20,106			

### **Power Services - Operating Expense**

### **Funding Schedule by Activity**

(accrued expenditures)
(dollars in thousands)

	(uo	mais in mousand	<i>s)</i>
Power Services - Operating Expenses	FY 2007	FY 2008	FY 2009
Production	872,484	1,235,976	1,332,693
Associated Projects Costs	264,883	277,356	286,322
Fish & Wildlife	139,260	143,007	143,007
Residential Exchange	300,581	336,861	337,320
NW Power & Conservation Council	8,390	9,266	9,453
Conservation and Energy Efficiency	61,995	66,387	66,037
Total, Power Services - Operating Expenses	1,647,593	2,068,853	2,174,832

### **Outyear Funding Schedule**

(accrued expenditures)
(dollars in thousands)

Total, Power Services - Operating Expense

(dollars in thousands)					
FY 2010	FY 2011	FY 2012	FY 2013		
1,971,328	2,036,896	1,929,150	1,849,540		

#### **Description**

Production includes all Bonneville non-Federal debt service (including EN debt),O&M of power system generation resources, including a large nuclear plant, business operations, short- and long-term power purchases, electric utility marketing of power, and oversight of hydro and nuclear projects. BPA develops products and services to meet the needs of Bonneville customers and stakeholders, and acquires resources as needed.

During FY 2008, BPA will be developing a long-term resource program to guide future resource acquisitions needed to meet preference customer load growth. This plan is expected to be completed in time for acquisitions to begin as necessary in FY 2009. Once the plan is complete, BPA will modify its budget as needed to reflect expected acquisitions.

EN debt is one of Bonneville's largest expense components. BPA, in collaboration with EN, is pursuing the refinancing of certain EN bonds as part of an ongoing debt optimization program. Through this program, BPA uses the reductions in debt service for its EN bonds to make advance payments on its Federal debt. Advance payment estimates in the 2009 budget include \$63 million in FY 2008 and \$78 million in FY 2009, consistent with power rate case documentation. Implementation of the refinancing components will be subject to favorable market conditions and interest rate environment.

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

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

Bonneville's Fish and Wildlife Program provides for the protection, enhancement, and mitigation of Columbia River Basin fish and wildlife due to losses attributed to 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 pursuant to Section 4(h) of the Northwest Power Act by funding projects and activities designed to be consistent with the Council Fish and Wildlife Program.

Bonneville is also mandated to implement measures called for under the ESA. These measures are part of the most recent biological opinions issued in November 2004 by NOAA Fisheries (2004 Biop) and in 2006 by the USFWS (2006 Biop) to address the effects of the operation of the FCRPS on threatened and endangered salmon, steelhead, Kootenai River white sturgeon, and bull trout. The biological opinions require the FCRPS Action Agencies to implement actions in the Columbia River Basin that address impacts of the Federal hydrosystem on ESA-listed fish to ensure that operation of the FCRPS does not jeopardize the continued existence of listed species or adversely modify their designated critical habitat. In February 2005, the FCRPS Action Agencies published an implementation plan for their proposed action addressed in the NOAA Fisheries 2006 Biological Opinion. The implementation plan, together with projects undertaken to address mitigation for non-listed species under the Northwest Power Act, and those to address requirements of the USFWS 2006 Biological Opinion form the basis for Bonneville's planned capital investment of \$36 million for FYs 2008 and 2009.

The 2004 BiOp was also challenged in Federal District Court. In October 2005, the District Court invalidated the 2004 BiOp, although leaving it "in place" during the remand period. The Judge also ordered the sovereign parties to collaborate during the remand process, to try to find an acceptable approach for the 2004 BiOp that would have regional support. In December, the Department of Justice filed a notice to appeal the District Court's October 2005 remand order. However, the Federal parties continue to support the court ordered collaboration on the 2004 BiOp, even though an appeal has been filed. In response to litigation seeking injunctive relief on the FCRPS in 2006, the Court approved the Federal spill plan with two modifications. In 2006 (the timeframe of the injunction), the FCRPS continued to spill during late spring and late August. The 2007 spill plan largely repeats the 2006 plan. The collaboration process has continued to make progress over the past two years and is now scheduled to be completed by spring 2008 when BPA anticipates NOAA Fisheries will complete a final FCRPS BiOp. Additional proposals to be implemented during FY 2009, if any, resulting from the completion of the remand collaboration process (by spring of 2008) requiring expenditures above and beyond the \$143 million in expense and \$36 million in capital are uncertain at this time.

There has also been litigation directed at the USFWS Biological Opinions for Libby dam. In 2003, the Corps and BPA reinitiated consultation for the operations at Libby dam to address impacts to recently designated critical habitat for the Kootenai River white sturgeon, and to evaluate information that had been developed on Kootenai River white sturgeon and bull trout since the 2000 USFWS BiOp. That consultation was completed in February 2006, but was challenged by environmental groups, the Kootenai Tribe, and the State of Montana in Federal district court of Montana. However these parties have reached tentative agreement on a long term plan of recovery efforts including a combination of hatchery, habitat and flow regimes that can be implemented by BPA, Corps, Kootenai Tribe, State of Montana and others.

Bonneville's fish and wildlife expenditures will focus on activities that benefit Columbia River Basin fish and wildlife resources including projects, consistent with priorities established in Council Subbasin Plans, designed to:

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

To the extent possible, Bonneville is integrating the actions implemented in response to the FCRPS Biological Opinions with projects implemented under the Council's Fish and Wildlife Program. Subbasin Plans that include prioritized strategies for mitigation actions will help guide project selection that meets both BPA's ESA and Northwest Power Act responsibilities. Discussion of a minimum cost-sharing requirement for certain fish and wildlife projects that BPA and other entities together share authority to fund is continuing in currently ongoing discussions with the Council and the regional fish and wildlife manager, customers, and Tribes. BPA established a Cost Sharing MOU with the US Forest Service in FY 2007 that requires a programmatic 30 percent cost share for fish mitigation projects funded by BPA on US Forest Service lands.

The FY 1997 Energy and Water Development Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an Independent Science Review Panel (ISRP) "to review a sufficient number of projects" proposed to be funded through Bonneville's fish and wildlife budget "to adequately ensure that the list of prioritized projects recommended is consistent with the Council's program," The Northwest Power Act further states that "... in making its recommendations to Bonneville, the Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives." The Conference Report on the FY 1999 Energy and Water Development Appropriations Act included a new assignment for the ISRP and the Council. The ISRP was to review the fish and wildlife projects, programs, or measures included in Federal agency budgets that are reimbursed, and/or directly funded, by Bonneville. The ISRP was directed to determine whether the proposals are consistent with the scientific criteria in the Northwest Power Act as amended in 1996, and provide a report to the Council by

April 1 of each year. The Council, in turn, must report to the Congress annually by May 15. Consequently, projects funded by Bonneville under the Program typically receive ISRP review as part of the Council recommendation process.

The REP was created through the Northwest Power Act to extend the benefits of low-cost Federal power to the residential and small farm customers of Pacific Northwest electric utilities that meet certain conditions. The 1996 Comprehensive Regional Review recommended that Bonneville engage in settlement discussions regarding the REP. Bonneville then developed a Subscription Strategy based on the recommendations of the Comprehensive Review. That Strategy proposed a comprehensive settlement of REP disputes with IOUs in the Pacific Northwest, which resulted in new contracts with regional IOUs that provided power and monetary benefits to their residential and small farm customers.

The 2000 REP Settlement Agreements, as amended, and the way the settlement costs were allocated in setting the PF rate for FY 2002-06, were challenged by public utilities and others in the U.S. Court of Appeals for the Ninth Circuit. The PF rate is the cost-based rate that preference customers pay for their requirements purchases from BPA On May 3, 2007, the Court held that the REP Settlement Agreements were inconsistent with the Northwest Power Act and that the settlement costs were improperly allocated in setting the PF rate.

As a result of these Court rulings, payments to the IOUs were suspended in May, 2007. Regional discussions continue that could lead to a recommendation to BPA on how best to implement a Residential Exchange Program, beginning in FY 2009. However, the PF rate remains unchanged in the meantime. BPA is planning a section 7(i) rate proceeding during FY 2008 to revise FY 2009 power rates, as well as a public process to review and revise the 1984 Average System Cost Methodology, to respond to the Court's rulings. These processes are expected to conclude in 2008.

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

BPA will acquire conservation resources consistent with the Council's Power Plan and act as a catalyst for energy efficiency. Such action will: 1) meet conservation targets; 2) achieve a least cost resource mix; 3) dampen the cost impacts of power purchases; 4) avoid the costs of ramping programs and infrastructure up and down; 5) extend the value of the FCRPS to customers; and 6) build the region's resource portfolio with conservation. Bonneville also is exploring how best to integrate demand-side management, distributed generation, and other leading edge technologies (i.e., Energy Web program and non wires solutions) into its transmission planning process.

#### **Detailed Justification**

	FY 2007	FY 2008	FY 2009
_			
	872,484	1,235,976	1,332,693

(dollars in thousands)

**Production** 

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

- can be made within the year due to the monthly shape of the loads and the monthly shape of the hydro electric generation. Also, purchases can be made within the month and within the day to fill shortages due to fluctuations in the hydro system and load changes.

