

# **Bonneville Power Administration**

## **Proposed Appropriations Language**

*Expenditures from the Bonneville Power Administration Fund, established pursuant to Public Law 93-454, are approved for official reception and representation expenses in an amount not to exceed \$1,500.*

*During fiscal year 2004, no new direct loan obligations may be made.*

## **Explanation of Changes**

The proposed appropriations language restricts new direct loans in FY 2004 as in FY 2003.



# **Bonneville Power Administration**

## **Executive Budget Summary**

### **Mission**

Bonneville Power Administration (Bonneville) is the Department of Energy's (DOE) electric Power Marketing Administration (PMA) for the Federal Columbia River Power System (FCRPS). Bonneville's mission is to meet its public responsibilities through commercially successful businesses. Bonneville's business strategies to fulfill its mission can be summarized as: selling electric energy at cost and below market; managing costs to be competitive in providing services to customers; strengthening Bonneville's financial position; and reorienting the organization to be responsive, flexible and competitive.

Bonneville's success in the marketplace supports the achievement of its vital responsibilities for fish and wildlife, energy conservation, renewable resources, and low-cost power and transmission for the people of the Pacific Northwest. Success is achieved by Bonneville satisfying its customers and enhancing the economic and environmental health of the region. Bonneville values the individual diversity, entrepreneurial spirit, personal responsibility, and public service of its workers.

Bonneville provides electric power (about forty-five percent 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. Army Corps of Engineers (Corps) and the U.S. Department of Interior, Bureau of Reclamation (Bureau), and also acquires non-Federal power to meet the needs of its customer utilities.

Congress created Bonneville in 1937 as part of the Bonneville Project Act, providing 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 revolving fund, allowing Bonneville to use its revenues from electric ratepayers to directly fund all programs and to sell bonds to the U.S. 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 and develop renewable energy resources, and protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries. In support of these expanded 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.

Bonneville's program is mandatory and nondiscretionary. It receives no annual appropriations from Congress. Bonneville funds the expense portions of its budget and repays the Federal investment in the FCRPS with revenues from electric rates. Bonneville is authorized to sell bonds to the Treasury up to a cumulative outstanding total of \$3.75 billion (permanent, indefinite borrowing authority). Through

FY 2002, Bonneville has returned approximately \$18.3 billion to the Treasury for payment of FCRPS O&M (about \$2.8 billion), interest (about \$10.1 billion), and amortization (about \$5.4 billion) of appropriations and bonds. Bonneville made its full FY 2002 cash payment of \$1.056 billion, including \$266 million in accelerated amortization. Fish Credits for FY 2002 were \$38.3 million. For FY 2003, Bonneville plans to pay the Treasury \$788 million, of which \$312 million is to repay investment principal, \$440 million is for interest, and \$36 million is for other payments including \$35 million for Pension and Post-retirement Benefits. The FY 2004 Treasury payment is currently estimated at \$717 million.

Bonneville's FY 2004 budget has been prepared on the basis of its major areas of activity, Power and Transmission. This structure supports Bonneville's ability to become more competitive in the rapid restructuring of the deregulated wholesale electric energy market. This industry deregulation stems largely from the 1992 Energy Policy Act and ensuing Federal Energy Regulatory Commission (FERC) orders (FERC Orders 888 and 889) requiring separation of utility power and transmission functions. As a Federal agency, Bonneville is not subject to FERC jurisdiction, but chooses to comply with the FERC orders because it views compliance as essential to successfully compete in the current and future electric power market. Further, Bonneville supports DOE's October 1995 "Power Marketing Administration Open Access Policy." This budget reflects Bonneville's functional separation of power and transmission and its accounting and budgetary implementation of major activities.

## **Goals and Objectives**

Bonneville has adopted the following strategic business objectives for FY 2003: 1. Achieve high and continually improving customer satisfaction; 2. Increase the value of our business and share the expanded benefits; 3. Be a low-cost provider of power and transmission services in the region; 4. Achieve and maintain financial integrity; 5. Keep the system safe and reliable; 6. Invest in results to enhance the region's natural environment; 7. Transform Bonneville into a diverse, employee-centered, high-performing, business-oriented organization.

## **Departmental Goal**

Increase global energy security, maintain energy affordability, and reduce adverse environmental impacts associated with energy production, distribution, and use by developing and promoting advanced energy technologies, policies, and practices that efficiently increase domestic energy supply, diversity, productivity, and reliability.

## **Program Assessment**

The Program Assessment Rating Tool will provide valuable information and Bonneville will work with DOE and OMB to develop and refine recommendations on measures and targets used to indicate program performance. Bonneville will continue to improve its long-term targets and measures of performance. The annual targets as provided in this budget submission are measurable and reflect performance standards used in the electric utility industry to evaluate performance. Bonneville will

continue to achieve its mandate under the law in regard to marketing of Federal power, customer preference, cost recovery, widespread use of the power, and disposition of revenues.

## **Strategic Objective**

The Departmental goal is supported by the following strategic objective and Program Strategic Performance Goal of the Power Marketing Administrations:

Ensure Federal hydropower is marketed and delivered while passing the North American Electric Reliability Council's Control Compliance Ratings, meeting planned repayment targets, and achieving a recordable accident frequency rate at or below our safety performance standard.

## **Strategy**

Bonneville's FY 2004 budget incorporates the budget decisions that Bonneville has made to remain competitive in the electric utility industry in the Pacific Northwest. The last two years have been particularly challenging with Bonneville's financial reserves dropping significantly which left Bonneville's Power Business Line with a forecasted financial gap between revenues and expenses estimated at \$1.2 billion over the remaining four years of the current power rate period. Bonneville's first priority now is to restore its financial balance. Through implementation of a variety of financial tools, Bonneville is working to assure full recovery of its costs by the end of the power rate period in FY 2006. Bonneville has already identified about \$350 million in potential expense savings, deferrals and other actions. In addition, Bonneville is no longer assuming a power rate decrease in FYs 2004-2006, which further decreases the gap by \$330 million. More cost reductions that potentially could contribute an additional \$500 million toward closing the Power Business Line gap are being pursued, as well as the possible use of other tools, such as power rate adjustment clauses, debt optimization strategies, and cash management strategies.

The following table provides a summary of accrued expenditures.

## Funding Summary (accrued expenditures in thousands of dollars)

	FY 2002	FY 2003	FY 2004
<b>CAPITAL INVESTMENTS</b>			
Power Business Line	\$ 108,197	\$211,821	\$168,556
Transmission Business Line	\$259,400	\$330,240	\$329,568
Capital Equipment & Bond Premium	\$ 21,988	\$ 43,958	\$ 28,800
<b>Total Capital Investments \1</b>	<b>\$389,585</b>	<b>\$586,019</b>	<b>\$526,924</b>
Accrued expenditures will require budget obligations of	\$389,585	\$586,019	\$526,924
<b>Operating Expenses</b>	<b>\$3,195,225</b>	<b>\$3,185,349</b>	<b>\$3,428,588</b>
Projects Funded in Advance	\$34,409	\$96,617	\$133,426
<b>CAPITAL TRANSFERS (cash)</b>	<b>\$505,000</b>	<b>\$312,000</b>	<b>\$222,000</b>
<b>BPA NET OUTLAYS</b>	<b>\$401,000</b>	<b>-\$29,000</b>	<b>-\$11,000</b>
<b>BPA STAFFING (FTE)</b>	<b>3,121</b>	<b>3,260</b>	<b>3,252</b>

### Notes:

These budget estimates are subject to continual change due to changing economic and institutional conditions in the electric utility industry in the Pacific Northwest.

Net Outlay estimates are based on forecasted market conditions, current cost savings to date, and anticipated use of rate adjustment and financial management tools. Net Outlays will change throughout the rate period as BPA experiences actual market and hydro conditions and responds with management actions.

Revenues, included in the Net Outlay formulation, are calculated consistent with rate period management goals and assume a number of rate, cost and cash adjustments. Assumed adjustments include the use of a combination of tools that include CRAC adjustments, cost re-estimates, net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Adjustments for depreciation, 4(h)(10)(C) and Fish Cost Contingency Fund credits are also assumed.



Date 1/23/03

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 Stephen J. Wright  
 Administrator and Chief Executive Officer

# **Bonneville Power Administration**

## **Program Mission**

### **Overview**

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 then 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 serves a 300,000 square mile area including Oregon, Washington, Idaho, Western Montana, and parts of Northern California, Nevada, Utah and Wyoming.

The Transmission System Act placed Bonneville under the provisions of the Government Corporation Control Act (31 U.S.C. 9101-9110) and allows Bonneville to use its revenue from electric ratepayers to fund all programs directly through the Bonneville revolving fund, and to sell bonds to the Treasury to finance the region's high voltage transmission requirements. The Northwest Power Act expanded Bonneville's utility obligations and responsibilities to meet requesting utility loads, encourage conservation and develop renewable resources, and to protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries. In support of these responsibilities, Bonneville's 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. This Act also required regional energy plans and programs and created the Northwest Power and Conservation Council (Planning Council).

Bonneville is "self-financed" by the ratepayers of the Pacific Northwest and receives no annual appropriations from Congress. Under the Transmission System Act, Bonneville funds the expense portion of its budget and repays the Federal investment with revenues from electric 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, indefinite statutory borrowing authority authorizes the agency to sell bonds to the Treasury up to a cumulative outstanding total of \$3.75 billion. Through FY 2002, Bonneville has returned approximately \$18.3 billion to the Treasury in interest, amortization, and repayment of Federal power generation, operation, maintenance, and construction costs. Bonneville made its full FY 2002 cash payment of \$1,056 million, including \$266 million in accelerated amortization. Bonneville's projected total Treasury payments for FY 2003 and FY 2004 are \$788 million and \$717 million, respectively.

Treasury payment outyear estimates for interest levels are based on ratecase estimates updated for revised capital investment plans. Amortization is based on ratecase estimates when available and planned amortization for future ratecase periods. These estimates may change due to revised capital investment plans, actual Treasury borrowing, and accelerated amortization payments. In recent years, BPA has made amortization payments in excess of those scheduled in its FERC-approved rate filings resulting in a balance of advance repayment. The cumulative amount of advance amortization payments as of the end of FY 2002 is \$472.5 million.

Starting in FY 1997, Bonneville began direct funding the Bureau's Pacific Northwest power O&M costs and in FY 1999 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. These costs, previously funded through appropriations, are now being paid through borrowing from the U.S. Treasury without additional BPA borrowing authority.

This FY 2004 budget proposes Bonneville accrued expenditures of \$3,428 million for operating expenses, \$133 million for Projects Funded in Advance, \$528 million for capital investments, and \$222 million for capital transfers in FY 2004. The budget has been prepared on the basis of Bonneville's major areas of activity, Power and Transmission. This structure supports Bonneville's competitiveness in the rapidly restructuring, deregulated wholesale electric energy market. This industry deregulation stems largely from the 1992 Energy Policy Act and ensuing FERC Orders 888 and 889 requiring separation of utilities power and transmission functions. As a Federal agency, Bonneville is not subject to FERC's jurisdiction, but chooses to comply with the FERC orders because it views compliance as essential to successfully compete in the current and future electric power market. Further, Bonneville supports DOE's October 1995 "Power Marketing Administration Open Access Policy."

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.

## **Program Mission**

The strategic mission of Bonneville is to meet its public responsibilities through commercially successful businesses.

Bonneville provides electric power, transmission, and energy services in increasingly competitive markets. Bonneville's success in the marketplace supports the achievement of its vital responsibilities for fish and wildlife, energy conservation, renewable resources, and low-cost power for the people of the Pacific Northwest. Bonneville succeeds by satisfying its customers and enhancing the economic and environmental health of the region.

Bonneville will remain a low-cost producer and a creative and flexible marketer in the region. Its success will help ensure economically strong Pacific Northwest communities.



Bonneville values the individual diversity, entrepreneurial spirit, personal responsibility, and public service of its workers. Bonneville welcomes new ideas and is accessible to the citizens of the Pacific Northwest.

## Program Strategic Performance Goal

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 a recordable accident frequency rate at or below our safety performance standard.

### Performance Indicators

- Transmission System Reliability Performance
- Transmission System Availability Performance
- Repayment of Federal Power Investment
- Recordable Injury Frequency Rate

### Annual Performance Results and Targets

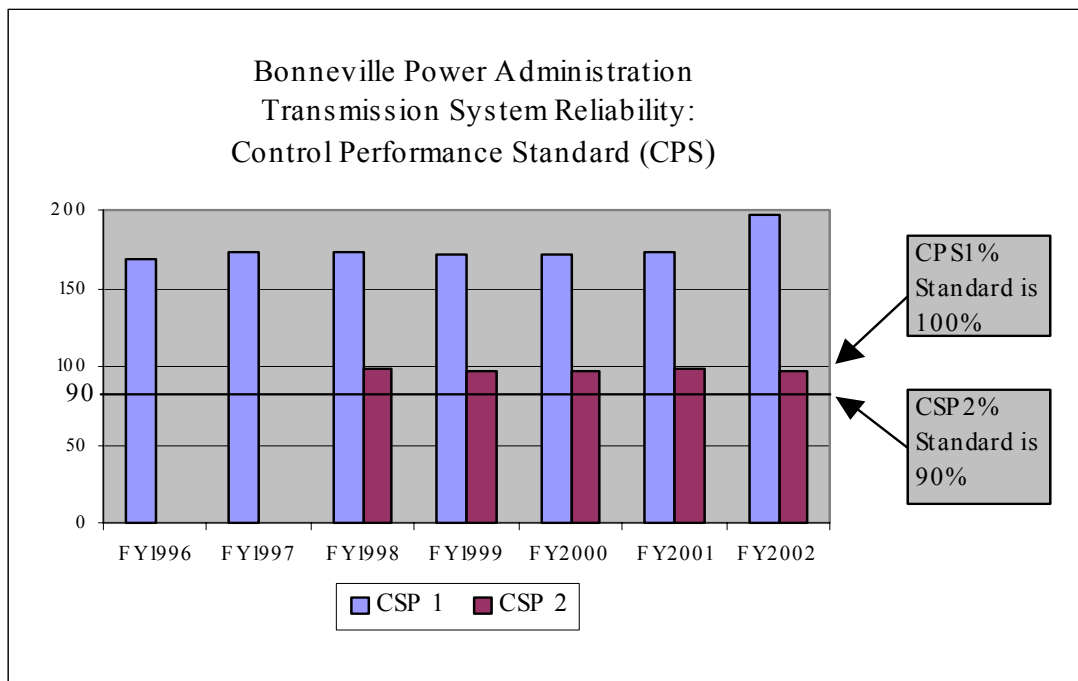
FY 2002 Results	FY 2003 Targets	FY 2004 Targets
<p><b>Transmission System Reliability Performance:</b> MET GOAL (ER2-5)</p>	<p>Receive monthly control compliance ratings that meet or exceed the Control Performance Standard (CPS) 1 and 2 established by the NERC. (ER9-1)</p>	<p>Receive monthly control compliance ratings that meet or exceed the Control Performance Standard (CPS) 1 and 2 established by the NERC. (ER9-1)</p> <p><b>Transmission System Availability Performance:</b> The proportion of time that BPA’s most important transmission lines (i.e., of Importance Ranks 1 and 2) are available for service, reflecting the effects of planned outages only, exceeds BPA’s lower control limit, as determined by historical performance. (ER9-1)</p>
<p><b>Repayment of Federal Power Investment:</b> MET GOAL (ER2-5)</p>	<p>Meet planned annual repayment of principal on Federal power investments. (ER9-2)</p>	<p>Meet planned annual repayment of principal on Federal power investments. (ER9-1)</p>

FY 2002 Results	FY 2003 Targets	FY 2004 Targets
<b>Recordable Injury Frequency Rate: MET GOAL</b> (ER2-5)	Achieve a safety performance of a 3.3 recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor and Statistics' industry rate, whichever is lower. (ER9-3)	Achieve a recordable accident frequency rate for recordable injuries per 200,000 hours worked of not greater than 3.3, or the Bureau of Labor Statistics' industry rate, whichever is lower. (ER9-1)

**Transmission System Reliability Performance Indicator**

This indicator defines a standard of minimum monthly control performance as established by the North American Electric Reliability Council (NERC). Each control area is to have the best operation above the minimum monthly control compliance ratings that can be achieved within the bounds of reasonable economic and physical limitations. Each control area shall monitor its control performance on a continuous basis against two standards, CPS1 and CPS2. These two standards have very defined technical requirements.

In FY 2002, Bonneville exceeded the minimum compliance level required by NERC with a CPS1 of 197.5% and a CPS2 of 96.8%.

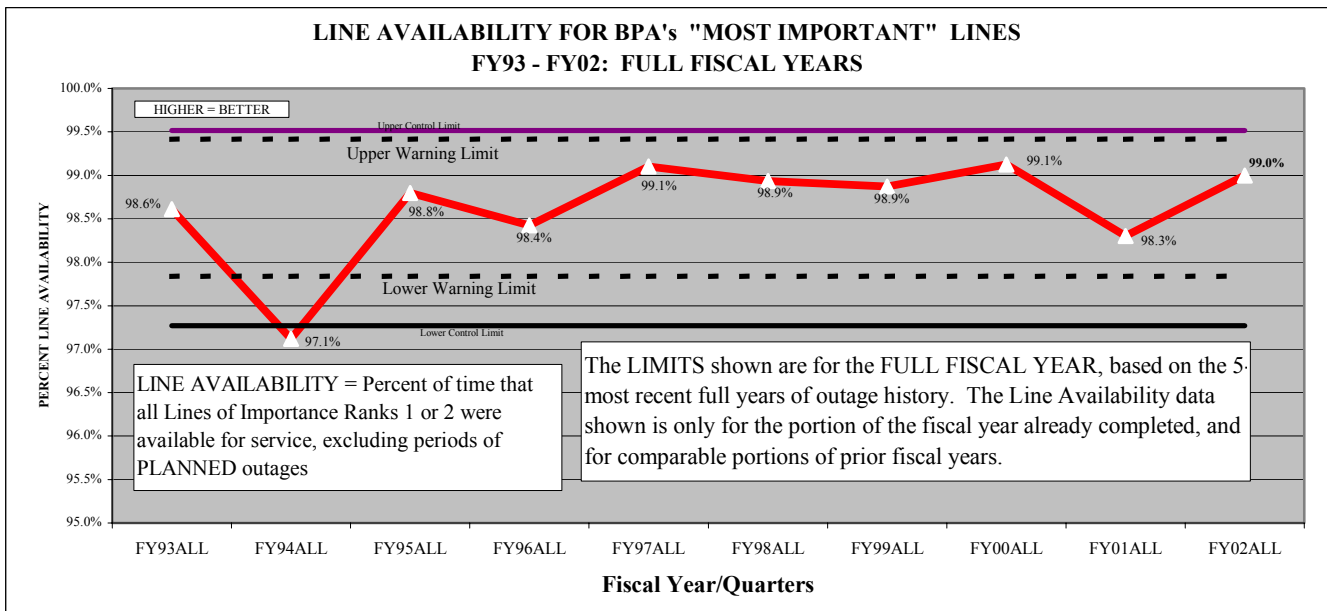


## Transmission System Availability Performance Indicator

In response to the President's management initiatives and emphasis of performance measures, BPA has added a fourth measure to the agency's annual performance results and targets. This new FY 2004 indicator helps ensure that high availability is maintained on the system's "most important" lines throughout the year. Bonneville management uses indicator results to schedule planned outages to more efficiently utilize line availability to meet load requirements. This indicator supports Bonneville's fifth Strategic Business Objective to keep the system safe, reliable and available.

Bonneville "most important" lines are defined as those with a Line Importance Rank of 1 or 2. Control-chart techniques are used to determine the "natural range" of variability in line availability for these lines. Actual availability is then compared with warning limits and control limits derived from that historical performance. For the purpose of this measure, Availability is reduced only by Planned outages, so this measure assesses the rate at which planned outages reduce availability for the most important lines on the system.

In FY 2002 Bonneville exceeded the annual control limit with a line availability of 99.0%.

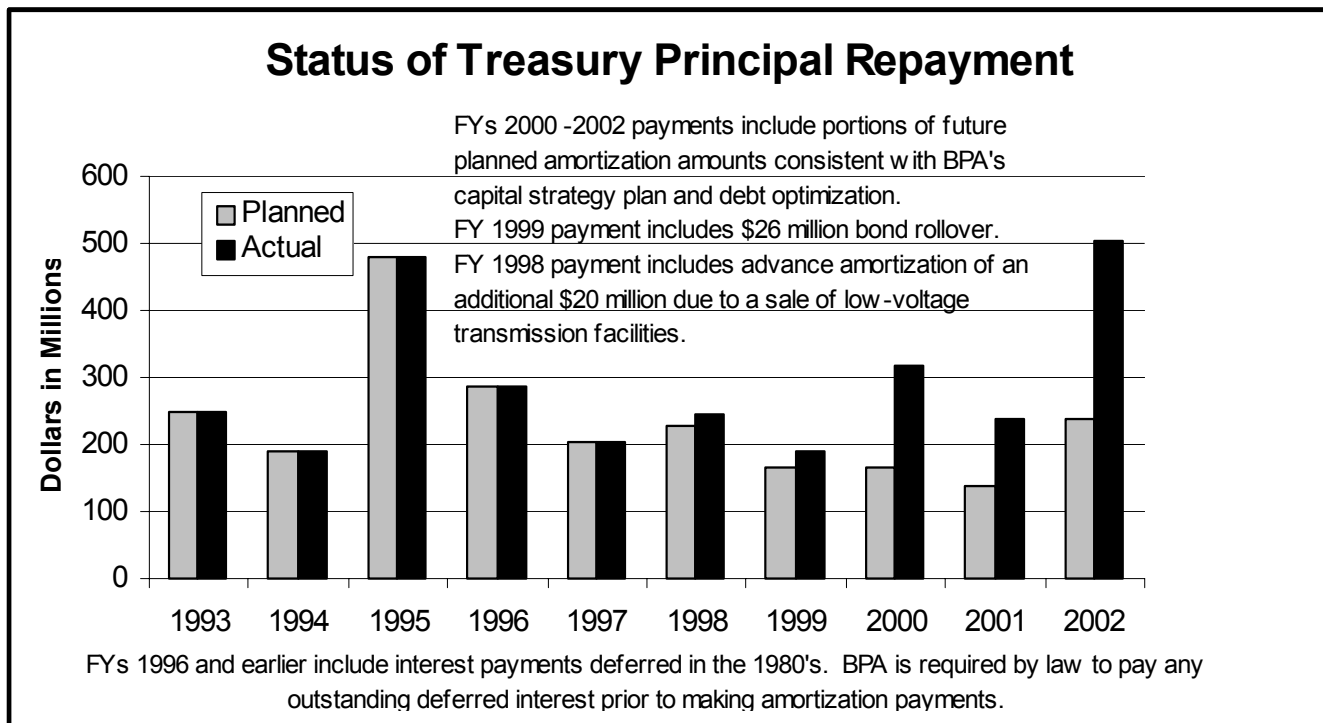


## Repayment of Federal Power Investment Performance Indicator

This indicator measures the variance of actual from planned principal payments to the U.S. Treasury. The indicator will be zero if the actual payment is equal to the planned payment.

Treasury payment outyear estimates for planned amortization are based on ratecase estimates. These estimates may change due to revised capital investment plans, actual Treasury borrowing, and accelerated amortization payments. 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 following chart displays principal repayment only.



### Recordable Injury Frequency Rate Performance Indicator

This indicator measures the recordable accident frequency rate by first multiplying the number of recordable injuries by 200,000. This number is then divided by the total hours worked. The PMAs measure their performance against a Bureau of Labor and Statistics standard industry case rate.

The national average recordable injury frequency rate is based on Bureau of Labor and Statistics. The Bureau of Labor's data is collected from organizations representing the private sector in the generation, transmission, and distribution of electric energy. The Bureau of Labor and Statistics includes a 2001 national average recordable injury frequency rate of 5.0 injuries per 200,000 hours worked. Bonneville's recordable injury frequency rate for FY 2002 was 1.7 injuries.

### Significant Accomplishments and Program Shifts

- Bonneville's FY 2004 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 situation. BPA is striving to enhance its competitive, cost-effective delivery of business-line 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.

- The last two years have been particularly challenging with BPA drawing heavily on its financial reserves. BPA had a forecasted financial gap between power revenues and power expenses estimated at \$1.2 billion over the remainder of the current power rate period absent any reduction in costs or increase in rates. BPA's first priority now is to restore its financial balance. BPA has defined restoration of financial health to include recovering all actual and projected power rate period losses. Through implementation of a variety of financial tools, BPA is working to assure full recovery of its costs by the end of the rate period in FY 2006. BPA has already identified about \$350 million in potential expense savings, deferrals and other actions that it is taking. In addition, BPA is no longer assuming a power rate decrease in FYs 2004-2006, which further decreases the gap by \$330 million.
- Further cost reductions that potentially could contribute an additional \$500 million toward closing the gap are being pursued as well. Many of these actions, such as realizing fish and wildlife efficiencies, will require cooperation from other agencies. Savings from fish and wildlife mitigation measures are not currently included in the \$350 million in cost savings identified above. As an example of recent actions, the BPA Administrator has sent a letter to the Northwest Planning Council seeking more efficient management of contract accruals to reduce the Integrated Program expenses for fish and wildlife mitigation to no more than \$139 million annually over the rate period while still meeting the requirements of the 2000 Biological Opinions and preserving previous important investments of the fish and wildlife program. In addition to seeking further cost reductions, other possible financial management tools, such as rate adjustment clauses, debt optimization strategy, cash management strategies, and organizational efficiency improvements are being pursued. The power rate adjustment clauses in effect through FY 2006 and BPA's debt optimization strategy are described more fully later in this Overview section.
- In establishing separate rate processes for the first time for the power and transmission functions, Bonneville's FY 2002 transmission and ancillary service rates were designed to be effective for FYs 2002 and 2003 rather than a five-year period. The two-year transmission rate period was designed to support the transition toward formation of a regional transmission organization (RTO). With work to develop an operational RTO continuing, BPA has initiated a rate setting process for the FY 2004-2005 time period. In November 2002, BPA signed a rate Settlement Agreement with most of its customers that calls for BPA to submit an initial transmission rate proposal incorporating the provisions of the Settlement Agreement. The Settlement Agreement provides for a 1.5 percent increase for most transmission and ancillary service rates for FYs 2004 and 2005. The conclusion of the rates process and Final Record of Decision is expected in summer 2003.
- On the power side, Bonneville concluded its power rate setting process for FYs 2002-2006 in May 2000 and submitted its power rate proposal to the Federal Energy Regulatory Commission. Subsequently, extremely high volatility and price uncertainty in power markets led Bonneville to reexamine its rate proposal. As a result, Bonneville made the decision to amend its power rate proposal knowing that a significant rate increase was likely.