  Power Scheduling/Marketing: Schedule and market (buy/sell) electric energy with
- Bonneville customers and the Pacific Northwest's interconnected utilities. Scheduling includes PS's implementation of physical and memo power schedules and associated transmission schedules, implementation of Electronic Tagging (ETag) in accordance with NERC and in accordance with FERC, implementation of electronic scheduling and the Columbia Grid as it evolves.
- Trojan: Decommissioning activities are complete and the Trojan operating license has been terminated by the NRC. BPA's 30 percent share of the demolition of buildings and site restoration activities will continue into FY 2008. Operation and maintenance for the Independent Spent Fuel Storage Installation Project will continue for FYs 2008-2010.
- Columbia Generating Station (formerly WNP-2): Continue to acquire full capability of Columbia Generating Station (Columbia). Columbia is on a 24-month fuel and outage cycle. A maintenance and refueling outage occurred in FY 2007 and is planned for FY 2009.
- WNP-1/WNP-3: Continue to fulfill contractual obligations for WNP-1 and WNP-3.
- Long-Term Power Purchases and Wheeling: Continue to acquire 100 percent of the 18.6 MW output of the Foote Creek 2 and 4 wind projects and a 15 kW share of the output from the Solar Ashland Project. Continue to acquire 90 MW of Stateline wind project. Continue to acquire 100 percent of the output of the Condon and Klondike wind projects.

#### Generation and Oversight:

FY 2007: Continue to provide oversight of all contracts signed to date. Provide oversight of large thermal generating plants from which Bonneville purchases capability to ensure that all Bonneville approval rights are protected; coordinate, communicate, and administer agreements, issues, and programs between Bonneville and the project owners. Continue to provide wind resource integration services for customer wind generation.

(dollars in thousands)		
FY 2007	FY 2008	FY 2009

FY 2008: Continue to provide oversight of all contracts signed to date. Pursue acquisition of cost effective renewable generation to meet load growth. Work with regional stakeholders to determine which (if any) products, actions or investments BPA should pursue to best facilitate renewable development in the Pacific Northwest. Continue to provide oversight on the wind resource integration services purchased by requirements customers.

FY 2009: Continue to provide oversight of all contracts signed to date. Continue to provide wind resource integration services for customer wind generation.

#### **Associated Project Costs**

264,883 277,356 286,322

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

FY 2007: Continued direct funding Reclamation O&M power activities. FY 2008: Continue direct funding Reclamation O&M power activities. FY 2009: Continue direct funding Reclamation O&M power activities.

Corps of Engineers:

FY 2007: Continued direct funding Corps O&M power activities. FY 2008: Continue direct funding Corps O&M power activities. FY 2009: Continue direct funding Corps O&M power activities.

Fish and Wildlife 139,260 143,007 143,007

Specific project solicitation recommendations were made by the Council in late 2006 followed by BPA review and funding decisions completed in early 2007. These decisions were based upon the management objectives and priorities in the Subbasin Plans as well as an integration of ESA responsibilities as described in the NOAA Fisheries and US Fish and Wildlife Service's FCRPS Biological Opinions. Coordination continues among BPA, Council, Federal, State, Tribes and others as the FCRPS remand collaborative process continued in FY 2007 with an expected outcome for a new FCRPS BiOp from NOAA Fisheries by spring 2008.

(dollars in thousands)		
FY 2007	FY 2008	FY 2009

- Anadromous Fish: Continue implementing both ongoing and new projects that support ESA-listed species and other measures called for under the 2004 BiOp and amended FCRPS Action Agency proposal, consistent with the successful outcome of the remand collaborative process in shaping a regionally agreed upon new Biological Opinion. Prioritize projects that address the factors that limit mitigation success as identified in the Subbasin Plans and that fulfill BPA's responsibility for mitigation of the FCRPS. Implement and develop activities that protect and enhance tributary and estuary habitat; improve mainstream habitat on an experimental basis; reduce potentially harmful hatchery practices on ESA-listed populations; and contribute to sustainable fisheries. These activities have been selected in response to the Northwest Power Act section 2(6) to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries."
- Resident Fish: Implement activities to determine the impacts of the FCRPS on 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 USFWS 2000 Biological Opinion and 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."
- Continue mitigation in resident fish for anadromous losses (substitution), mitigation for reservoir operation impacts to resident fish, and continue to refine, quantify, and delineate the difference between the two. Those resident fish acquisition projects that meet BPA's capitalization policy will be funded under the capital portion of Bonneville's fish and wildlife budget.
- Wildlife: Use existing Bonneville policies to continue the current program including funding for wildlife actions resulting from Council Fish and Wildlife Program amendments for wildlife mitigation. These activities have been selected in response to the Northwest Power Act requirement to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries." Those wildlife acquisition projects that meet BPA's capitalization policy will be funded under the capital portion of Bonneville's fish and wildlife budget.

#### **Residential Exchange**

300,581

336,861

337,320

 Includes negotiated contract settlement agreement costs for monetary benefits and forecasts of possible public exchange costs.

#### **Northwest Power and Conservation Council**

8,390

9,266

9,453

 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.

(dollars in thousands)			
FY 2007 FY 2008 FY 2009			
·			

### **Conservation and Energy Efficiency**

61,995

66,387

66,037

- 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 or technical or financial support to conservation purposes. As an agency with independent responsibilities based on its authorizing legislation, Bonneville has a statutory responsibility to provide support to certain conservation objectives that are governmental in nature, such as assisting in the development of emerging technologies and providing unbiased information to consumers. 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.

**Total, Power Services – Operating Expense** 

1,647,593

2,068,853

2,174,832

### **Explanation of Funding Changes**

FY 2009 vs. FY 2008 (\$000)

#### **Production**

Primarily reflects increases in power purchases and CGS O&M

+96.717

#### **Associated Project Costs**

• Reflects minor changes to security, biological opinion requirements, and improvements, replacements, and minor additions at the projects.

+8.966

#### Fish and Wildlife

 Consistent funding levels reflect funding associated with Biological Opinion and Northwest Power Act activities.

0

#### **Residential Exchange**

+459

Increase due to increase in forecast of public exchange costs.

#### **Northwest Power and Conservation Council**

■ Small increase reflects continuing Council program activities.

+187

FY 2009 vs. FY 2008 (\$000)

# **Conservation and Energy Efficiency**

• Small decrease reflects normal program adjustments.

-350

**Total Funding Change, Power Services - Operating Expense** 

+105,979

### **Transmission Services - Operating Expense**

### **Funding Schedule by Activity**

(accrued expenditures)
(dollars in thousands)

	(uoi	iais iii uiousa	iius)
Transmission Services - Operating Expense	FY 2007	FY 2008	FY 2009
Engineering	42,685	58,668	70,155
Operations	103,733	102,086	103,287
Maintenance	139,983	139,842	141,585
Total, Transmission Services - Operating Expense	286,401	300,596	315,027

# **Outyear Funding Schedule**

(dollars in thousands)

(donars in thousands)				
FY 2010	FY 2011	FY 2012	FY 2013	
321,696	330,184	336,271	342,504	

Total, Transmission Services - Operating Expense

# **Description**

**Engineering** 

This activity provides for the transmission system services of engineering, operations, and maintenance for Bonneville's electric transmission system, consisting of over 15,000 circuit miles (24,135 circuit kilometers) of lines, 237 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 customers; 3) optimize the transmission system; and 4) provide open and nondiscriminatory transmission access; and 5) improve Bonneville's cost effectiveness.

#### **Detailed Justification**

(dollars in thousands)			
FY 2007 FY 2008 FY 200			
42.685	58,668	70.155	

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

(dollars in thousands)		
FY 2007	FY 2008	FY 2009

- R&D: Conduct in-house transmission system research and development, including (1) studies on reliability, High Voltage Direct Current (HVDC) and High Voltage Alternating Current (HVAC) outage reduction, and (2) methods to update existing facilities and reduce maintenance costs including reliability-centered monitoring and recording methods for analysis.
- Technical Support: Provide technical support activities, such as transmission system planning and studies to optimize portions of the system. Provide support for non-wires solutions studies and pilot projects.
- Capital-to-Expense Adjustments: Conduct annual analysis of Bonneville's outstanding capital work orders to assess whether they should be expensed.
- 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 utilities. The projects must be beneficial, under agreed upon criteria, to Bonneville operations and to the Federal or non-Federal entity involved. Additionally, these activities contribute to more efficient or reliable construction of the Federal transmission system or otherwise enhance electric service to the region.
- Leased and Other Costs: Includes leases and other costs of transmission, delivery and voltage support facilities when such arrangements are operationally feasible and cost effective to deliver power. Other costs included are the debt service costs associated with Large Generator Interconnection Agreements (LGIA).