- In June 2001, after a public process, BPA submitted a supplemental power rate proposal to FERC and was subsequently granted interim approval in September 2001. This proposal focused primarily on modifications to proposed risk mitigation measures. BPA and many parties to the rate case collaboratively developed the terms of the proposal. A key feature of the proposal is a three-component Cost Recovery Adjustment Clause (CRAC): one component, the Load-Based CRAC tied to BPA's power system load, allows a rate adjustment every six months to reflect BPA's actual costs of purchasing power to augment the system. A second component, the Financial-Based CRAC based on the power business line's financial status, allows a one-year rate increase in any year of the five-year rate period, to restore reserve levels if end-of-year accumulated net revenues drop below a threshold level. The third component, the Safety-Net (SN) CRAC, allows BPA to change the parameters of the Financial-Based CRAC costs if BPA were to forecast missing a payment to the Treasury or other creditor, or actually misses such a payment. As in the original filing, the Supplemental Proposal continues to reflect implementation of Bonneville's fish and wildlife obligations while still maintaining the ability to make our planned payments to the U.S. Treasury on time and in full.
- The initial Load-Based CRAC, in effect for the first six months of FY 2002, provided an increase of about 46% on average above base rates. The Load-Based CRAC for the second six months, April through September, provided an increase of about 41% above base rates. The Load-Based CRAC is expected to decline to the 33% level for the first half of FY 2003, and then rise again to about 39% for the second half of the year. The Financial-Based CRAC, based on FY 2002 third quarter financial results, triggered in October 2002 with a rate impact of about 11%. With the coincident decline in the Load-Based CRAC and the increase from the Financial Based CRAC, BPA's total power rates will remain at about their same level for the first half of FY 2003.
- BPA conducted informal workshops within the Region to discuss the probability of triggering the Safety-Net CRAC in FY 2003 and potential designs of an SN CRAC rate increase should it trigger. BPA is waiting until more information about the winter water situation and about secondary power prices is available before making a final decision on the timing and duration of the SN CRAC. Once a decision to trigger the SN CRAC is made, an abbreviated rate case process will begin. At the conclusion of this process, BPA would submit a Record of Decision to FERC for approval within 60 days. Rates would be subject to the SN CRAC 61 days from filing with FERC unless FERC orders otherwise prior to that time.
- Bonneville is continuing efforts to help meet the region's long-term power and transmission infrastructure needs. Bonneville is planning infrastructure investments in the Pacific Northwest to meet Northwest transmission needs that will also continue a competitive wholesale market in the Western Interconnection that encompasses 15 western states, 2 Canadian provinces and 2 Mexican states.

- BPA has identified a number of actions that it is taking or could take over the next five years to provide additional electrical infrastructure relief. These actions include federal hydro generation efficiencies and additions, additional renewable resource generation and conservation efforts, long and short-term power purchases and construction of transmission projects that reinforce the grid and integrate new generation. As part of these efforts, Bonneville has designed a process to review and prioritize the investments. Part of this process, developed with stakeholder input, will provide investor-owned utilities and public utilities an opportunity to evaluate proposed major transmission infrastructure additions for their cost, benefits, and their contribution to reliability, as well as schedules for project completions. Bonneville will also engage DOE and regional stakeholders in discussions to clarify needed generation improvements and conservation.
- Bonneville's remaining borrowing authority is not sufficient to fund all projects that have been identified to help relieve the region's infrastructure problems. As a result, Bonneville needs additional borrowing authority over the next decade in order to provide a sufficient level of long-term infrastructure planning assurance. This FY 2004 Congressional budget includes an analysis of the impact of a legislative proposal to increase Bonneville's existing limit on borrowing authority by \$700 million in FY 2004. See tables BP-4 Status of Borrowing Under Current Legislation and Status of Borrowing Under Proposed Legislation in the Schedules section of this budget. Bonneville will set rates to assure sufficient revenues to recover the expenses associated with these infrastructure investments. Additional borrowing authority provides near-term funding relief for Bonneville's capital needs to meet its responsibilities and assure a reliable northwest energy supply. In addition to the legislative proposal for increased borrowing authority, BPA is pursuing other strategies to sustain funding for its infrastructure investment requirements. These additional strategies include optimization of Energy Northwest debt, revenue financing of some amount of transmission investments, and seeking when possible third party financing sources.
- Bonneville is continuing efforts to explore non-federal financial participation in its transmission infrastructure projects with transmission customers and others in the region. This effort has been designed to obtain as much interest as is possible in cost effective and timely non-federal participation and financing of transmission infrastructure that can be operated and maintained integrally with the Federal grid. A set of principles for non-federal financial participation was developed by BPA and publicly announced in OASIS (Open Access Same-Time Information System)/Federal Register postings in early 2002. That posting initiated a formal schedule for soliciting interest in non-federal participation. The schedule is sufficiently flexible to accommodate the level of interest expressed and the schedule of individual transmission projects.
- This FY 2004 budget includes capital and expense estimates for the Power Business Line consistent with the conclusion of the business line's public review process, called Financial Choices. Approximately \$350 million in cost savings, deferrals and other actions are included in these estimates through FY 2006. The Transmission Business Line capital and expense estimates are based on the TBL rate Settlement Agreement and will form the basis for the initial transmission 2004 rate proposal. Capital investment levels also reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process. In addition, estimates included in this budget also reflect 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. FY 2002 costs are based on actual results.

- 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 CRAC adjustments, reduced cost estimates, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Adjustments for depreciation, 4(h)(10)(C) and Fish Cost Contingency Fund credits are also assumed. 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 is continuing to participate in the development of a regional transmission organization called RTO West in response to the Federal Energy Regulatory Commission's Order 2000 and consistent with the Administration's support for competitive energy markets. Bonneville is working closely with the region's investor-owned utilities as well as other stakeholders through a public collaborative process to design RTO West to meet the Commission's requirements and the specific needs of the Pacific Northwest. Bonneville and the investor-owned utilities filed a Stage 2 proposal at the Commission in March 2002. In September 2002, the Commission approved the majority of the filing and ordered further development. The Commission noted that Bonneville is central to the viability of RTO West, and strongly encouraged the ongoing efforts to ensure Bonneville's involvement consistent with its mandate. Furthermore, Bonneville recently consolidated its efforts to address RTO, standard market design (SMD) and restructuring legislation under a single "Industry Restructuring" organization that reports directly to the Administrator. BPA will maintain its current level of resources and budget for FY 2003.
- BPA 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 increasing low interest rates on historic appropriations to current Treasury market rates and resetting (reducing) the principal of FCRPS appropriations unpaid as of the end of FY 1996. 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 Act, plus \$100 million. The new principal amounts were then assigned new interest rates based on the Treasury yield curve rates prevailing at the end of FY 1996. Bonneville's outstanding repayment obligation on appropriations at the end of FY 1996 was \$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. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the refinancing to Treasury for their review and approval. Treasury approved the implementation transactions in July 1997.



- Consistent with assumptions for the power rate case, Bonneville has reached a settlement of the Residential Exchange Program for regional utilities for the post-2001 period. Regional utilities were eligible to participate in the Residential Exchange Program beginning in 2001, except for the nine utilities that previously executed settlement agreements for terms beyond July 2001. To settle the Residential Exchange, Investor Owned Utility (IOU) customers will receive 1,900 average MW (aMW) in power and financial benefits, at prices generally equivalent to the priority firm power rate, over the FY 2002-2006 rate period. In FY 2007 the total amount of settlement benefits changes to 2200 aMW. No settlement offer was made to Bonneville's preference customers, or public agency utilities, because none had forecasted average system costs that were sufficiently high to qualify for Residential Exchange benefits. See the Operating Expenses- Power Business Line section for additional discussion of the settlement agreements.
- BPA also implemented a load reduction strategy in 2001 as a key component of the power rate case. This strategy was designed to help bridge the gap between the amount of load on the system and the amount of power purchases required to meet that load. Bonneville, with help across all customer groups, was successful in reducing its load commitments by over 2,000 a MW. These load reductions varied in length of time, from a few months to up to two years over the rate period. Even with the successful results of the load reduction strategy, Bonneville still expects, over the rate period through FY 2006, to make significant power purchases in the market at prices higher than earlier anticipated. Thus, the load reduction efforts early in the rate period were thought to help minimize BPA's market exposure.
- As part of its continuing competitive efforts, BPA is working to further optimize debt service costs. BPA has reached agreement with Energy Northwest to pursue refinancing of certain Energy Northwest bonds. BPA pays the debt service on these bonds under the terms of earlier net billing agreements. A component of the refinancing strategy will be to extend the final maturity on the Columbia Generating Station (formerly WNP-2) debt. In addition, for Projects 1 and 3, some debt currently maturing prior to FY 2012 will be extended into the 2013–2018 time period. BPA has committed to Energy Northwest to use the reductions in debt service resulting from this extension to amortize Federal debt earlier than currently scheduled, except to handle an extreme financial emergency. Implementation of the refinancing components will be subject to favorable market conditions and interest rate environment. Thus only the actual Federal amortization due to debt service savings of debt refinancings are included in cost estimates for this FY 2004 budget.
- As part of its strategic staffing efforts and infrastructure project requirements, Bonneville has seen an increase in FTE levels since FY 2000. This increase, expected to peak in FY 2003, is designed in part to accommodate a shift in critical skills needed to meet the demands of succeeding in a deregulated energy market. Bonneville FTE projections included in this FY 2004 budget are 3,260 and 3,252 for FYs 2003 and 2004, respectively.

- Bonneville is committed to continue funding its share of the region’s efforts to recover listed Columbia Basin fish and wildlife. In its power rate case, Bonneville incorporated fish funding principles that were developed and supported by a broad base of regional interests. Consistent with these principles, rates were set to provide sufficient revenue to satisfy Bonneville’s fish responsibilities. BPA is working closely with the Northwest Power Planning Council, regional fisheries managers, and other federal agencies (National Marine Fisheries Service (NMFS), the United States Fish & Wildlife Service (USFWS), Corps of Engineers and Bureau of Reclamation) to prioritize and manage fish and wildlife costs to remain within the funding estimates established in rates. Future funding estimates will also be managed to remain within the weighted average of a range of costs assumed in the power rate case. Included with the budget schedules section of this budget document is the current tabulation of the history of Bonneville’s fish and wildlife investments.
- Bonneville, to the extent possible, is integrating its implementation of Endangered Species Act (ESA) actions with the Planning Council’s Fish and Wildlife Program. Many of the actions in the FCRPS BiOps and the Planning Council’s Program overlap, particularly in the areas of habitat, hatchery and harvest offsite mitigation measures. The Action Agencies’ – U.S. Army Corps of Engineers (Corps), Bureau of Reclamation (Bureau), and Bonneville – FCRPS 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 all fish and wildlife affected by the operation of the FCRPS. The Provincial Review process, sponsored by the Council, provides the mechanism for integrating activities under the existing Fish and Wildlife Program with the measures focusing on ESA-listed fish stocks in the NMFS and USFWS BiOps.
- BPA and the Action Agencies will continue to prioritize funding for fish and wildlife projects, including BiOp implementation, and focus funding on those projects that provide the most biological benefit at the least cost. General and specific criteria, including factors for selecting projects focused on targeted stocks, will be further refined as BPA and the region gain experience with the Provincial Review processes.
- BPA is also relying on the Planning Council’s upcoming sub-basin plans to further integrate needs identified through recovery planning with those of the council’s Fish and Wildlife Program and FCRPS BiOp implementation. BPA recently entered into a two-year contract with the Planning Council for development of sub-basin plans for the entire Columbia River Basin. The plans will be developed in close coordination with the NMFS and USFWS to ensure the integration and prioritization of ESA-focused project activities in the Planning Council’s Fish and Wildlife Program. The sub-basin plans are expected to further inform the selection of projects received under the Provincial Reviews.
- The FY 1997 Energy and Water Development Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Planning Council to appoint a Scientific Review Panel “to review projects proposed to be funded through that portion of Bonneville Power Administration’s fish and wildlife budget that implements the Planning Council’s fish and wildlife program.” And, “...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.” Consequently, projects funded under

Bonneville's direct program will be reviewed and prioritized as part of the Planning Council initiative process.

- Bonneville has adopted the following strategic business objectives for FY 2003: 1. Achieve high and continually improving customer satisfaction. -- BPA's viability begins and ends with the customer. We must anticipate their needs and serve them with excellence. 2. Increase the value of our business and share the expanded benefits. -- BPA is more than a business, but BPA must succeed as a business in a competitive market if it is to carry out its legislative mandates. Market success gives BPA the financial strength necessary to deliver both commercial and public benefits. 3. Be a low-cost provider of power and transmission services in the region. -- The provision of low-cost power and transmission to the region is a principal reason for BPA's existence. BPA's commercial success also hinges on it – requiring constant pursuit of efficiency and optimizing the use of assets. 4. Achieve and maintain financial integrity. -- Financial integrity means each business line is recovering all costs, ensuring full and timely payments to creditors, including the U.S. Treasury, maintaining economic access to capital, providing high quality and timely information to BPA managers and other interested parties, and assessing and managing financial, operational and strategic risks. 5. Keep the system safe and reliable. -- BPA must strive continually to improve its record of safety and reliability. Safety is critical to our workforce and reliability is an important source of our value to the region. 6. Invest in results to enhance the region's natural environment. -- The natural systems of the Pacific Northwest are valuable in their own right and essential to the quality of life of the people of the region. We must seek to have a light environmental footprint. 7. Transform BPA into a diverse, employee-centered, high-performing, business-oriented organization in which: employee development is supported; contributions are recognized; employees feel connected with the business; systems are fair and open; quality and quantity of communications are high; management focuses primarily on employees; and personal integrity, trust and respect are demonstrated.

## **President's Management Agenda**

- In the area of the President's Management Agenda, Bonneville is leveraging the President's initiatives to achieve efficiencies while preserving the long-term value of the Pacific Northwest federal hydro system. To ensure that BPA is able to fully leverage the initiatives, Bonneville has consolidated the implementation under one BPA employee, who is leading four cross-agency teams in the areas of Improving Financial Management, Integrating Budget and Performance, Human Capital, and Expanding E-Government. The teams report directly to the Deputy Administrator and, using the Office of Management and Budget and Office of Personnel Management "standards for success," have mapped Bonneville's current status and are developing strategies to close existing gaps and achieve greater efficiencies and effectiveness in Bonneville programs and operations.

- Bonneville is self-reporting its Current Status as “green” or successful on both the Financial Management and the Integrating Budget and Performance initiatives. Over the past several years, Bonneville has streamlined and integrated its strategic planning and budgeting processes, setting quantifiable outcome goals and targets and has aligned its resource allocations in context of past results. As part of this process, Bonneville executives develop Agency Strategic Business Objectives and Strategic Thrusts that formulate policy direction, establish annual performance targets, and set Agency financial targets. BPA has received a Clean Audit Opinion since the mid-1980s and has no material financial weaknesses reported on its financial statements. BPA planning and budgeting processes include extensive BPA stakeholder involvement, including customers, constituents, tribal and other interested parties in the region. Bonneville’s financial management systems and reporting procedures meet federal standards, comply with generally accepted accounting principles and are consistent with Presidential Initiative schedule guidance.
- In the area of Expanding E-Government, BPA is reporting its Current Status as “red” and its Progress Toward Implementing the President’s Management Agenda as “yellow.” In an effort to close the gap in the standard of IT (Information Technology) program management (90 percent of IT projects on time and on budget), Bonneville has also initiated an IT Leading Change effort to implement a more consistent IT project management approach, as well as enhanced IT documentation and reporting processes. BPA exceeds OMB (Office of Management and Budget) standards for IT business case preparation and for providing web access that improve citizen access by offering one-stop shopping through integrated delivery methods while reducing undue burden on our business partners and customers by reducing or eliminating the need to re-key data. BPA has developed an Enterprise Resource Planning system that integrates its major business process, providing its managers and employees with access to timely and accurate financial, personnel, and property reports.
- Bonneville is self-reporting “yellow” in Current Status and “green” in Progress Toward Implementing the President’s Management Agenda in the area of Human Capital. Bonneville is continuing its strategic focus on transforming Bonneville into a High Performing Organization with implementation of several Leadership Development initiatives. Through its Skills Gap Assessment, as an example, BPA has identified competency levels for all critical jobs in order to enhance its training and development and recruiting programs. Bonneville meets or exceeds the Office of Personnel Management (OPM) Standards of Success in the areas of Strategic Alignment, successfully eliminated one-layer of management and created a frontline organization of Customer Account Executives; Strategic Competencies (Talent), developed comprehensive staffing plans for BPA business lines; Leadership, implemented developmental and training programs designed to prepare employees for executive responsibilities and to strengthen current managerial leadership skills; and Performance Culture (Strategic Awareness), implemented a rigorous awards program, aligning Agency Strategic Business Objectives with quantifiable targets that are embedded in individual executive and managerial performance contracts. These targets cascade throughout organizations and provide the basis for the Bonneville performance awards program.

## **Program Assessment**

- The Program Assessment Rating Tool will provide valuable information and Bonneville will work with DOE and OMB to develop and refine recommendations on measures and targets used to indicate program performance. Bonneville will continue to improve its long-term targets and measures of performance. The annual targets as provided in this budget submission are measurable and reflect performance standards used in the electric utility industry to evaluate performance. Bonneville will continue to achieve its mandate under the law in regard to marketing of Federal power, customer preference, cost recovery, widespread use of the power, and disposition of revenues.



# **Bonneville Power Administration**

## **Overview of Detailed Program Justifications**

Bonneville's detailed justification summaries that follow present budget requirements of budget line items (BLI) on the basis of accrued expenditures. Accrued expenditure is the basis of presenting Bonneville's program funding levels in the power and transmission rate making processes, and the basis upon which Bonneville managers control their resources to provide products and services. Accrued expenditures relate costs to performance. Traditional budget obligation requirements for Bonneville's budget are shown on the Program and Performance Schedule prepared in accord with OMB Circular A-11.

The FY 2004 budget and these performance summaries reflect Bonneville's business line 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. The Power business line includes line items for Fish and Wildlife, Conservation and Energy Efficiency, Residential Exchange, Associated Projects O&M Costs and Planning Council. Environmental activities are shown in the relevant business line, and in accord with OMB Circular A-11 guidance for revolving funds, reimbursable costs are incorporated within the associated business lines. All programs funded in advance will be fully funded by benefiting entities. 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 \$528 million in FY 2004.

The near-term forecasted capital funding levels have undergone an extensive internal review as a result of implementation of a capital asset management strategy. This strategy encompasses prioritizing capital projects to be funded based on risk and other factors. Utilizing this review process helps Bonneville in its efforts to compete in the deregulated energy market. Bonneville will continue to work with the Corps and the Bureau to optimize the best mix of projects.

In addition to implementation of a capital asset management strategy, Bonneville has developed and is implementing a capital investment review process that provides significant benefits to Bonneville 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). As part of this process Bonneville established a Cross-Agency Capital Allocation Board (Board). Near-term capital funding levels in this budget are based on Board decisions after extensive review. BPA will continue its efforts to refine and implement the revised 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 business line and program activities financed by power sales and transmission services revenues and projects funded in advance. For FY 2004, budget expense obligations are estimated at \$3,428 million. The total program requirements of all Bonneville programs include estimated budget obligations of \$4,089 million in FY 2004.



## Funding Profile

(dollars in thousands)

	FY 2002 Actuals	FY 2003 Original <sup>b</sup>	FY 2003 Adjustments	FY 2003 Revised	FY 2004 Proposed
<b>Capital Investment Obligations</b>					
Associated Project Costs <sup>c</sup> .....	73,252	NA	—	129,021	104,556
Fish & Wildlife.....	6,166	NA	—	36,000	36,000
Conservation & Energy Efficiency <sup>c</sup> .....	28,779	NA	—	46,800	28,000
Subtotal, Power Business Line <sup>d</sup> .....	108,197	NA	—	211,821	168,556
Transmission Business Line <sup>c</sup> .....	259,400	NA	—	330,240	329,568
Capital Equipment & Bond Premium.....	21,988	NA	—	43,958	28,800
<b>Total, Capital Obligations <sup>e</sup> .....</b>	<b>389,585</b>	<b>630,800</b>	<b>—</b>	<b>586,019</b>	<b>526,924</b>
<b>Expensed and Other Obligations</b>					
Expensed.....	3,195,225	3,030,300	—	3,185,349	3,428,588
Projects Funded in Advance.....	34,409	25,000	—	96,617	133,426
<b>Total, Obligations <sup>e</sup> .....</b>	<b>3,906,219</b>	<b>3,686,100</b>	<b>—</b>	<b>3,867,985</b>	<b>4,088,938</b>
Capital Transfers (cash).....	505,000	247,300	—	312,000	222,000
<b>BPA Total.....</b>	<b>4,411,219</b>	<b>3,933,400</b>	<b>—</b>	<b>4,179,985</b>	<b>4,310,938</b>
Total Excluding Legislative Funding					
for Federal Retirements <sup>f</sup> .....	4,411,219	3,933,400	—	4,179,985	4,310,938
Full-time Equivalents (FTEs).....	3,121	3,278	—	3,260	3,252

**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

<sup>a</sup> BPA's FY 2004 budget has been prepared in accord with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to discretionary "caps" in the BEA. These estimates support activities that are legally separate from discretionary activities and accounts. Thus, changes to BPA estimates cannot be used to affect any other budget categories such as domestic discretionary, or defense discretionary, which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a BEA "pay-as-you-go" test regarding its revision of funding estimates.

<sup>b</sup> These estimates reflect BPA's FY 2003 Congressional Budget Submission.

<sup>c</sup> 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. Borrowing in FY 2002 will not exceed \$374.5 million as stated in the FY 2002 Congressional Budget. BPA will manage the additional capital requirements including evaluation of alternative funding sources.

<sup>d</sup> The Power Business Line includes Fish and Wildlife, Conservation & Energy Efficiency, and Associated Project costs in the Performance Summaries, and which appear separately in this table.

<sup>e</sup> Includes short-term purchase power contract estimates for meeting load requirements.

This FY 2004 budget includes capital and expense estimates for the Power Business Line consistent with the conclusion of the business line's public review process, called Financial Choices. Approximately \$350 million in cost savings, deferrals and other actions are included in these estimates through FY 2006. The Transmission Business Line capital and expense estimates are based on the TBL rate Settlement Agreement and will form the basis for the initial transmission 2004 rate proposal. Capital investment levels also reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process. In addition, estimates included in this budget also reflect 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. FY 2002 cost estimates are based on audited actual results.

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.

Total obligations for FY2002 in this budget have been reconciled to the Statement of Budgetary Resources (SBR). A miscellaneous accounting adjustment line was added to the Program and Finance schedule in this budget to reflect the net difference between total operating expenses and total capital investment per this budget versus the SBR total obligations calculation. In addition, the total obligation amount for FY2002 throughout this budget has been adjusted to reflect the SBR. The SBR obligations take into account the net effects of certain balance sheet accounts as well as total expenditures.

# **Power Business Line - Capital**

## **Mission Supporting Goals and Objectives**

Associated Project Costs provide for direct funding of additions, improvements and replacements of existing Bureau of Reclamation (Bureau), and U.S. Army Corps of Engineers (Corps) hydroelectric projects in the Pacific Northwest. The Bureau and Corps provide power production, which is marketed by BPA, and invest in additions, improvements, and replacements that provide for increased performance and availability of generating units.

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% of BPA's power supply, and is composed of 31 operating Federal hydro 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 Bureau, BPA uses its borrowing authority to make investments needed to restore generation availability and improve efficiency, eliminating demand on Corps and Bureau appropriations for power-related investments. Since the beginning of direct funding, BPA has significantly improved system performance - generation availability is up to 89 percent as of last year. In 1999, at the direction of Congress, BPA issued a report that it soon began to implement called the "Asset Management Strategy for the FCRPS." BPA concluded in this report that it needed to invest nearly \$1 billion in the projects over the next 12 -15 years. Without these investments, that are focused on restoring and maintaining the reliability of the system, history indicates that unit availability may decline at a rate of about 1.5% per year. Supplementary analysis, and experience with the system, has revealed additional investment needs above and beyond the levels originally planned under the Asset Management Strategy for this and the next five-year rate periods.

These planned investments, included in these FY 2004 budget's funding estimates, will maintain the output of the FCRPS. Moving forward with these cost-effective opportunities to expand the generation capability of the Federal system is a smart economic and environmental decision when compared to purchasing power from the market to serve 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 hydroelectric projects on the Columbia River and its tributaries, pursuant to Section 4(h) of the Northwest Power Act. BPA satisfies a major portion of its fish and wildlife responsibilities and meets the Administrator's obligation under the Northwest Power Act by funding projects and activities designed to be consistent with the Northwest Power Planning Council's (Planning Council) Fish and Wildlife Program. BPA is also mandated to implement measures called for under the Endangered Species Act. These measures are part of the Year 2000 Biological Opinions (BOs) issued by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS), regarding the operations of the Federal Columbia River hydro system.