Operations 103,733 102,086 103,287

- FY 2007: Continued to operate within parameters of regional transmission authorities. Prepared for increased complexity of outage scheduling, transmission scheduling, and dispatching, as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training apprentices and skilled replacements. Continued development and implementation of business systems and tools. Participated in planning and preparation for establishment of Columbia Grid.
- FY 2008: Continue to operate within parameters of regional transmission authorities. Continue preparation for increased complexity of outage scheduling, transmission scheduling, and dispatching, as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training apprentices and skilled replacements. Continue development and implementation of business systems and tools. Participate in continued planning and preparation of Columbia Grid.

(dollars in thousands)		
FY 2007	FY 2008	FY 2009

- FY 2009: Continue to operate within parameters of regional transmission authorities. Continue preparation for increased complexity of outage scheduling, transmission scheduling, and dispatching, as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training students, apprentices, and skilled replacements. Continue development and implementation of business systems and tools. Participate in planning and preparation for establishment of Columbia Grid.
- Substation Operations: Perform operations functions necessary to provide electric service to customers and to protect the Federal investment in electric equipment. Includes equipment adjustments, switching lines and equipment during emergencies or maintenance, isolating damaged equipment, restoring service to customers, and inspecting equipment, reading meters, et cetera.
- Power System Control and Dispatching: 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 operation of the system control and data computers at Dittmer and Munro Control Centers.
- Marketing and Sales: Provide management and direction of transmission rates, and provide business strategy in marketing of transmission and ancillary products and services of Transmission Services. Involve customers and constituents in the process of product and rate development. Maintain accurate and complete historical records of current and past transmission agreements. Provide guidance for current and future transmission contract negotiations. Provide financial analysis of market strategies. Monitor and report on the financial health of transmission services. Support cost management by effective reporting and analysis of current expenditures. Ensure official budget submittals reflect current management financial strategies and adequately fund transmission programs.
- Transmission Scheduling: Provide open access to the Federal transmission system consistent with the Open Access Transmission Tariff approved by FERC. Schedule and market transmission capacity to Bonneville customers, California ISO, and Pacific Northwest's interconnected utilities. Manage the reservations and scheduling of all transmission services associated with the Open Access Transmission Tariff.

(dollars in thousands)		
FY 2007	FY 2008	FY 2009

Maintenance 139,983 139,842 141,585

In all aspects of maintenance, Bonneville is continuing the implementation of RCM practices. This change is focused on improving system reliability and increasing availability in a deregulated market. Access road maintenance costs are expected to increase dramatically as Bonneville addresses the aging roads system and environmental constraints associated with construction, enhancement, and maintenance of access roads. The Bonneville transmission system encompasses approximately 50,000 miles of access roads (many of these roads are through rugged, inaccessible terrain).

- FY 2007: Continued to refine RCM practices at all of Bonneville's O&M regions. 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 in a deregulated market 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.
- FY 2008: Continue to refine RCM practices at all of Bonneville's O&M regions. 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. Continue to prepare for the impact of an expected high attrition rate among Bonneville's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage scheduling and coordination planning to increase customer satisfaction and system availability. Increase emphasis on non-electric facilities to compensate for years of deferral. Continue high emphasis of vegetation management, implementation of an aggressive access road management plan to maintain roads at a level that minimizes response time, increases reliability, and ensures environmental compliance.

(dollars in thousands)		
FY 2007	FY 2008	FY 2009

- FY 2009: 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. 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.
- Transmission Line Maintenance: Maintain and repair over 15,000 circuit miles (24,135 km) of high voltage transmission lines, of which over 6,436 km (4,000 circuit miles) are 500-kV transmission EHV (extra-high voltage), for which maintenance is two and one-half times more labor-intensive than maintenance of lower transmission voltages, although more efficient in transmission of power. This responsibility includes maintaining transmission rights-of-way to ensure system reliability, safety, and environmental compliance. Adopt work practices that improve system availability and reliability.
- Substation Maintenance: Maintain and repair the transmission system power equipment located in Bonneville's 238 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 Bonneville's non-electric facilities. Includes site, building, and building utility maintenance; custodial services; station utility; and other maintenance service activities on Bonneville-owned or Bonneville-leased non-electric facilities.

(dollars in thousands)		
FY 2007	FY 2008	FY 2009

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.

<b>Total, Transmission Services - Operating</b>			
Expense	286,401	300,596	315,027

### **Explanation of Funding Changes**

FY 2009 vs. FY 2008 (\$000)

### **Engineering**

 Reflects emphasis on system reliability improvements, research and development, and an increase in the debt service for the LGIA program.

+11,487

### **Operations**

■ Reflects continued emphasis on security and control center systems support.

+1,201

#### Maintenance

■ Primarily reflects continuing maintenance program activities, including system protection, right-of-way, line maintenance, and performance improvements.

+1,743

**Total Funding Change, Transmission Services – Operating Expense.** 

14,431

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

### **Funding Schedule by Activity**

(accrued expenditures)

	(dollars ill tilousalius)		
Interest, Pension and Post-retirement Benefits	FY 2007	FY 2008	FY 2009
BPA Bond Interest (Net)	127,985	67,281	89,394
BPA Appropriation Interest	44,665	40,793	38,611
Corps of Engineers Appropriation Interest	162,186	163,744	157,655
Lower Snake River Comp Plan Interest.	16,485	16,466	16,466
Bureau of Reclamation Appropriation Interest	43,376	43,247	43,247
Subtotal, Interest – Operating Expense	394,697	331,531	345,373
Pension and Post-retirement Benefits	21,100	18,000	30,652
Total, Interest, Pension and Post-retirement Benefits	415,797	349,531	376,025

#### **Outyear Funding Schedule**

(accrued expenditures)
(dollars in thousands)

FY 2010 FY 2011 FY 2012 FY 2013 402,570 422,136 442,763 475,449

Total, Interest, Pension and Post-retirement Benefits

### **Operating Expense**

### **Description**

Interest expense provides for the payment of interest due on Federal debt. This consists of capital investment in FCRPS hydroelectric generating and transmission facilities of Bonneville, the Corps and Reclamation. Investments were financed by Congressional appropriations and Bonneville borrowings from the Treasury. Bonneville repays Federal debt through its power sales and transmission services revenues.

Since receiving Treasury borrowing authority in 1974 under the Transmission System Act, all Bonneville borrowing has been at market rates. As of Oct 1, 1996, all of Bonneville's repayment obligations on FCRPS appropriated investment (Corps and Reclamation FCRPS investment and Bonneville investment) financed with appropriations prior to the Transmission System Act that were unpaid as of Sept 30, 1996, were restructured and assigned new current-market interest rates. The Bonneville Appropriations Refinancing Act of 1996 called for resetting (reducing) the unpaid principal of FCRPS appropriations and reassigning (increasing) interest rates. New principal amounts were established as of the beginning of FY 1997 at the present value of the principal and annual interest payments Bonneville would make to the Treasury for these obligations in the absence of the legislation, plus \$100 million. The new principal amounts are then assigned new interest rates based on the Treasury yield curve rates prevailing at the end of FY 1996. Bonneville's outstanding repayment

Bonneville Power Administration/ Interest, Pension and Post-Retirement Benefits and Capital Transfers-Operating Expense

FY 2009 Congressional Budget

obligations on appropriations at the end of FY 1996 were \$6.7 billion with a weighted average interest rate of 3.4 percent. The refinancing reduced the principal amount to \$4.1 billion with a weighted average interest rate of 7.1 percent. Implementation of the refinancing took place in 1997 after audited actual financial data was available. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the Bonneville Appropriations Refinancing Act to Treasury for their review and approval. Treasury approved the implementation calculations in July 1997. The Act also calls for all future FCRPS appropriations to be assigned prevailing Treasury yield curve interest rates.

Interest estimates are a direct function of costs of Treasury borrowing to Bonneville, repayment status of outstanding FCRPS investments, and projected additions to FCRPS plant in service. These estimates may change over time depending on forecasted market conditions. The interest cost estimates below include the impact of Bonneville's appropriation refinancing legislation.

Bonneville has been paying its unfunded liability of the Civil Service Retirement System (CSRS) and post-retirement benefits into the General Fund of the Treasury (receipt account 892889) since FY 1998. These payments are consistent with the FY 2001 Administration's budget which assumed Bonneville would prospectively cover the full unfunded liability that accrues in fiscal years after FY 1997 of the Civil Service Retirement and Disability Fund (Disability Fund), the Employees Health Benefits Fund (Health Fund), and the Employees Life Insurance Fund (Insurance Fund) that it had not covered prior to FY 1998. As part of the FY 2001 Administration's Budget, Bonneville assumed its entire CSRS cost recovery would be phased in over a 10-year period, given that wholesale power and transmission rates for Bonneville were contractually frozen until the end of FY 2001, in order to meet competitive market pressures. The Additional Post-Retirement Contribution for FY 2007, in the amount of \$21.1 million, includes the final payment on deferred amounts including interest, that accrued between FY 1998 and FY 2001 when power rates were frozen. For FY 2008, the final year of the scheduled 10-year period, and for FY 2009, \$18.0 million and \$30.5 million, respectively, are assumed to be recovered by Bonneville through rates and paid into the General Fund of the Treasury. Post FY 2008 amounts are unscheduled estimates and may change. Cost estimates include pension and post-retirement benefits for Bonneville and the power-related portion of the Corps, Reclamation, and USFWS.