BPA worked with the Planning Council, the Columbia Basin tribes, state and Federal agencies, and public interest groups to develop an expected range for BPA's fish and wildlife costs for FYs 2002-2006. The total estimated annual average financial impact on BPA for the region's fish and wildlife programs ranges from \$438 million to over \$724 million per year. This range of costs was used to develop the power rate proposal for FYs 2002 – 2006. BPA's fish and wildlife costs are expected to be within this range, including capital, expenses, and lost revenues from spill. Future funding estimates are still expected to fall within the range assumed in the power rate case.

BPA'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, increase fish production and survival through construction of hatchery and acclimation facilities, fish monitoring facilities and fish habitat enhancement. Funding is also included for pre-engineering design and studies for new and developing projects. Capital project funding will focus on integrating ESA-related priorities with the Planning Council's Fish and Wildlife Program. A current goal of the Planning Council, and one supported by BPA, is that projects funded under both BPA's direct program as well as the reimbursable and capital investment components of the other Federal agencies will be reviewed and prioritized as part of a regional planning initiative.

The FY 1997 Energy and Water Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Planning Council to appoint a Scientific Review Panel "to review projects proposed to be funded through that portion of BPA's fish and wildlife budget that implements the Council's fish and wildlife program." And, "...in making its recommendations to BPA, 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 Independent Scientific Review Panel (ISRP) and the Planning 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 BPA 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 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.

Consistent with the principles of the Federal Caucus' *Final Basinwide Salmon Recovery Strategy* (All-H Strategy), BPA is implementing much of the off-site mitigation actions required by the Year 2000 BOs through the Planning Council's Fish and Wildlife Program. Under the 1980 Northwest Power Act, the Fish and Wildlife Program is tasked with protecting and rebuilding Columbia River Basin fish and wildlife affected by the development and operation of the FCRPS. The Provincial Review process, sponsored by the Planning Council, provides the mechanism for integrating activities under the existing Fish and Wildlife Program with the measures focused on ESA-listed fish stocks in the NMFS and USFWS BOs.

Provincial Reviews occur on a rolling three-year basis within the 11 Planning Council-designated geographical provinces and the System-wide and Mainstem project selection processes. Projects solicited under those processes may cross provincial boundaries. Based on sub-basin assessments, as well as review by the Independent Science Review Panel, NMFS, BPA, and others, habitat, hatchery, and research projects in each province are selected for funding. The first full round of Provincial Reviews should be completed by the second quarter of FY 2003, and will enable implementation of three years of carefully selected and scientifically based projects.

When acquiring resources to meet planned future loads, the NW Power Act requires the Administrator to first consider and acquire resources through cost-effective conservation that the Administrator determines are consistent with the NW Power Planning Council's Power Plan to reduce loads. The Council's Power Plan specifies that BPA's share of the regional, cost-effective conservation target will be about 220 aMW by FY 2006. In addition, the Council's Plan, currently under revision, further estimates that BPA's target will be another 250 aMW of conservation in the FY 2007 to 2011 period. BPA anticipates that between 100 and 225 aMW of this amount will be acquired under its augmentation strategy.

Conservation was key to the recent effort to reduce BPA's power delivery obligations as a way of limiting the impact of volatile and high market prices on BPA's rates. With the current demand for FCRPS resources exceeding supply, BPA is augmenting the system to meet the obligations from customers that signed subscription contracts. Conservation is an important part of BPA's augmentation portfolio. A diverse portfolio of resources that includes conservation provides a more reliable approach to meeting BPA's load obligations.

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, because it keeps producing at the original cost incurred.



(dollars in thousands)

FY 2002	FY 2003	FY 2004
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▪ **Corps of Engineers (known projects to date):**

FY 2002: Continued work on Power System Reliability Improvement. Continued generator rewedging at Bonneville Dam. Continued refurbishment/replacement of head gates and gantry crane at Bonneville. Continued implementation of main unit and station service breaker replacement program. Finished Ice Harbor exciter replacement and continued replacements at John Day. Continued generator rewedging at Little Goose. Continued work on oil/water separators at Lower Snake River projects. Continued work on replacing main unit annunciation, 480 volt distribution system and CO2 fire suppression system at Chief Joseph. Continued replacement of DC power supplies at John Day and The Dalles. Completed initial design of turbine runners at McNary. Continued transformer replacements or refurbishments at several plants. Purchased a spare generator winding for McNary. Completed design for Cougar modernization. Continued hydro optimization investigations system wide.

FY 2003: Continue work on Power System Reliability Improvements. Continue refurbishment/replacement of head gates and gantry crane at Bonneville Dam. Continue repairing of fish unit generator and generator rewedging at Bonneville. Continue main unit and station service breaker replacements at selected projects. Continue work on oil/water separators at Lower Snake River projects. Complete work on replacing main unit annunciation and continue work on the 480 volt distribution system and CO2 system at Chief Joseph. Complete replacement of DC power supplies at John Day and The Dalles. Select a prototype turbine runner for McNary. Continue hydro optimization investigations system wide. Test prototype replacement governors at several plants. Begin implementation of Cougar modernization. Continue exciter replacements at John Day. Begin turbine runner replacement at Ice Harbor, Unit #2. Complete battery system at McNary. Plus a variety of smaller continuing or new investments and repairs for failed units.

FY 2004: Complete work on Power System Reliability Improvements. Continue refurbishment/replacement of head gates and gantry crane at Bonneville Dam. Continue rewedging at Bonneville. Continue main unit and station service breaker replacements at selected projects. Continue work on oil/water separators at most projects. Continue with turbine runner replacement and modernization at McNary. Continue hydro optimization investigations and equipment installations system wide. Begin replacement governors at selected projects. Continue Cougar modernization. Continue exciter replacements at John Day. Continue with 480-volt distribution replacement and finish CO2 system installation at Chief Joseph. Continue runner replacement at Ice Harbor, Unit #2 and begin generator rewind. Purchase replacement generator winding for Lower Granite and Detroit. Begin replacement of exciters at Lower Monumental. Continue gate rehabilitation at Ice Harbor. Plus a variety of smaller continuing or new investments and repairs to failed units.





(dollars in thousands)

FY 2002	FY 2003	FY 2004
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FY 2002-2003 efforts include continued implementation of high priority Endangered Species Act related projects and activities associated with the FY 2000 NMFS, and USFWS Biological Opinions. Projects may include a genetics analysis and education facility and a Hatchery Safety Net Program for up to ten ESA listed salmon and steelhead populations if determined to be necessary by formulation of Hatchery Genetic Management Plans and Genetic Risk Analyses. Implementation of reforms to hatchery programs may also be warranted as information on the types of changes to these facilities are established and priorities for sequencing implementation are developed through the Council's Artificial Production Review Committee. Projects that meet the Reasonable and Prudent Measures (RPA's) and other high priority measures in the NMFS and USFWS BO's are also described in the action agencies (Corps of Engineers and Bureau of Reclamation) Annual Implementation Plan for FY 2002.

Anadromous fish supplementation, production, and/or juvenile and adult passage improvement projects that may require capital funds in FY 2004 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 and for the design and construction of a monitoring and evaluation building for use by project biologists.
- Johnson Creek Summer Chinook Salmon restoration in South Fork Salmon Basin of Idaho may include development and construction of facilities for adult collection and holding, juvenile rearing, and acclimation. The design and construction is expected to continue.
- Upper Snake River Spring Chinook Salmon captive broodstock acclimation and adult collection facilities will 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 Planning 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 Walla Walla River Basins.
- Salmon Creek: Restore and Enhance Anadromous Fish Populations and Habitat in Salmon Creek. This project would provide instream flows through on-farm water conservation & water leasing. Design a river pump station and an upgrade to the Salmon Lake Feeder Canal. Enhance channel habitat. Design channel restoration. A hatchery feasibility study for supplementation of currently listed salmon and steelhead populations under the ESA is under discussion with the Bureau of Reclamation (BOR) and may be appropriate for Bonneville funding, with construction potentially funded by the BOR.
- 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.

(dollars in thousands)

FY 2002	FY 2003	FY 2004
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- Nez Perce Tribal Hatchery. This project would complete construction and begin operation of Nez Perce Tribal Hatchery supplementation program to assist in the recovery and restoration of non-listed spring chinook and ESA-listed Snake River fall chinook in the Clearwater Basin.
- Coeur D’Alene Tribe Trout Production Facility. The purpose of this facility is to produce fish in support of on-going Couer D’Alene Tribal fisheries enhancement projects. Target species include Westslope cutthroat trout, Bull trout and Rainbow trout. The design and construction is expected to continue.
- Continue acquisition and installation of Adult Pit tag monitors at selected Federal dams in Snake and lower Columbia rivers. The design and construction is expected to continue.
- Juvenile and adult PIT tag detection facilities throughout the Columbia River Basin.
- Mid-Columbia coho restoration program. This project will continue planning and design of satellite acclimation facilities and a potential central coho production facility.
- Major irrigation diversion screening and consolidation programs in Oregon, Washington and Idaho.

**Conservation and Energy Efficiency ..... 28,779 46,800 28,000**

The Conservation Augmentation (ConAug) program offers several ways for customers to participate in regional conservation. ConAug program components include: (1) request for Interest in Reducing Load Through Conservation (IRLC), which resulted in customer proposals to conserve energy through residential weatherization, commercial lighting and HVAC, industrial processes and lighting, and irrigated agriculture; (2) residential compact fluorescent lighting; (3) “Vending Mi\$er”, a program to reduce energy use in regional refrigerated vending machines; (4) Federal programs to help Federal installations in the region reduce energy use; (5) Waste Water Treatment program; (6) Federal Hatcheries program; (6) work at various dams to help the Corps of Engineers in its efforts to reduce energy use; and (7) other initiatives still in the design stage.

**Total Power Business Line – Capital ..... 108,197 211,821 168,556**

## Explanation of Funding Changes From FY 2003 to FY 2004

FY 2004 vs.  
FY 2003  
(\$000)

### Associated Project Costs

- Reduction due to FY 2002 program deferrals that caused an increase in FY 2003 capital program implementation ..... -24,465

### Fish and Wildlife

- No change ..... 0

### Conservation and Energy Efficiency

- Reflects emphasis on increased program implementation during FY 2003, early in rate period, resulting in a decrease in FY 2004 program implementation ..... -18,800

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**Total Funding Change, Power Business Line — Capital ..... -43,265**



# **Transmission Business Line - Capital**

## **Mission Supporting Goals and Objectives**

The Transmission Business Line (TBL) provides for all additions, upgrades, and replacements to the Federal transmission system in the Pacific Northwest, allowing reliable service to be provided to Northwest industrial users and utility customers. The transmission system also allows for the sale and exchange of power to and from the region.

TBL plans to make significant improvements and additions to the system over the next several years to assure reliable transmission in the Northwest. These improvements and additions will help the Federal transmission system remain in compliance with national reliability standards, allow for interconnection of needed new generation, remove constraints that limit economic trade or limit the ability to maintain the system, and replace aging equipment. No major transmission projects have been built since 1987. Only incremental additions have been built into the system over the years, but it is stretched to the limit. Approximately 30,000 MW of generation are under consideration for siting in the Northwest. The Transmission System will become even more stressed with the addition of generation if nothing is done to reinforce the existing network.

The first phase of Bonneville's infrastructure addition consists of the following projects:

(G1) Puget Sound Area Additions, (G2) North of Hanford/North of John Day, (G3) West of McNary (on hold), (G4) Starbuck Generation (on hold), (G5) Lower Monumental & McNary Area Generation (Phase II) (on hold), (G6) Cross Cascades North, (G7) Celilo Modernization, (G8) I-5 Corridor Generation Additions, (G9) Spokane Area and Western Montana Generation Additions, (G10) Portland Area Additions, (G12) Olympic Peninsula Additions, (G13) I-5 Corridor Generation Additions (Southwest Washington-Northwest Oregon) (on hold pending availability of third party funding). The G10, G12 and G13 additions have been added since the FY 2003 Congressional Budget. These projects are further described below.

Bonneville assumes that some generators will integrate their load into the Federal system. Depending on which generators build on sites in the Northwest and the project locations, between 8000 and 12000 MW can be integrated with the completion of the above additions and improvements. The benefits will include relief from congestion, as well as restoring reliability margin back in the grid. This additional margin 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 the Regional Transmission Organization (RTO) to start without the regional grid heavily congested.

As a means to compliment BPA's borrowing authority limitations, third party funding partnerships are currently being pursued for some of the infrastructure additions. For example, on projects associated with generation integration, the potential generation or transmission customers are being consulted regarding funding the construction of these projects.

The system replacement plan is 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 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 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 seek partnerships with fiber optic facility and service providers to meet its needs.

### **Funding Schedule (Accrued Expenditures)**

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Main Grid .....	33,766	199,349	194,478	-4,871	-2.4%
Area & Customer Services .....	15,246	15,704	15,241	-463	-2.9%
Upgrades & Additions .....	125,048	42,261	53,597	+11,336	+26.8%
System Replacements .....	85,341	72,925	66,252	-6,673	-9.2%
Projects Funded in Advance .....	34,409	96,617	133,426	+36,809	+38.1%
<b>Total, Transmission Business Line — Capital ....</b>	<b>293,810</b>	<b>426,856</b>	<b>462,994</b>	<b>+36,138</b>	<b>+8.5%</b>

### **Detailed Program Justification**

(dollars in thousands)

	FY2002	FY 2003	FY 2004
<b>Main Grid .....</b>	<b>33,766</b>	<b>199,349</b>	<b>194,478</b>

- 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

(dollars in thousands)

FY2002	FY 2003	FY 2004
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system congestion; and to assure compliance with the Nuclear Energy Regulatory Commission (NERC), Western Electric 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 to provide for transmission access for new generation projects to the load center. Minor reinforcements in the Portland, OR/Seattle, WA corridor are also planned.

- FY 2002: (1) Completed design of the Kangley-Echo Lake 500 KV line and substation addition at Echo Lake and the 500/230 KV bank addition at SnoKing substation (G1); (2) Continued design of the Schultz-Wautoma 500 KV line and new 500 KV Wautoma substation (G2); (3) Completed environmental studies and begin design of the McNary-John Day 500 KV line and substation additions at John Day and McNary (this project was placed on hold due to cancelled or moth-balled generation projects) (G3); (4) Began design of the Lower Monumental-Starbuck 500 KV line and substation addition at Lower Monumental (this project was placed on hold as the generation company decided to sell the project) (G4); (5) Continued design of the Newport Generation-Smiths Harbor 500 KV line and new Smiths Harbor substation and reviewed the need for 500 KV shunt capacitor additions at McNary, Big Eddy, and Slatt substations (this project was placed on hold due to cancelled or moth-balled generation project) (G5); (6) Began installation of the 500 KV series capacitor addition at Schultz substation (G6); (7) Continued design of the Grand Coulee-Bell 500 KV line, the 500 KV series capacitor additions at Bell and Dworshak substations, 500 KV series capacitor replacement at Garrison substation, and the 500 KV shunt reactor addition at Grand Coulee (G9); (8) Continued the design for the installation of the 500/230 KV bank addition at Pearl substation (G10); (9) Upon further power flow studies, the Libby-Bonnars Ferry 230 KV line addition has been delayed until FY 2004 (G15); (10) Upon further power flow studies, the Hanford-Ostrander 500 KV loop to Big Eddy substation has been delayed until Fy 2004 (G14); (11) Completed cooling plant construction at Celilo for valve groups 1-6 (G7); (12) Awarded Furnish and Install (F & I) contract for the infrastructure line projects. The contractor will furnish the materials and labor reserves to construct the projects identified by task order under this F&I contract; (13) Continued planning studies and design to comply with the Double Contingency (N-2) outage criteria; (14) Continued planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (15) Continue planning studies to solve the transmission system capacity congestion and for the integration of new generation facilities; (16) Continued planning studies to identify and clarify needed infrastructure additions.
- FY 2003: (1) Complete Environmental Impact Statement (EIS) and begin construction of the Kangley-Echo Lake 500 KV line and substation addition at Echo Lake and the 500/230 KV bank addition at SnoKing substation (G1); (2) Begin construction of the Schultz-Wautoma 500 KV line and new Wautoma substation (G2); (3) Continue installation of the 500 KV series capacitor addition at Schultz substation (G6); (4) Complete design of and begin construction of the Grand Coulee-Bell 500 KV line, 500 KV series capacitor additions at Bell and Dworshak substations, 500 KV series capacitor replacement at Garrison substation and the 500 KV shunt reactor addition at Grand Coulee (G9); (5) Complete installation of the 500/230 KV bank addition at Pearl substation

(dollars in thousands)

FY2002	FY 2003	FY 2004
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(G10); (6) Begin design for the Ostrander 500kV shunt capacitor group addition; (7) Continue planning studies and design to comply with the N-2 outage criteria; (8) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (9) Continue planning studies to solve the transmission system capacity congestion and for the integration of new generation facilities; (10) Continued planning studies to identify and clarify needed infrastructure additions

- FY 2004: (1) Complete construction of the Kangley-Echo Lake 500kV line and substation addition at Echo Lake, and the 500/230kV bank addition at SnoKing Substation (G1); (2) Complete construction of Schultz-Wautoma 500kV line and Wautoma Substation (G2); (3) Complete installation of the 500 KV series capacitor addition at Schultz substation (G6); (4) Complete 500kV reactive groups at Bell, Dworshak, Garrison, McNary, Big Eddy, Ostrander, and Grand Coulee; (5) Complete Grand Coulee-Bell 500kV line and substation additions (G9); (6) Begin environmental analysis, demand side management study, design & material acquisition for Olympic Peninsula Addition II (G12); (7) Begin preliminary design for the loop in of the Wautoma-Ostrander 500kV line to Big Eddy Substation (G14); (8) Continue studies for the Libby-Sand Spring-Bell 230kV project (G15 & G20); (9) Resume planning studies for the Monroe-Echo Lake 500kV #2 project (G8); (10) Continue planning studies and design to comply with the N-2 outage criteria; (11) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (12) Continue planning studies to solve the transmission system capacity congestion and for the integration of new generation facilities; (13) Continue planning studies to identify and clarify needed infrastructure additions.

**Area & Customer Service ..... 15,246 15,704 15,241**

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 2002: (1) Completed construction to replace the cable and upgrade support and maintain reliability for the San Juan area in NW Washington; (2) Continued construction on the Shelton Kitsap line rebuild to double circuit to provide voltage stability and prevent transformer and line overloads in the Kitsap area; (3) Discontinued studying the needs for 500 kV reinforcements in the Southwest Oregon Area; (4) Continued preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for the BPA service area.
- FY 2003: (1) Complete construction on the Shelton Kitsap line rebuild to double circuit to provide voltage stability and prevent transformer and line overloads in the Kitsap area; (2) Begin the design, material acquisition, and construction to rebuild the Albany-Eugene 115kV line to double circuit from Eugene to the Alderwood Tap; (3) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for the BPA service area.



(dollars in thousands)

FY2002	FY 2003	FY 2004
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- FY 2004: (1) Complete construction to rebuild the Albany-Eugene 115kV line to double circuit from Eugene to the Alderwood Tap; (2) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for the BPA service area.

**Upgrades & Additions** ..... **125,048**      **42,261**      **53,597**

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; and to implement special remedial action control schemes to accommodate new generation and mitigate immediate operational and market constrained paths. 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 becoming 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 2002: (1) Completed installation of 35 miles of fiber optic cable from Flathead Substation to Libby Substation and Libby Powerhouse; (2) Completed design of the Kalispell to Hot Springs digital radio section of the Noxon-Hot Springs 200 mile fiber optic project; (3) Continued design, material acquisition and construction of 37 miles of fiber optic cable and terminations between Custer and Intalco; (4) Completed design, material acquisition and construction of 33 miles of fiber optic cable and terminations between Noxon and Thompson Falls as part of the Noxon-Hatwai 175 mile fiber optic project. The Noxon-Hatwai fiber project replaces the previously approved 97 mile Taft-Bell fiber optic project; (5) Continued design for the 10 mile Longview to Allston fiber optic project; (6) Continued the design and material acquisition of the 12 mile Raver-Echo Lake fiber optic cable on the Raver-Echo Lake 500 kV line; (7) Completed installation of fiber optic terminal equipment and transfer of operational circuits onto the fiber at various BPA substations; (8) Completed digital radio system upgrades at various sites critical for the overall upgrade to the operational telecommunication system; (9) Completed special remedial action control schemes required for generation integration projects; (10) Completed additional efforts to separate Transmission from the Power scheduling function; (11) Completed improvements of operational, dispatching and marketing computer systems at the Dittmer and Munro Control Centers; (12) Continued planning, design, material acquisition, and construction of various system additions and upgrades necessary to maintain a reliable system for the BPA service area.
- FY 2003: (1) Complete construction of 37 miles of fiber optic cable and terminations between Custer and Intalco; (2) Complete installation of 10 miles of fiber optic cable and terminations between Longview and Allston; (3) Complete material acquisition and construction of the 12 mile fiber optic cable on the Raver-Echo Lake 500 kV line; (4) Complete material acquisition and construction of the Kalispell-Hot Springs digital radio section of the Noxon-Hot Springs 200 mile fiber optic project; (5) Continue design functions for the Thompson Falls to Taft section of the 175 mile Noxon–Hatwai fiber optic project; (6) Continue design and material acquisition for 78 miles of

(dollars in thousands)

FY2002	FY 2003	FY 2004
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fiber optic cable and terminations from Covington to Maple Valley to Echo lake to Monroe to Snohomish; (7) Complete design, material acquisition and construction of the Custer to Sumas digital radio project that replaces the 8 mile Bellingham-BC Hydro fiber optic project; (8) Continue construction of fiber projects and digital radio system upgrades to improve the operational telecommunication system; (9) Continue replacement and upgrade of operational and business tools at the Dittmer and Munro control centers; (10) Continue planning, design, material acquisition, construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (11) Continue planning, design, material acquisition, construction of various system additions and upgrades necessary to maintain a reliable system for the BPA service area.

- FY 2004: (1) Continue design functions for the Thompson Falls to Taft to Dworshak to Hatwai sections of the 175 mile Noxon-Hatwai fiber optic project; (2) Continue design, material acquisition and start construction of 78 miles of fiber optic cable and terminations from Covington to Maple Valley to Echo lake to Monroe to Snohomish; (3) Complete design, material acquisition and construction of the fiber optic cable and terminations on the 70 mile McNary-John Day 500 kV line; (4) Continue construction of fiber projects and digital radio system upgrades to improve the operational telecommunication system and to meet rural needs; (5) Continue replacement and upgrade of operational and business tools at the Dittmer and Munro control centers; (6) Continue planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (7) Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for the BPA service area.

**System Replacements** ..... **85,341**      **72,925**      **66,252**

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 3) replacing all other existing high-risk equipment and facilities affecting the safety and reliability of the transmission system.

Non-Electric Replacements:

- FY 2002: (1) Completed various maintenance building and control house roof replacements; (2) Completed seismic upgrades to buildings; (3) Completed various Heating, Ventilation and Air Conditioning (HVAC) replacements; (4) Completed other non-electric replacements as necessary; (5) Continued design activities, material acquisition, and construction for the new Access Road Program, a prioritized effort to upgrade aging access roads to critical transmission lines.

(dollars in thousands)

FY2002	FY 2003	FY 2004
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- FY 2003: (1) Complete various maintenance building and control house roof replacements; (2) Complete seismic upgrades to buildings; (3) Complete various HVAC replacements; (4) Complete other non-electric replacements as necessary; (5) Continue the design, material acquisition, and construction for the Access Road Program.
- FY 2004: (1) Complete various maintenance building and control house roof replacements; (2) Complete seismic upgrades to buildings; (3) Complete various HVAC replacements; (4) Complete other non-electric replacements as necessary; (5) Continue the design, material acquisition, and construction for the Access Road Program; (6) Restart design that was postponed in FY 2002 for the Dittmer Control Center expansion at the Ross Complex.

Electric Replacements:

- FY 2002: (1) Continued replacement of Poly-Chlorinated-Biphenyl (PCB)-contaminated capacitors at various locations; (2) Continued replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using Reliability-Centered Replacements (RCR) criteria. Such replacements include relays, annunciators, oscillographs, various types of communication-related equipment and Supervisory Control and Data Acquisition (SCADA) equipment; (3) Continued replacement of under-rated & high maintenance substation equipment; (4) Started replacing aged AC-DC converter valves and control systems at the Celilo Converter Station necessary to continue operation of 3100 MW of DC transmission capability (G7); (5) Continued replacing critical, operational tools and systems at the Dittmer and Munro Control Centers; (6) Continued replacing deteriorating wood pole transmission line structures.
- FY 2003: (1) Continue replacement of PCB-contaminated capacitors at various locations; (2) Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCR criteria. Such replacements include relays, annunciators, oscillographs, various types of communication related equipment and SCADA equipment; (3) Continue replacement of under-rated & high maintenance substation equipment; (4) Continue replacing aged AC-DC converter valves and control systems at the Celilo Converter Station necessary to continue operation of 3100 MW of DC transmission capability (G7); (5) Begin design and material acquisition for reconductoring approximately 22 miles of the John Day-Big Eddy 500kV Line; (6) Continue replacing critical, operational tools and systems at the Dittmer and Munro Control Centers; (7) Continue replacing deteriorating wood pole transmission line structures.

(dollars in thousands)

FY2002	FY 2003	FY 2004
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- FY 2004: (1) Continue replacement of PCB-contaminated capacitors at various locations; (2) Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCR criteria. Such replacements include relays, annunciators, oscillographs, various types of communication related equipment and SCADA equipment; (3) Continue replacement of under-rated & high maintenance substation equipment; (4) Complete replacement of aged AC-DC converter valves and control systems at the Celilo Converter Station necessary to continue operation of 3100 MW of DC transmission capability (G7); (5) Complete construction to reconductor approximately 22 miles of the John Day-Big Eddy 500kV Line; (6) Continue replacing critical, operational tools and systems at the Dittmer and Munro Control Centers; (7) Continue replacing deteriorating wood pole transmission line structures.