### **Capital Transfers**

# **Funding Schedule by Activity**

(accrued expenditures) (dollars in thousands)

	(dollars in thousands)		
Capital Transfers	FY 2007	FY 2008	FY 2009
BPA Bond Amortization	506,300	241,419	258,770
Reclamation Appropriation Amortization	229	0	0
BPA Appropriation Amortization	54,157	30,662	6,878
Corps Appropriation Amortization	57,714	136,183	10,075
Total Capital Transfers	623,400	408.264	275.723

### **Outyear Funding Schedule**

(accrued expenditures)
(dollars in thousands)

(donars in thousands)							
FY 2010	FY 2011	FY 2012	FY 2013				
423.976	417.680	293.841	246.661				

Total, Capital Transfers

# **Description**

This activity conveys funds to the Treasury for repayment of certain FCRPS costs not included in the Associated Project Costs budget. Since capital transfers are cash transactions, they are not considered budget obligations.

BPA Amortization/Capital Transfers for FY 2007 includes final payment to Treasury for reimbursement of judgment funds, consistent with the Enron settlement agreement in 2003.

# BONNEVILLE POWER ADMINISTRATION TOTAL OBLIGATIONS/OUTLAYS

Current Services (in millions of dollars) FISCAL YEAR

FB 23-Jan-08

<u> </u>				HOUAE TEAK						
BP-1 SUMMARY	20	007	2008		2009		2010	2011	2012	2013
1,3/	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
1 Residential Exchange	301	301	337	337	337	337	300	300	171	171
2 Power Services 2/	1,137	1,137	1,513	1,513	1,619	1,619	1,450	1,515	1,531	1,451
3 Transmission Services	427	427	543	543	609	609	600	700	755	663
4 Conservation & Energy Efficiency	69	69	108	108	108	108	109	109	119	119
5 Fish & Wildlife	174	174	179	179	179	179	179	179	179	179
6 Interest/ Pension 4/	416	416	350	350	376	376	403	422	443	475
7 Associated Project Cost - Capital	108	108	159	159	137	137	143	148	153	158
8 Capital Equipment	21	21	31	31	51	51	55	27	27	28
3 Planning Council	8	8	9	9	9	9	10	10	10	10
10 Misc. Accounting Adjs.	0	0	0	0	0	0	0	0	0	0
11 Projects Funded in Advance	107	107	72	72	125	125	66	79	72	73
12 Capitalized Bond Premiums	0	0	0	0	0	0	0	2	2	2
13 Misc. Accounting Adjs.	0			·				•		
TOTAL OBLIGATIONS/ OUTLAYS 3/	2,768	2,768	3,301	3,301	3,550	3,550	3,315	3,491	3,462	3,329

#### **REVENUES AND REIMBURSEMENTS**

Current Services (in millions of dollars)

# in millions of dollar

BP-1	SUMMARY
------	---------

- 13 Revenues 5/
- 14 Project Funded in Advance
- 15 **TOTAL**

**BUDGET AUTHORITY (NET) 6/** 

	FISCAL TEAR									
I	20	007	200	8	20	2009		2011	2012	2013
I	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
Ī	3,214	3,214	3,221	3,221	3,424	3,424	3,250	3,413	3,400	3,266
	107	107	72	72	125	125	66	79	72	73
ſ	3,321	3,321	3,293	3,293	3,549	3,549	3,316	3,492	3,472	3,339
ſ	(312)		26		12		22	8	(7)	(10)
ŀ		(508)		42		23	30	17	(4)	(10)

### The accompanying notes are an integral part of this table.

1/ This FY 2009 budget includes capital and expense estimates for PS based on forecasted FY 2007 Final Power Rate Proposal and associated outyear estimates for FYs 2010-2013. The TS capital and expense estimates are based on forecasted Transmission 2008 Rate Case estimates and associated outyear estimates for FYs 2010-2013.

Capital funding levels also reflect BPA's Capital Planning Review Process and 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. Capital investment levels in this FY 2009 budget have been updated to reflect executive management decisions from BPA's Capital Allocation Board.

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, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.
- 3/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of current-law funding estimates.
- 4/ See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.
- Factorial Revenues, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming rate adjustment mechanisms, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, causing the same Net Outlay result. Adjustments for depreciation and 4(h)(10)(C) credits of the NW Power Act are also
- 6/ BPA received \$49 million of additional budget authority in FY 2007 to accommodate the work necessary to relocate the radio spectrum consistent with the Commercial Spectrum Enhancement Act (P.L. 108-494). In subsequent years, per the assumed expenditures developed as part of BPA's work plans, outlays for the work performed are assumed.
- 7/ Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses. Actual Net Outlays are volatile and are reported in SF-133. Estimated Net Outlays could change 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

2007		200	8	2009 2010		2010	2011	2012	2013
Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
301	301	337	337	337	337	300	300	171	171
1,137	1,137	1,513	1,513	1,619	1,619	1,450	1,515	1,531	1,451
286	286	301	301	315	315	322	330	336	343
62	62	66	66	66	66	69	69	74	74
139	139	143	143	143	143	143	143	143	143
416	416	350	350	376	376	403	422	443	475
8	8	9	9	9	9	10	10	10	10
2,349	2349	2719	2719	2865	2865	2697	2789	2708	2667
	•	•							
107	107	72	72	125	125	66	79	72	73

1 Residential Exchange2 Power Services 2/

3 Transmission Services

Conservation & Energy Efficiency
 Fish & Wildlife
 Interest/ Pension 3/

7 Planning Council

8 TOTAL EXPENSE

10 Projects Funded in Advance

#### CAPITAL OBLIGATIONS/OUTLAYS

Current Services (in millions of dollars)

FISCAL YEAR

BP-2 continued	20	007	200	8	20	09	2010	2011	2012	2013
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
Conservation & Energy Efficiency	7	7	42	42	42	42	40	40	45	45
11 Transmission Services	141	141	242	242	294	294	278	370	419	320
12 Associated Project Cost	108	108	159	159	137	137	143	148	153	158
13 Fish & Wildlife	35	35	36	36		36	36	36	36	36
14 Capital Equipment	21	21	31	31	51	51	55	27	27	28
15 Capitalized Bond Premiums	0	0	0	0	0	0	0	2	2	2
16 TOTAL CAPITAL INVESTMENTS \5	312	312	510	510	560	560	552	623	682	589
17 TREASURY BORROWING AUTHORITY TO FINANCE CAPITAL OBLIGATIONS 4,5/	312		510		560		552	623	682	589
18 TREASURY BORROWING AUTHORITY										
TO FINANCE OTHER OBLIGATIONS	3		(76)		(272)		(106)	(199)	(396)	(352)
19 ADJUSTED PERMANENT AUTHORITY TO BORROW:	315		434		288		446	424	286	237

#### The accompanying notes are an integral part of this table.

1/ This FY 2009 budget includes capital and expense estimates for PS based on forecasted FY 2007 Final Power Rate Proposal and associated outyear estimates for FYs 2010-2013. The TS capital and expense estimates are based on forecasted Transmission 2008 Rate Case estimates and associated outyear estimates for FYs 2010-2013.

Capital funding levels also reflect BPA's Capital Planning Review Process and 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. Capital investment levels in this FY 2009 budget have been updated to reflect executive management decisions from BPA's Capital Allocation Board.

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, 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
- 4/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of current-law funding estimates.
- 5/ Treasury Borrowing Authority to Finance Other Obligations represents the use of (positive), or building up of (negative), deferred borrowing. Deferred borrowing is created when Bonneville uses cash from revenues to liquidate capital obligations in lieu of Treasury borrowing. This creates the ability in future years to borrow money, when fiscally prudent, to liquidate revenue funded activities. The amount on this line, under the title "Treasury Borrowing Authority to Finance Other Obligations" represents the annual use or creation of deferred borrowing. OMB has requested that Bonneville show this deferred borrowing as a resource carried forward from year to year in the manner displayed here.

# CURRENT SERVICES

(in millions of dollars)

# **CAPITAL TRANSFERS**

	2007
Amortization:	Pymts
20 BPA Bonds	506
21 Reclamation Appropriations	0
22 BPA Appropriations	59
23 Corps Appropriations	58
24 TOTAL CAPITAL TRANSFERS	623

FISCA	L YEAR

	SCAL IL	~IX				
2008		2009	2010	2011	2012	2013
ymts		Pymts	Pymts	Pymts	Pymts	Pymts
241		259	345	115	40	155
0		0	0	1	0	0
31		7	76	109	157	92
136		10	3	192	96	0
408		276	424	417	293	247

25 FULL-TIME EQUIVALENT (FTE)	2,896

		STAFFING	3				
I	3,000		3,000	3,000	3,000	3,000	3,000

# The accompanying notes are an integral part of this table.

The cumulative amount of actual advance amortization payments as of the end of FY 2007 is \$2,091 million.