**Projects Funded in Advance** ..... **34,409**      **96,617**      **133,426**

This category includes those facilities and/or equipment where BPA retains ownership but which are funded by a third party, either in total or in part through a cost-share agreement.

- FY 2002: (1) Completed the integration of new 280 MW generation capacity in Boardman, OR into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (2) Completed the integration of new 536 MW generation capacity near Hermiston into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (3) Completed the integration of new 270 MW generation capacity near Tacoma into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (4) Continued the integration of new 248 and 225 MW generation capacities near Goldendale into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (5) Continued the integration of new 600 MW generation capacity near Chehalis into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (6) Stopped work on the 1200 MW generation capacity near Starbuck because the customer has abandoned the project (G4); (7) Began work to integrate new 1300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the Open Access Tariff (G5) (on hold); (8) Completed work to build a new substation and transmission facilities to improve transmission service to the US Navy near Bremerton; (9) Integrated new 600 MW generation capacity near Satsop into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (10) Integrated new 290 MW generation capacity near Longview into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (11) Integrated various new wind generation projects into BPA transmission grid per Transmission Service Request via the Open Access Tariff; (12) Performed studies to identify system impacts and needs regarding proposed new generation projects; (13) Performed environmental cleanup and other work necessary for the sale of BPA facilities; (14) Completed other projects as requested by customers; (15) Began preliminary engineering design of the Southwest Washington-Northwest Oregon 500 KV line addition (G13) (on hold pending availability of third party funding).
- FY 2003: (1) Complete the integration of new 248 and 225 MW generation capacities near Goldendale into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (2) Complete the integration of new 600 MW generation capacity near Chehalis into the

(dollars in thousands)

FY2002	FY 2003	FY 2004
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BPA transmission grid per Transmission Service Request via the Open Access Tariff; (3) Continue work to integrate new 1300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the Open Access Tariff (G5) (on hold); (4) Complete the integration of new 600 MW generation capacity near Satsop into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (5) Complete the integration of new 290 MW generation capacity near Longview into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (6) Continue to integrate various new wind generation projects into BPA transmission grid per Transmission Service Request via the Open Access Tariff; (7) Perform studies to identify system impacts and needs regarding proposed new generation projects; (8) Perform environmental cleanup and other work necessary for the sale of BPA facilities; (9) Complete other projects as requested by customers.

- FY 2004: (1) Complete work to integrate new 1300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the Open Access Tariff (on hold); (2) Continue to integrate various new wind generation projects into BPA transmission grid per Transmission Service Request via the Open Access Tariff; (3) Perform studies to identify system impacts and needs regarding proposed new generation projects; (4) Perform environmental cleanup and other work necessary for the sale of BPA facilities; (5) Complete other projects as requested by customers; (6) Continue design, material acquisition and construction of the Southwest Washington-Northwest Oregon 500 KV line addition (G13).

## Explanation of Funding Changes From FY 2003 to FY 2004

FY 2004 vs. FY 2003 (\$000)
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### Main Grid

- Reflects fiscal year shifts in materials and construction costs to accommodate updated power flow study results ..... -4,871

### Area & Customer Services

- Reflects less emphasis on customer service projects as strategic focus has changed to improvements and additions to the Main Grid facilities ..... -463

### Upgrades & Additions

- Reflects increased emphasis on both system wide communications upgrades and improvements and additions to other transmission facilities ..... +11,336

### System Replacements

- Reflects less emphasis on system replacements, except for the Celilo project, as the strategic focus has changed to improvements and additions to the Main Grid facilities ..... -6,673

### Projects Funded in Advance

- Reflects emphasis on completion of large customer funded or third party funded projects related to generation integration ..... +36,809

<b>Total Funding Change, Transmission Business Line — Capital .....</b>	<b>+36,138</b>
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# Capital Equipment/Capitalized Bond Premium

## Mission Supporting Goals and Objectives

This activity provides for the acquisition of general and some dedicated business line special purpose capital automatic data processing (ADP) equipment, development of capitalized ADP software, and acquisition of special-use capital furniture and equipment in support of BPA’s strategic objectives. This budget category provides BPA with the ability to acquire general and some dedicated business line special purpose capital ADP equipment. See the Capital Program – Transmission Services Business Line section of this budget for additional discussion of transmission related ADP requirements acquisitions.

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

### Funding Schedule (Accrued Expenditures)

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Capital Equipment .....	21,988	43,958	25,800	-18,158	-41.3%
Capitalized Bond Premium .....	0	0	3,000	+3,000	0.0%
<b>Total, Capital Equipment/Capitalized Bond Premium .....</b>	<b>21,988</b>	<b>43,958</b>	<b>28,800</b>	<b>-15,158</b>	<b>-34.5%</b>

### Detailed Program Justification

(dollars in thousands)

	FY 2002	FY 2003	FY 2004
<b>Capital Equipment .....</b>	<b>21,988</b>	<b>43,958</b>	<b>25,800</b>

Acquire capital office furniture and equipment, capital ADP-based administrative telecommunications equipment, ADP equipment (hardware), and support capital software development for certain BPA programs. Includes enhancements to BPA’s information technology processes to provide efficiencies for secure, timely and accurate information. Continue enhancements to BPA’s Enterprise systems that

(dollars in thousands)

FY 2002	FY 2003	FY 2004
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are designed to link key information systems throughout Bonneville and improve business processes. Current efforts include functional expansion into areas not implemented during the initial development phase.

**Capitalized Bond Premium** ..... 0 0 3,000

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

**Total, Capital Equipment/Capitalized Bond Premium** ..... 21,988 43,958 28,800

**Explanation of Funding Changes From FY 2003 to FY 2004**

FY 2004 vs. FY 2003 (\$000)
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**Capital Equipment**

Decrease due to implementation of Business Solutions Project ..... -18,158

**Capitalized Bond Premium**

Increase in anticipated bond refinancing due to evolving refinancing opportunities ..... +3,000

**Total, Funding Change Capital Equipment/Capital Bond Premium** ..... -15,158



# **Power Business Line - Operating Expense**

## **Mission Supporting Goals and Objectives**

Production includes all BPA strategic resource planning and business development, short and long-term power purchases, wheeling, electric utility marketing of resources, hedging-related costs, generation and oversight costs, including the large thermal nuclear projects. These activities identify the Administrator's load obligations, develop product plans and services to meet the needs of BPA customers, and acquire resources as needed. As a means of mitigating power market risk, BPA's Hedging Policy allows the use of financial instruments in the power, natural gas, and aluminum markets to hedge the price of electricity and reduce BPA's exposure to market fluctuations and certain index sales contract provisions.

Associated Projects provide funding for operation and maintenance costs for the FCRPS; minor additions, improvements, and replacements; and liabilities of the Corps of Engineers and Bureau of 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. BPA pays additional financing costs of the FCRPS facilities through its Interest Expense and Capital Transfer budget programs. BPA 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).

Fish and Wildlife expenses provide for the protection, enhancement and mitigation of Columbia River Basin fish and wildlife due to losses attributed to the development and operation of hydroelectric projects on the Columbia River and its tributaries. BPA discharges 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 Northwest Power and Conservation Council's (Planning Council) Fish and Wildlife Program. To satisfy its responsibilities under the Endangered Species Act, BPA implements measures in the biological opinions issued by the NMFS and the USFWS regarding the operations of the Federal Columbia River hydro system.

NMFS and USFWS issued new Biological Opinions (BO's) on FCRPS operations in December 2000. The BO's require the Action Agencies (COE, BOR, and BPA) to implement actions throughout the Columbia River Basin that comprehensively address all the life stages of Endangered Species Act (ESA)-listed fish. BPA's responsibilities under the 2000 FCRPS BO's are expected to significantly increase its Fish and Wildlife costs in future years. To plan for this expected increase, BPA incorporated a wide range of fish and wildlife costs when setting the FY 2002-2006 power rates. Based on the 2000 FCRPS BO requirements, BPA's planning estimate is an average of \$150 million annually for fish and wildlife for the rate period covering FY 2003 - 2006. This is within the range of \$109 - \$179 million of accrued expenses assumed in the power rate case. Future funding estimates are still expected to fall within the range assumed in the power rate case. The Administrator has asked the Planning Council to lead an effort to prioritize projects to keep annual accrual funding at \$139 million

or below throughout the rate period, while still meeting the requirements of the 2000 Biological Opinions and preserving previous important investments of the fish and wildlife program.

BPA's fish and wildlife expense funds will focus on activities that benefit Columbia River Basin fish and wildlife resources including projects designed to:

- increase survival of ESA-listed fish at FCRPS dams and reservoirs;
- increase survival of ESA-listed fish throughout their life cycle by protecting and enhancing important habitat areas;
- reform hatchery practices and use hatcheries to contribute to conservation and recovery of ESA-listed fish;
- reduce harvest-related mortality on ESA-listed fish and support sustainable fisheries; and,
- support a disciplined and well-coordinated research, monitoring, and evaluation program.

BPA is working to integrate the actions implemented in response to the 2000 FCRPS BO's with projects implemented under the Planning Council's Fish and Wildlife Program. In the near term, BPA will use the Planning Council's Provincial Review process as the primary vehicle for soliciting project proposals to address BO actions. Provincial Review project solicitations will identify specific BO implementation needs in conjunction with the broader non-ESA Northwest Power Act priorities. BPA also may use targeted solicitations if BO requirements are not fully satisfied through the Provincial Review's solicitations.

The FY 1997 Energy and Water Development Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Planning Council to appoint a Scientific Review Panel "to review projects proposed to be funded through that portion of Bonneville Power Administration's fish and wildlife budget that implements the Planning Council's fish and wildlife program." And, ". . . in making its recommendations to BPA, 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." Consequently, projects funded under Bonneville's direct program will be reviewed and prioritized as part of the Planning Council initiative process.

The Northwest Power Act created the Residential Exchange Program (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 recommended that BPA engage in settlement discussions regarding the Residential Exchange. BPA then developed a Subscription Strategy based on the recommendations of the Comprehensive Review. That strategy proposed a comprehensive settlement of the REP for Investor-Owned Utilities (IOUs) in the Pacific Northwest, which has resulted in new contracts with regional IOUs that provide power and monetary benefits to their residential and small farm customers.

To settle the REP with the Investor-Owned Utilities, IOU customers were offered 1900 aMW in power and monetary benefits for the FY 2002-2006 rate period. The power is sold at a price equivalent to the priority firm power rate. The monetary benefits are calculated based on the forecast of the cost of purchasing the power in the market that was used in the 96 Rate Case, less the rate used for sale of power to the IOU customers. All 6 regional IOUs signed contracts in the fall of 2000 implementing this

settlement of the Residential Exchange. They originally were to receive 1000 aMW of power and 900 aMW in monetary benefits for FY 2002-2006, but two IOUs subsequently sold 619 aMW of power back to BPA as part of BPA's rate mitigation efforts for FY 2002. In addition, 3 other IOUs triggered the clause in their contracts to convert their power purchases to financial payments. In FY 2007 the total amount of settlement benefits changes to 2200 aMW. Under the Subscription Strategy, BPA stated its intent for all of these benefit to be provided as power; however, BPA may provide either power or monetary benefits under the terms of the settlement agreements.

BPA's preference utilities, or public agency utilities, are eligible to execute new Residential Exchange Program contracts beginning in 2001, except for the nine utilities that previously executed settlement agreements for terms ending July 1, 2011. These customers are forecasted to have average system costs that are lower than the Exchange Program rate and thus would not qualify for these benefits.

The Northwest Power Act directs that expenses of the Planning Council, subject to certain limits based on forecasted BPA power sales, shall be included in BPA's annual budget to Congress. Funding for the Planning Council is provided by Bonneville and is recovered through Bonneville rates. Its 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 competitive market situation is driving the need for alternatives to the traditional approaches to developing conservation resources. PBL will acquire conservation in accordance with the Northwest Power Planning Council's guidance and act as a catalyst for energy efficiency and direct application renewables. These resources will provide a vital component of PBL's diversified resource portfolio: (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; (6) cushion the need for rate increases; and (7) build the region's resource portfolio with conservation and direct application renewables. BPA also is exploring how best to integrate demand-side management, distributed generation, and other leading edge technologies into its resource portfolio through its Energy Web program.