#### PROGRAM & FINANCING SUMMARY

Current Services (in millions of dollars)

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

10.00 Total obligations 4/

Program by activities: Operating expenses: 0.01 Power Services 0.02 Residential Exchange Associated Project Costs: 0.05 Bureau of Reclamation 0.06 Corps of Engineers 0.07 Colville Settlement 0.19 U.S. Fish & Wildlife Service 0.20 Planning Council 0.21 Fish & Wildlife 0.23 Transmission Services 0.24 Conservation & Energy Efficiency 0.25 Interest 0.26 Pension and Health Benefits 1/ 0.91 Total operating expenses 2/ Capital investment: 1.01 Power Services 1.02 Transmission Services 1.03 Conservation & Energy Efficiency 1.04 Fish & Wildlife 1.05 Capital Equipment 1.06 Capitalized Bond Premiums 1.07 Total Capital Investment 3/ 1.08 Misc. Accounting Adjustments 2.01 Projects Funded in Advance

		est.				
2007	2008	2009	2010	2011	2012	2013
896	1,236	1,333	1,154	1,211	1,219	1,139
301	337	337	300	300	171	171
67	75	78	80	81	84	84
158	166	170	177	182	187	187
20	17	18	18	19	19	19
19	20	20	21	22	22	22
8	9	9	10	10	10	10
139	143	143	143	143	143	143
286	301	315	322	330	336	343
62	66	66	69	69	74	74
395	332	345	372	391	411	444
21	18	31	31	31	32	32
2,372	2,720	2,865	2,697	2,789	2,708	2,668
108	159	137	143	148	153	158
141	242	294	278	370	419	320
7	42	42	40	40	45	45
35	36	36	36	36	36	36
21	31	51	55	27	27	28
0	0	0	0	2	2	2
312	510	560	552	623	682	589
0					***	-
84	72	125	66	79	72	73
2,768	3,302	3,549	3,315	3,491	3,462	3,330

# 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, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.
- <sup>3/</sup> Assumes capital obligations, not capital expenditures.
- 4/ This FY 2009 budget includes capital and expense estimates for PS based on forecasted FY 2007 Final Power Rate Proposal and associated outyear estimates for FYs 2010-2013. The TS capital and expense estimates are based on forecasted Transmission 2008 Rate Case estimates and associated outyear estimates for FYs 2010-2013.

For purposes of this table, this FY 2009 budget reflects, for FY 2007, actual third party financing expense only for PFIA.

Capital funding levels also reflect BPA's Capital Planning Review Process and 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. Capital investment levels in this FY 2009 budget have been updated to reflect executive management decisions from BPA's Capital Allocation Board.

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

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

Program and Financing (continued)

Current Services

(in millions of dollars)

est.

Financing:   21.90 Unobligated balance available, start of year. 5/   24.40 Unobligated balance available, end of year. 5/   31   20   12   3   3   0   0   25.00 Unobligated balance lapsing   3,182   3,318   3,561   3,323   3,500   3,465   3,329   3,000   3,00		2007	2008	2009	2010	2011	2012	2013
of year. 5/ 24.40 Unobligated balance available, end of year. 5/ 25.00 Unobligated balance lapsing 39.00 Budget authority (gross)  Budget Authority:  61.00 Transfer to other accounts 62.00 Transfer from other accounts 66.10 Contract Authority:  61.00 Transfer from other accounts 66.10 Contract Authority 61.00 Agusted Permanent Authority: Authority to borrow from Treasury (indefinite) 6/ Spending authority from off- setting collections  3,321 3,293 3,549 3,316 3,492 3,472 3,339  69.47 Portion applied to debt reduction  (556) (408) (276) (424) (417) (293) (247)  69.90 Spending authority from offsetting collections (adjusted)  71.00 Total obligations  2,782 3,335 3,572 3,346 3,509 3,468 3,329  71.00 Total obligations  2,782 3,335 3,572 3,346 3,509 3,468 3,329  Adjustments to budget authority and outlays: Deductions for offsetting collections:  88.00 Federal funds  (40) (90) (90) (90) (90) (90) (90) (90) (9	<u> </u>							
24.40 Unobligated balance available, end of year.5/       47       31       20       12       3       0       0         25.00 Unobligated balance lapsing       3,182       3,318       3,561       3,323       3,500       3,465       3,329         Budget Authority:       8       3,182       3,318       3,561       3,323       3,500       3,465       3,329         Budget Authority:       8       49       49       49       49       49       49       49       49       49       49       44       424       286       237       237       3,500       3,412       3,422       3,422       3,339       3,422       3,422       3,339       3,442       288       446       424       286       237       3,399       3,442       3,316       3,492       3,472       3,339       3,316       3,492       3,472       3,339       3,316       3,492       3,472       3,339       3,316       3,492       3,472       3,339       3,316       3,492       3,472       3,339       3,399       3,414       3,491       3,462       3,399       3,492       3,472       3,399       3,392       3,472       3,399       3,468       3,509       3,468       3,329	· · · · · · · · · · · · · · · · · · ·							
of year.5/ 25.00 Unobligated balance lapsing 39.00 Budget authority (gross)  Budget Authority:  61.00 Transfer to other accounts 62.00 Transfer from other accounts 62.00 Transfer from other accounts 66.10 Contract Authority 67.10 Adjusted Permanent Authority: Authority to borrow from Treasury (indefinite) 6/ Spending authority from off- setting collections 89.00 Spending authority from offsetting collections (adjusted)  71.00 Total obligations  2,768 3,301 3,550 3,314 3,491 3,462 3,329  87.00 Outlays (gross)  Adjustments to budget authority and outlays: Deductions for offsetting collections  88.00 Federal funds  (40) (90) (90) (90) (90) (90) (90) (90) (9	•	0	47	31	20	12	3	0
25.00 Unobligated balance lapsing 39.00 Budget authority (gross) 3,182 3,318 3,561 3,323 3,500 3,465 3,329 Budget Authority:  61.00 Transfer to other accounts 49 62.00 Transfer from other accounts 66.10 Contract Authority to borrow from Treasury (indefinite) 6/ Spending authority from offsetting collections 3,321 3,293 3,549 3,316 3,492 3,472 3,339 69.47 Portion applied to debt reduction (556) (408) (276) (424) (417) (293) (247) 69.90 Spending authority from offsetting collections (adjusted) 2,387 2,884 3,273 2,892 3,076 3,179 3,092 71.00 Total obligations 2,768 3,301 3,550 3,314 3,491 3,462 3,329 71.00 Total obligations 2,782 3,335 3,572 3,346 3,509 3,468 3,329 71.00 Outlays (gross) 2,782 3,335 3,572 3,346 3,509 3,468 3,329 71.00 Total obligations (40) (90) (90) (90) (90) (90) (90) (90) (9	· · · · · · · · · · · · · · · · · · ·					_		
3,182   3,318   3,561   3,323   3,500   3,465   3,329	•	47	31	20	12	3	0	0
Budget Authority: 61.00 Transfer to other accounts 62.00 Transfer from other accounts 62.00 Transfer from other accounts 62.10 Contract Authority 67.10 Adjusted Permanent Authority: Authority to borrow from Treasury (indefinite) 6/ Spending authority from off- setting collections 3,321 3,293 3,549 3,316 3,492 3,472 3,339 69.47 Portion applied to debt reduction 69.90 Spending authority from offsetting collections (adjusted)  7,00 Total obligations 7,00 Outlays (gross)  Adjustments to budget authority and outlays: Deductions for offsetting collections: 88.00 Federal funds 9,00 Budget authority (net)  89.00 Budget authority (net)  80.00 Federal sources 1,3454								
1.00 Transfer to other accounts   74   49   62.00 Transfer from other accounts   49   66.10 Contract Authority   67.10   Adjusted Permanent Authority: Authority   67.10   Adjusted Permanent Authority from offsetting collections   3,321   3,293   3,549   3,316   3,492   3,472   3,339   69.47   Portion applied to debt   65.60   Adjusted   Adjuste	39.00 Budget authority (gross)	3,182	3,318	3,561	3,323	3,500	3,465	3,329
62.00 Transfer from other accounts 66.10 Contract Authority 67.10 Adjusted Permanent Authority: Authority to borrow from Treasury (indefinite) 6/ Spending authority from off- setting collections 69.47 Portion applied to debt reduction 69.90 Spending authority from offsetting collections (adjusted)  71.00 Total obligations 71.00 Total obligations 71.00 Outlays (gross)  Adjustments to budget authority and outlays: Deductions for offsetting collections: 88.00 Federal funds 88.40 Non-Federal sources 88.90 Total, offsetting collections 89.00 Budget authority (net)  89.00 Budget authority (net)  49  49  49  49  49  49  49  49  49  4	Budget Authority:							
62.00 Transfer from other accounts 66.10 Contract Authority 67.10 Adjusted Permanent Authority: Authority to borrow from Treasury (indefinite) 6/ Spending authority from off- setting collections 69.47 Portion applied to debt reduction 69.90 Spending authority from offsetting collections (adjusted)  71.00 Total obligations 71.00 Total obligations 71.00 Outlays (gross)  Adjustments to budget authority and outlays: Deductions for offsetting collections: 88.00 Federal funds 88.40 Non-Federal sources 88.90 Total, offsetting collections 89.00 Budget authority (net)  89.00 Budget authority (net)  49  49  49  49  49  49  49  49  49  4	61.00 Transfer to other accounts	74						
67.10 Adjusted Permanent Authority: Authority to borrow from Treasury (indefinite) 6/ Spending authority from off- setting collections 69.47 Portion applied to debt reduction 69.90 Spending authority from offsetting collections (556) (408) (276) (424) (417) (293) (247) 69.90 Spending authority from offsetting collections (adjusted) 71.00 Total obligations 71.00 Total obligations 71.00 Outlays (gross) 72.782 3.335 3.572 3.346 3.509 3.468 3.329  Adjustments to budget authority and outlays: Deductions for offsetting collections: 88.00 Federal funds 88.00 Federal funds 98.00 Federal sources 88.00 Total, offsetting collections (3494) (3203) (3,459) (3,227) (3,402) (3,382) (3,472) (3,339)  89.00 Budget authority (net) (312) 26 12 22 8 (7) (10)	62.00 Transfer from other accounts							
to borrow from Treasury (indefinite) 6/ Spending authority from off- setting collections  69.47 Portion applied to debt reduction  69.90 Spending authority from offsetting collections (adjusted)  71.00 Total obligations  71.00 Total obligations  71.00 Outlays (gross)  Adjustments to budget authority and outlays: Deductions for offsetting collections:  88.00 Federal funds  88.00 Federal funds  88.00 Total, offsetting collections  (312) 26 12 22 8 (7) (10)	66.10 Contract Authority							
Spending authority from off- setting collections  3,321 3,293 3,549 3,316 3,492 3,472 3,339  69.47 Portion applied to debt reduction  (556) (408) (276) (424) (417) (293) (247)  69.90 Spending authority from offsetting collections (adjusted)  2,387 2,884 3,273 2,892 3,076 3,179 3,092  71.00 Total obligations  2,768 3,301 3,550 3,314 3,491 3,462 3,329  87.00 Outlays (gross)  Adjustments to budget authority and outlays: Deductions for offsetting collections:  88.00 Federal funds  (40) (90) (90) (90) (90) (90) (90)  88.40 Non-Federal sources  (3,454) (3,203) (3,459) (3,227) (3,402) (3,382) (3,249)  88.90 Total, offsetting collections  (312) 26 12 22 8 (7) (10)	67.10 Adjusted Permanent Authority: Authority							
setting collections 3,321 3,293 3,549 3,316 3,492 3,472 3,339 69.47 Portion applied to debt reduction (556) (408) (276) (424) (417) (293) (247) 69.90 Spending authority from offsetting collections (adjusted) 2,387 2,884 3,273 2,892 3,076 3,179 3,092 71.00 Total obligations 2,768 3,301 3,550 3,314 3,491 3,462 3,329 87.00 Outlays (gross) 2,782 3,335 3,572 3,346 3,509 3,468 3,329 Adjustments to budget authority and outlays: Deductions for offsetting collections: 88.00 Federal funds (40) (90) (90) (90) (90) (90) (90) (90) (9	to borrow from Treasury (indefinite) 6/	315	434	288	446	424	286	237
69.47 Portion applied to debt reduction (556) (408) (276) (424) (417) (293) (247) (69.90 Spending authority from offsetting collections (adjusted) 2,387 2,884 3,273 2,892 3,076 3,179 3,092 (247) (293) (247) (247) (293) (247) (247) (293) (247) (24	Spending authority from off-							
reduction (556) (408) (276) (424) (417) (293) (247) (49.90) Spending authority from offsetting collections (adjusted) 2,387 2,884 3,273 2,892 3,076 3,179 3,092 (247) (29.90)		3,321	3,293	3,549	3,316	3,492	3,472	3,339
87.00 Outlays (gross)  Adjustments to budget authority and outlays: Deductions for offsetting collections:  88.00 Federal funds  88.40 Non-Federal sources  88.90 Total, offsetting collections  2,387  2,884  3,273  2,892  3,076  3,179  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,092  3,093  3,092  3,092  3,092  3,093  3,093  3,092  3,093  3,094  3,092  3,092  3,093  3,094  3,092  3,092  3,093  3,092  3,093  3,092  3,093  3,093  3,094  3,093  3,092  3,093  3,092  3,093								
collections (adjusted)       2,387       2,884       3,273       2,892       3,076       3,179       3,092         71.00 Total obligations       2,768       3,301       3,550       3,314       3,491       3,462       3,329         87.00 Outlays (gross)       2,782       3,335       3,572       3,346       3,509       3,468       3,329         Adjustments to budget authority and outlays:		(556)	(408)	(276)	(424)	(417)	(293)	(247)
71.00 Total obligations  2,768 3,301 3,550 3,314 3,491 3,462 3,329  87.00 Outlays (gross)  2,782 3,335 3,572 3,346 3,509 3,468 3,329  Adjustments to budget authority and outlays: Deductions for offsetting collections:  88.00 Federal funds  (40) (90) (90) (90) (90) (90) (90) (90) (9								
87.00 Outlays (gross)  2,782 3,335 3,572 3,346 3,509 3,468 3,329  Adjustments to budget authority and outlays: Deductions for offsetting collections:  (40) (90) (90) (90) (90) (90) (90) (90) (9	collections (adjusted)	2,387	2,884	3,273	2,892	3,076	3,179	3,092
Adjustments to budget authority and outlays:     Deductions for offsetting collections:  88.00 Federal funds (40) (90) (90) (90) (90) (90) (90)  88.40 Non-Federal sources (3,454) (3,203) (3,459) (3,227) (3,402) (3,382) (3,249)  88.90 Total, offsetting collections (3,494) (3,293) (3,549) (3,316) (3,492) (3,472) (3,339)  89.00 Budget authority (net) (312) 26 12 22 8 (7) (10)	71.00 Total obligations	2,768	3,301	3,550	3,314	3,491	3,462	3,329
Adjustments to budget authority and outlays:     Deductions for offsetting collections:  88.00 Federal funds (40) (90) (90) (90) (90) (90) (90)  88.40 Non-Federal sources (3,454) (3,203) (3,459) (3,227) (3,402) (3,382) (3,249)  88.90 Total, offsetting collections (3,494) (3,293) (3,549) (3,316) (3,492) (3,472) (3,339)  89.00 Budget authority (net) (312) 26 12 22 8 (7) (10)								
Deductions for offsetting collections:   (40) (90) (90) (90) (90) (90) (90) (90) (9	87.00 Outlays (gross)	2,782	3,335	3,572	3,346	3,509	3,468	3,329
88.40 Non-Federal sources (3,454) (3,203) (3,459) (3,227) (3,402) (3,382) (3,249) (3,494) (3,293) (3,549) (3,316) (3,492) (3,472) (3,339) (3,494) (3,293) (3,293) (3,494) (3,293) (3,2								
88.90 Total, offsetting collections (3,494) (3,293) (3,549) (3,316) (3,492) (3,472) (3,339) 89.00 Budget authority (net) (312) 26 12 22 8 (7) (10)	88.00 Federal funds	(40)	(90)	(90)	(90)	(90)	(90)	(90)
89.00 Budget authority (net) (312) 26 12 22 8 (7) (10)	88.40 Non-Federal sources	(3,454)	(3,203)	(3,459)	(3,227)	(3,402)	(3,382)	(3,249)
	88.90 Total, offsetting collections	(3,494)	(3,293)	(3,549)	(3,316)	(3,492)	(3,472)	(3,339)
	80 00 Rudget authority (net)	(312)	26	12	22	Q	(7)	(10)
	- · · · · · · · · · · · · · · · · · · ·		-					

# The accompanying notes are an integral part of this table. 5/ Reflects estimated cost for radio spectrum fund.

6/ The Permanent Authority: Authority to borrow (indefinite) from Treasury amounts reflect both BPA's capital program financing needs and either the use of, or creation of, deferred borrowing. Deferred borrowing in created when, as a cash and debt management decision, BPA uses cash from revenues to liquidate capital obligations in lieu of borrowing from Treasury. This temporary use of cash on hand instead of borrowed funds creates the ability in future years to borrow money, when fiscally prudent. Technical Executive Branch budget display and tracking requirements have modified the way BPA shows this deferred borrowing as a resource carried forward from year-to-year. This amount must therefore be added to, or subtracted from, BPA's current year Treasury borrowing authority amount, making this number a combination of capital program financing needs and the annual use, or creation of deferred borrowing. The FY 1989 Energy and Water Development Appropriations Act (P.L. 100-371 of 7/19/88) clarified that BPA has authority to incur obligations in excess of Treasury borrowing authority and cash in the BPA Fund. The two amounts which comprise the net amount of line 67.10 above as follows:

#### Treasury Borrowing Authority:

to finance capital obligations to finance other obligations

#### Adjusted Permanent Authority to Borrow

#### FISCAL YEAR

2007	2008	2009	2010	2011	2012	2013
314	510	560	552	623	682	589
1	(76)	(272)	(106)	(199)	(396)	(352)
315	434	288	446	424	286	237

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 SF-133. Estimated Net Outlays could change 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 NW Power Act are also assumed

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

(in millions of dollars)

BP-4A Fiscal Year

DI +//(	1 isodi i cai								
		2	007			20	800		
		Net				Net			
		Capital				Capital			
	Net	Obs	Net	Bonds	Net	Obs	Net	Bonds	
	Capital	Subject	Capital	Out-	Capital	Subject	Capital	Out-	
	Obs	to BA	Expend.	Standing	Obs	to BA	Expend.	Standing	
Start-of-Year: Total	1,624	1,624	2,717	2,440	1,430	1,430	2,523	2,240	
Plus: Annual Increase									
CumAnnual Treasury Borrowing	312	312	312		510	510	510		
Treasury Borrowing (Cash)				306				510	
Less:									
BPA Bond Amortization	506	506	506	506	241	241	241	241	
Net Increase/(Decrease):	(194)	(194)	(194)	(200)	269	269	269	269	
CumEnd-of-Year: Total	1,430	1,430	2,523	2,240	1,699	1,699	2,792	2,509	
Total Remaining Treasury Borrowing									
Amount				2,210				1,941	
Total Legislated									
Treasury Borrowing Amount				4,450				4,450	

# 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 also reflect BPA's Capital Planning Review Process and 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. Capital investment levels in this FY 2009 budget have been updated to reflect executive management decisions from BPA's Capital Allocation Board.

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

BPA reserve financing of \$15 million annually is assumed as part of TS capital-PFIA for FYs 2008-2009.

The cumulative amount of actual advance amortization payments as of the end of FY 2007 is \$2,091 million.

(in millions of dollars)

BP-4B Fiscal Year

		20	09			20	10			
		Net				Net				
		Capital				Capital				
	Net	Obs	Net	Bonds	Net	Obs	Net	Bonds		
	Capital	Subject	Capital	Out-	Capital	Subject	Capital	Out-		
						· .				
	Obs	to BA	Expend.	Standing	Obs	to BA	Expend.	Standing		
Start-of-Year: Total	1,699	1,699	2,792	2,509	2,000	2,000	3,093	2,810		
Plus: Annual Increase										
CumAnnual Treasury Borrowing	560	560	560		552	552	552			
Treasury Borrowing (Cash)				560				552		
Less:										
Total BPA Bond Amortization	259	259	259	259	345	345	345	345		
Net Increase/(Decrease):										
Total	301	301	301	301	207	207	207	207		
CumEnd-of-Year: Total	2,000	2,000	3,093	2,810	2,207	2,207	3,300	3,017		
<b>Total Remaining Treasury Borrowing</b>										
Amount				<u>1,640</u>				<u>1,433</u>		
Total Legislated										
Treasury Borrowing Amount				4,450				4,450		

# 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 also reflect BPA's Capital Planning Review Process and 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. Capital investment levels in this FY 2009 budget have been updated to reflect executive management decisions from BPA's Capital Allocation Board.

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

BPA reserve financing of \$15 million annually is assumed as part of TS capital-PFIA for FYs 2008-2009.

(in millions of dollars)

BP-4C Fiscal Year

···								
		20	11			20	12	
		Net				Net		
		Capital				Capital		
	Net	Obs	Net	Bonds	Net	Obs	Net	Bonds
	Capital	Subject	Capital	Out-	Capital	Subject	Capital	Out-
	Obs	to BA	Expend.	Standing	Obs	to BA	Expend.	Standing
Start-of-Year: Total	2,207	2,207	3,300	3,017	2,714	2,714	3,807	3,524
Plus: Annual Increase								
CumAnnual Treasury Borrowing	622	622	622		681	681	681	
Treasury Borrowing (Cash)				622				681
Less:								
Total BPA Bond Amortization	115	115	115	115	40	40	40	40
Net Increase/(Decrease):								
Total	507	507	507	507	641	641	641	641
CumEnd-of-Year: Total	2,714	2,714	3,807	3,524	3,355	3,355	4,448	4,165
<b>Total Remaining Treasury Borrowing</b>								
Amount				<u>926</u>				<u>285</u>
Total Legislated								
Treasury Borrowing Amount				4,450				4,450

# 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 also reflect BPA's Capital Planning Review Process and 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. Capital investment levels in this FY 2009 budget have been updated to reflect executive management decisions from BPA's Capital Allocation Board.

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

BPA reserve financing of \$15 million annually is assumed as part of TS capital-PFIA for FYs 2008-2009.

(in millions of dollars)

BP-4D	Fiscal Year							
		2	013					
		Net						
		Capital						
	Net	Obs	Net	Bonds				
	Capital	Subject	Capital	Out-				
	Obs	to BA	Expend.	Standing				
Start-of-Year: Total	3,355	3,355	4,448	4,165				
Plus: Annual Increase								
CumAnnual Treasury Borrowing	588	588	588					
Treasury Borrowing (Cash)				588				
Less:								
Total BPA Bond Amortization	155	155	155	155				
Net Increase/(Decrease):								
Total	433	433	433	433				
CumEnd-of-Year: Total	3,788	3,788	4,881	4,598				
Total Remaining Treasury Borrowing								
Amount				<u>(148)</u>				
Total Legislated								
Treasury Borrowing Amount				4,450				

# 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 also reflect BPA's Capital Planning Review Process and 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. Capital investment levels in this FY 2009 budget have been updated to reflect executive management decisions from BPA's Capital Allocation Board.

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

BPA reserve financing of \$15 million annually is assumed as part of TS capital-PFIA for FYs 2008-2009.

# BONNEVILLE POWER ADMINISTRATION POTENTIAL THIRD PARTY FINANCING TRANSPARENCY

Fiscal Year

(in millions of dollars)

# BP-5

						•		
Transmission Services - Capital		2007	2008	2009	2010	2011	2012	2013
Main Grid		5	32	70	87	204	260	163
Area & Customer Services	ants	3	39	32	7	12	7	28
Upgrades & Additions	Requirements	51	71	65	60	70	70	40
System Replacements	quir	82	101	126	124	84	83	89
Projects Funded in Advance	Re	107	72	125	66	79	72	73
Total, Transmission Services - Capital		248	315	418	344	449	492	393
Federal and Non-Federal Funding Projects Funded in Advance	S	107	72	125	66	79	72	73
Treasury Borrowing Authority	Sources	141	243					320
Scenario		-						
Third Party Financing	Scenario	5	110	157	122	194	240	174
Alternate Treasury Borrowing Authority	Scer	136	133	136	156	176	180	146

#### The accompanying notes are an integral part of this table.

The table above shows both the potential use of Treasury borrowing authority for transmission capital projects based on this FY 2009 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 2009 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.

#### TREASURY PAYMENTS

(in millions of dollars)

# FISCAL YEAR

		2007	2008	2009	2010	2011	2012	2013
Α.	INTEREST ON BONDS & APPROPRIATIONS							
	Bonneville Bond Interest							
1	Bonneville Bond Interest (net)	108	67	89	113	130	167	209
2	AFUDC 1/	21	17	18	19	22	24	20
	Appropriations Interest							
3	Bonneville	45	41	39	38	33	25	13
4	Corps of Engineers 2/	162	164	158	161	169	160	162
5	Lower Snake River	16	16	16	16	16	16	16
6	Bureau of Reclamation 3/	43	43	43	43	43	43	43
7	Total Bond and Approp. Interest	395	348	363	390	413	435	463
В.	ASSOCIATED PROJECT COST							
8	Bureau of Reclamation Irrigation Assistance	1	0	3	7	0	31	29
9	Bureau of Rec. O & M 4/	2	0	0	0	0	0	0
10	Corps of Eng. O & M 4/	3	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	6	0	3	7	0	31	29
C.	CAPITAL TRANSFERS							
	Amortization							
13	Bonneville Bonds	506	241	259	345	115	40	155
14	Bureau of Reclamation Appropriations	0	0	0	0	1	0	0
15	Corps of Engineers Appropriations	58	136	10	3	192	96	0
16	Lower Snake River Comp. Plan	0	0	0	0	0	0	0
17	Bonneville Appropriations	59	31	7	76	109	157	92
	Total Capital Transfers	623	408	276	424	417	293	247
D.	OTHER PAYMENTS							
18	Unfunded CSRS Liability 5/	21	18	31	31	31	32	32
21	TOTAL TREASURY PAYMENTS 16/	1,045	774	673	852	861	791	771

Costs for power O&M is funded directly by Bonneville as follows (in millions)

FISCAL YEAR	2007	2008	2009	2010	2011	2012	2013
Bureau of Reclamation	67	75	78	80	81	84	84
Corps of Engineers	158	166	170	177	182	187	187
Subtotal Bureau and Corps	225	241	248	257	263	271	271
Lower Snake River Comp. Plan	19	20	20	21	22	22	22
Total	244	261	268	278	285	293	293

See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

BPA Amortization/Capital Transfers for FY 2007 includes \$5 million payment to Treasury for reimbursement of judgment funds, consistent with the Enron settlement agreement in 2003.

The accompanying notes are an integral part of this table.

This interest cost is capitalized and included in BPA's Transmission System Development, System Replacments, and Associated Projects Capital programs. AFUDC is financed through the sale of bonds.

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.

Includes payments paid by Reclamation to Treasury on behalf of Bonneville.

Does not include Treasury bond premiums on refinanced Treasury bonds.

# **OBJECT CLASSIFICATION STATEMENT**

(in millions of dollars) 1/

IDENTIFICATION CODE: 89-4045-0-3-271 DIRECT OBLIGATIONS

# **ESTIMATES**

		2007	2008	2009
11.1	Full-time permanent	167	191	205
11.3	Other than full-time permanent	42	42	45
11.5	Other personnel compensation	19	12	13
11.9	Total personnel compensation	228	245	263
12.1	Civilian personnel benefits	57	60	64
13.0	Benefits for former personnel	21	30	32
21.0	Travel and transportation of persons	16	13	14
22.0	Transportation of things	4	1	1
23.1	Rental payments to GSA	1		
23.2	Rents, other	48	26	28
23.3	Communication, utilities & misc. charges	8	7	8
25.1	Consulting Services	273	247	266
25.2	Other Services	1,300	1,731	1,865
25.3	Purchases from Government Accounts			
25.4	O&M of Facilities			
25.5	R & D Contracts	11	14	13
26.0	Supplies and materials	124	64	69
31.0	Equipment			
32.0	Lands and structures	31	17	18
41.0	Grants, subsidies, contributions	60	7	7
43.0	Interest and dividends	586	839	902
99.0	Total obligations	2,768	3,301	3,550
55.0	i otai obiigations	2,700	3,301	3,330

Includes object classifications developed from updated GL accounting codes consistent with implementation of BPA's business enterprise system of accounts. The object classifications are subject to change as BPA's GL accounting codes continue to evolve to more effectively meet management information needs, and meet FERC and Federal reporting requirements.

# **Estimate of Proprietary Receipts**

(in millions of dollars)

#### Fiscal Year

	2007	2008	2009	2010	2011	2012	2013
Reclamation Interest	43	43	43	43	43	43	43
Reclamation Amortization	0	0	0	0	1	0	0
Reclamation O&M	1	0	0	0	0	0	0
Reclamation Irrig. Assist.	1	0	3	7	0	31	29
Revenues Collected by Reclamation	-8	-7	-7	-7	-7	-7	-7
Distributed in Treasury Account (credit)							
Colville Settlement (credit)	-5	-5	-5	-5	-5	-5	-5
Total 1/ Reclamation Fund	32	31	34	38	32	62	60
Corps O&M	3						
CSRS	21	18	31	31	31	32	31
Total 2/ Repayments on misc.costs	24	18	31	31	31	32	31

<sup>1/</sup> 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

<sup>2/</sup> 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)

	2007	2008	2009	2010	2011	2012	2013
Bureau of Reclamation	67	75	78	80	81	84	84
Corps of Engineers	158	166	170	177	182	187	187
Lower Snake River Comp. Plan	19	20	20	21	22	22	22

See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

#### BONNEVILLE POWER ADMINISTRATION

# FISH AND WILDLIFE COSTS $^{1/}$

COST ELEMENT	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
CAPITAL INVESTMENTS 2										
BPA FISH AND WILDLIFE	22.0	14.7	13.9	16.5	6.1	11.6	8.5	12.2	36.3	36.2
ASSOCIATED PROJECTS (FEDERAL HYDRO)	-	14.1	47.0	6.2	8.8	68.4	75.9	53.8	360.0	60.4
BPA DIRECT FISH AND WILDLIFE PROGRAM	104.9	108.2	108.2	101.1	137.1	140.7	137.9	135.8	137.9	139.5
SUPPLEMENTAL MITIGATION PROGRAM EXPENSES 3/				2.9	7.1	6.5	7.8	7.5	0.0	0.0
REIMBURSABLE/DIRECT-FUNDED PROJECTS 4/										
O & M LOWER SNAKE RIVER HATCHERIES	11.4	13.0	12.4	12.7	14.9	15.1	17.3	17.2	20.1	19.3
O & M CORPS OF ENGINEERS	18.5	19.9	19.7	23.1	28.2	30.3	32.3	32.5	31.8	32.9
O & M BUREAU OF RECLAMATION	2.7	2.6	1.8	3.0	3.8	3.1	3.9	3.9	4.5	3.9
OTHER (NW POWER AND CONSERVATION COUNCIL)	3.7	3.4	3.7	3.7	4.0	4.0	3.7	4.3	4.3	4.2
SUBTOTAL (REIMB/DIRECT-FUNDED)	36.4	38.9	37.6	42.5	50.9	52.6	57.2	57.9	60.7	60.3
TOTAL OPERATING EXPENSES	141.3	147.1	145.8	146.5	195.1	199.8	202.9	193.7	198.6	199.8
PROGRAM RELATED FIXED EXPENSES 5/										
INTEREST EXPENSE	48.9	49.4	48.4	49.1	48.5	49.9	53.3	56.4	53.4	76.0
AMORTIZATION EXPENSE	14.1	15.3	16.1	16.8	17.2	17.4	17.5	17.4	17.4	22.9
DEPRECIATION EXPENSE	11.1	11.4	11.8	12.3	12.5	13.2	14.6	15.9	16.7	14.0
TOTAL FIXED EXPENSES	74.1	76.1	76.3	78.2	78.2	80.5	85.4	89.7	87.5	112.9
GRAND TOTAL PROGRAM EXPENSES	215.4	223.2	222.1	224.7	273.3	280.3	288.3	283.4	286.1	312.7
FOREGONE REVENUES AND POWER PURCHASES										
FOREGONE REVENUES	116.5	197.8	193.1	115.9	12.6	79.2	21.7	182.1	397.4	282.6
BPA POWER PURCH. FOR FISH ENHANCEMENT	5.4	47.6	64.8	1,389.6	147.8	171.1	191.0	110.8	168.2	120.7
TOTAL FOREGONE REVENUES AND POWER PURCHASES	121.9	245.4	257.9	1,505.5	160.4	250.3	212.7	292.9	565.6	403.3
TOTAL PROGRAM EXPENSES, FOREGONE REVENUES, & POWER PURCHASES	337.3	468.6	480.0	1,730.2	433.7	530.6	501.0	576.3	851.7	716.0
CREDITS										
4(h)(10)(C) credits earned	(35.7)	(46.0)	(50.4)	(336.6)	(66.4)	(73.6)	(77.0)	(57.7)	(76.4)	(66.1)
FISH COST CONTINGENCY FUND "	-	-	-	(246.5)	-	(78.7)	-	-	-	-
TOTAL CREDITS	(35.7)	(46.0)	(50.4)	(583.1)	(66.4)	(152.3)	(77.0)	(57.7)	(76.4)	(66.1)

<sup>1/</sup> For purposes of this presentation, this financial information has been made publicly available by BPA in February 2008 and is consistent with the financial system of record used in preparation of the audited financial statements for the respective period reported.

<sup>2/</sup> Capital Investments include both BPA's direct Fish and Wildlife Program capital investments, funded by BPA's Treasury borrowing, and "Associated Projects", which include capital investments at the Corps and Reclamation projects, funded by appropriations and repaid by BPA. 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.

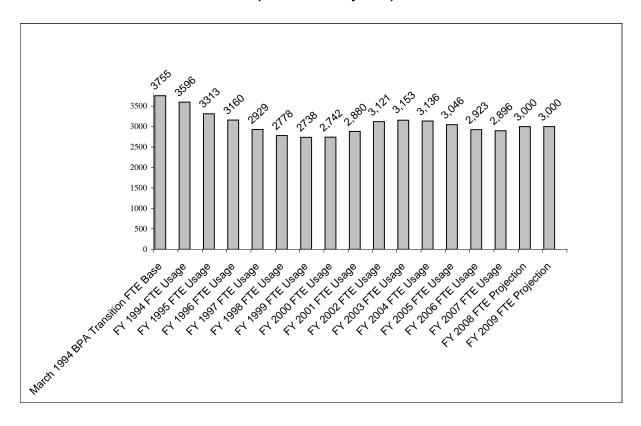
<sup>3/</sup> Supplemental Mitigation Program Expenses includes High Priority and Action Plan Expenses and other supplemental programs.

<sup>4/</sup> 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.

<sup>5/</sup> Fixed Expenses include depreciation and interest on investment on the Corps projects, and amortization and interest on the investments associated with BPA's direct Fish and Wildlife Program.

<sup>6/</sup> The Fish Contingency Fund was exhausted in 2003

# BONNEVILLE FTE (revised January 2008)



BPA has utilized the following number of Voluntary Separation Incentives (VSIs): 190 in FY 1994, 240 in FY 1995, 137 in FY 1996, 135 in FY 1997, 121 in FY 1998, 81 in FY 1999, 43 in FY 2000, 12 in FY 2001, 0 in FY 2002, 80 in FY 2003, 0 ir FY 2004, 98 in 2005, 35 in FY 2006, and 37 in FY 2007.

BPA continues to assume various authorities, including the use of voluntary separation incentives (VSI) and voluntary early retirement authority (VERA) to help achieve BPA planning levels.

Actual FTE data is consistent with DOE personnel reports.

FTE outyear data are estimates and may change.