### **Funding Schedule (Accrued Expenditures)**

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Production .....	1,893,752	1,872,440	2,100,262	+227,822	+12.2%
Associated Projects Costs .....	219,318	228,100	239,400	+11,300	+5.0%
Fish & Wildlife .....	144,175	156,100	134,400	-21,700	-13.9%
Residential Exchange .....	143,983	143,000	143,000	0	0.0%
Planning Council .....	8,380	8,700	8,700	0	0.0%
Conservation and Energy Efficiency .....	61,279	63,995	62,971	-1,024	-1.6%

Total, Power Services - Operating Expense	2,470,887	2,472,335	2,688,733	+216,398	8.8%
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### Detailed Program Justification

(dollars in thousands)

	FY 2002	FY 2003	FY 2004
<b>Production .....</b>	<b>1,893,752</b>	<b>1,872,440</b>	<b>2,100,262</b>

- Short-Term Power Purchases/Pacific Northwest Coordination Agreement (PNCA) Interchange: Includes purchase power for efficient operation of the power system, fish mitigation and resale. Due to higher and more volatile market prices in 2001, Bonneville was subject to much greater demand for service from its customers for FY 2002-2006. This increase in load demand indicates that Bonneville may need to make substantially greater power purchases in the market. In order to mitigate a larger rate increase, FY 2003 and FY 2004 expenses include \$306 million, and \$276 million respectively, in IOU and DSI load buy downs. See additional discussion of the evolving power market included in “Significant Accomplishments and Program Shifts” included in the Program Mission section of this budget.
- Under terms of the Pacific Northwest Coordination Agreement (PNCA), BPA makes interim cash payments to other generating utilities for power received as interchange energy. Likewise, BPA receives interim cash payments from other generating utilities for power that BPA delivers as interchange energy. Interchange energy is an energy exchange between utilities to supply all or a part of any deficiency between a utility’s actual energy capability and its firm energy load carrying capability. The energy is then returned to the supplying utility at a time that it has a deficiency, and any interim cash payments made on such energy is refunded.
- Power Scheduling/Marketing: Schedule and market (buy/sell) electric energy with BPA customers and the Pacific Northwest’s interconnected utilities. Scheduling includes PBL’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 RTO as it evolves. PBL’s development of a new Transaction Scheduling System will facilitate the above needs. Place major emphasis on marketing for support of the Biological Opinion of the Fish and Wildlife Program.
- Trojan: Continue termination and decommissioning of BPA’s 30 percent share of the Trojan Nuclear Plant. Trojan’s Decommissioning Trust Fund was accessed to fund the FY 2002 activities, thus decreasing FY 2002 expenses. Decommissioning continues at a consistent level through FY 2004.
- Columbia Generating Station (WNP-2): Continue to acquire full capability of Columbia Generating Station (Columbia). Columbia has now completed the transition to a 24-month fuel cycle from a 12-month cycle. A maintenance and refueling outage will occur in FY 2003 and is reflected in the FY 2003 expenses.
- WNP-1/WNP-3: Continue to fulfill contractual obligations for WNP-1 and WNP-3.
- Long Term Power Purchases and Wheeling:

(dollars in thousands)

FY 2002	FY 2003	FY 2004
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FY 2002 and FY 2003: Continue to acquire 100 percent of the Packwood, Idaho Falls, Cowlitz Falls, Wauna and BPA’s share of Foote Creek 1 project output. Continue contract payments on four billing credit projects. Continue to acquire 100 percent of the 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 100 percent of the output of the Condon and Klondike wind projects. Continue to fund the White Bluffs solar project. BPA may acquire a portion of the output from the Maiden wind project. Continue to make decisions whether to sign predevelopment agreements for additional renewable generation. Continue to make decisions whether to acquire a share of the output from, and/or provide resource integration services for, additional renewable generation.

FY 2004: Continue to acquire 100 percent of the Packwood, Idaho Falls, Cowlitz Falls, Wauna and BPA’s share of Foote Creeke 1 project output. Continue contract payments on four billing credit projects. Continue to acquire 100 percent of the 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 100 percent of the output of the Condon and Klondike wind projects. Continue to fund the White Bluffs solar project. If it has not already done so, BPA may acquire a portion of the output from the Maiden wind project. Make decisions whether to sign predevelopment agreements and initiate the NEPA process for additional renewable generation. Complete NEPA process and make decisions whether to acquire renewable generation projects initiated in FY 2003. Make decisions whether to acquire output from additional renewable generation projects.

- Generation & Oversight:

FY 2002: Continued to provide oversight of all contracts signed to date.

FY 2002-2004: Continue to provide oversight of all contracts signed to date. Complete the NEPA process for the Maiden Wind project. Provide oversight of large thermal generating plants from which BPA purchases capability to insure that all BPA approval rights are protected; coordinate, communicate and administer agreements, issues and programs between BPA and the project owners. Continue to make decisions whether to purchase the output from the Maiden Wind project and proceed with the predevelopment agreements and NEPA process for additional renewable generation. Continue to make decisions whether to acquire output from additional renewable generation projects.

FY 2004: Continue to provide oversight of all contracts signed to date. Provide oversight of large thermal generating plants from which BPA purchases capability to insure that all BPA approval rights are protected; coordinate, communicate and administer agreements, issues and programs between BPA and the project owners. Complete NEPA process and make decisions whether to acquire renewable generation projects initiated in FY 2003.

**Associated Project Costs ..... 219,318 228,100 239,400**

- Support FCRPS project costs and work to strengthen relationships to improve project support and better understand project costs. This helps to maintain FCRPS system integrity and to attain BPA’s

(dollars in thousands)

FY 2002	FY 2003	FY 2004
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strategic business objectives.

- Bureau of Reclamation:  
FY 2002: Continued direct funding Bureau O&M power activities.  
FY 2003: Continue direct funding Bureau O&M power activities.  
FY 2004: Continue direct funding Bureau O&M power activities.
- Corps of Engineers:  
FY 2002: Continued direct funding Corps O&M power activities.  
FY 2003: Continue direct funding Corps O&M power activities.  
FY 2004: Continue direct funding Corps O&M power activities.

<b>Fish and Wildlife .....</b>	<b>144,175</b>	<b>156,100</b>	<b>134,400</b>
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In a manner consistent with the assumptions used for the FY 2002-2006 power rate case:

Anadromous Fish: Continue implementing projects which support Endangered Species Act listed species and other measures called for under the 2000 FCRPS NMFS BO. Use the Council's Provincial Review and Sub-basin Planning processes to identify activities for implementation. Implement and develop activities that protect and enhance tributary and estuary habitat, improve mainstem habitat on an experimental basis, reduce potentially harmful hatchery practices, 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 U. S. Fish and Wildlife Service 2000 FCRPS BO and the Northwest Power Act 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.
- Wildlife: Continue the current program including funding for wildlife actions resulting from Planning Council Fish and Wildlife Program amendments for wildlife mitigation. These activities have been selected in response to the Northwest Power Act to “protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries.”

<b>Residential Exchange .....</b>	<b>143,983</b>	<b>143,000</b>	<b>143,000</b>
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- Includes negotiated contract settlement agreement costs consistent with assumptions in the power rate case and subscription strategy.

(dollars in thousands)

FY 2002	FY 2003	FY 2004
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**Planning Council** ..... **8,380**      **8,700**      **8,700**

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

**Conservation and Energy Efficiency** ..... **61,279**      **63,995**      **62,971**

- Continue close out of the Legacy conservation resource acquisition contracts, which support BPA’s contractual obligation to serve customer load growth. As part of the power subscription strategy and the 2002 Power Rate Case, BPA implemented a conservation rate credit system for utility customers.
- Provide credible, unbiased information or technical or financial support to conservation purposes. As an agency of the DOE, and with independent responsibilities based on its authorizing legislation, BPA 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. BPA is participating with other regional entities to support market transformation and development activities that meet the needs of BPA customers and create business opportunities for the private sector in the Pacific Northwest.
- Seek to make the existing energy efficiency marketplace larger by helping to remove barriers which customers face in the development of conservation projects. This opens up possibilities that have previously been foreclosed, thus serving to “grow the pie.” This activity must be self-financing; that is, payments from customers must cover all of the costs of performing the service.
- Create and enhance markets for energy efficiency and end-use renewables through delivery of public benefits. Promote the development and implementation of new energy efficiency technologies. Provide leadership and collaborative funding for market transformation initiatives. Continue activities being performed through the regionally-funded Northwest Energy Efficiency Alliance through a multi-party agreement signed in 2000. Support the Energy Web, a program advancing innovation and deployment of new energy technologies, This program will: (1) provide benefit to the Pacific Northwest; (2) promote standards and technology development deployment to achieve business benefits for BPA and its customers; and (3) promote the “Green” aspects of the Energy Web. Implications of participation in Energy Web development include:
- Diversify BPA risk hedges to include physical alternatives such as demand reductions and peak generation.
- Demonstrate potential to reduce peak loads and transmission needs.
- Clarify location benefits associated with peak load reduction, power and system reliability, power quality, and avoiding greenhouse gas production.

**Total, Power Business Line – Operating Expense** ..... **2,470,887**      **2,472,335**      **2,688,733**

## Explanation of Funding Changes from FY 2003 to FY 2004

FY 2004 vs. FY 2003 (\$000)
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### Production

- Reflects a shift in Energy Northwest Project debt service in support of debt optimization and some increase in power purchase activities related to anticipated DSI curtailment of subscription power contracts ..... +227,822

### Associated Project Costs

- Increase due to security, BO requirements, and improvements, replacements, and minor additions at the projects ..... +11,300

### Fish and Wildlife

- Decrease due to activities associated with the 2000 FCRPS NMFS BO ..... -21,700

### Residential Exchange

- No change ..... 0

### Planning Council

- No change ..... 0

### Conservation and Energy Efficiency

- Minor decrease reflects continuing close out of Legacy conservation resource acquisition programs ..... -1,024

<b>Total Funding Change, Power Business Line - Operating Expense</b> .....	<b>+216,398</b>
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# Transmission Business Line — Operating Expense

## Mission Supporting Goals and Objectives

This activity provides for the transmission system services of engineering, operations and maintenance for BPA’s electric transmission system of over 15,000 circuit miles (24,135 circuit kilometers) of lines, 285 substations, and associated power system control and communication facilities with an invested cost of more than \$4.8 billion. Primary strategies of this program are: 1) maintain the safety and reliability of the transmission system, consistent with the strategic performance goal ER 9-1; 2) increase the focus on customers; 3) optimize the transmission system; and 4) improve BPA's competitive position.

### Funding Schedule (Accrued Expenditures)

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Engineering .....	34,691	30,036	31,274	1,238	+4.1%
Operations .....	93,229	97,094	101,510	4,416	+4.5%
Maintenance .....	126,541	134,603	140,150	5,547	+4.1%
Total, Transmission Business Line - Operating Expense .....	254,461	261,733	272,934	11,201	+4.3%

### Detailed Program Justification

(dollars in thousands)

	FY 2002	FY 2003	FY 2004
<b>Engineering .....</b>	<b>34,691</b>	<b>30,036</b>	<b>31,274</b>

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.

- R&D: Conduct in-house transmission system research and development, including (1) studies on reliability, HVDC (high voltage direct current) and HVAC (high voltage alternating current) outage reduction, (2) methods to update existing facilities and reduce maintenance costs including reliability-centered monitoring and recording methods for analysis.

(dollars in thousands)

FY 2002	FY 2003	FY 2004
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- **Technical Support:** Provide technical support activities, such as transmission system planning and studies to optimize portions of the system.
- **Capital-to-Expense Adjustments:** Annually, BPA analyzes its outstanding capital work orders to assess whether they should be expensed.
- **Reimbursable Transactions:** BPA enters into written agreements with Federal and non-Federal entities that have work or services to be performed by BPA staff at the expense of the benefiting utilities. The projects must be beneficial, under agreed upon criteria, to BPA 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 Facilities:** When operationally feasible, BPA leases delivery facilities and voltage support facilities to support the transmission system instead of building or purchasing new assets.

**Operations ..... 93,229 97,094 101,510**

- **FY 2002:** 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 potential establishment of an RTO.
- **FY 2003:** 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 planning and preparation for potential establishment of an RTO.
- **FY 2004:** 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 planning and preparation for potential establishment of an RTO.

(dollars in thousands)

FY 2002	FY 2003	FY 2004
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- 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 & Dispatching: Includes 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.
- Operations Standards & Engineering: Includes analyzing system loads, voltage levels, outage information, stability levels and other data, and making policy recommendations for system operations and related affairs. Provides for development of control center requirements for centralized automation of substations and generation, and BPA participation with other utilities in developing utility operating standards and guides.
- Marketing, Sales, & Services: Provides management and direction of transmission rates, provides business strategy in marketing of transmission and ancillary products and services of the Transmission Business Line.
- Transmission Scheduling: Provides open access to the Federal transmission system consistent with transmission tariffs approved by FERC. Schedule and market transmission capacity to BPA customers, California ISO and Pacific Northwest’s interconnected utilities. Manages the reservations and scheduling of all transmission services associated with the transmission tariffs.

**Maintenance ..... 126,541 134,603 140,150**

In all aspects of maintenance, Bonneville is shifting to the implementation of Reliability-Centered Maintenance (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 deals with the aging roads system and environmental constraints associated with construction, enhancement, and maintenance of access roads. The BPA transmission system encompasses up to 50,000 miles of access roads. Cost for maintenance activities are budgeted at \$1,000,000 annually.

- FY 2002: Continued to refine RCM practices at all of BPA’s O&M regions. Continued to improve performance to meet 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 which illustrate variability in performance. Continued to improve availability performance in a deregulated market. Utilized retention and recruitment incentives to ensure succession of the current work force

(dollars in thousands)

FY 2002	FY 2003	FY 2004
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and remain competitive as an employer in the utility industry. This included increased benefits for hourly employees as part of a Columbia Power Trades Council (CPTC) agreement to bring our wages in line with the public sector. Increased outage scheduling planning to increased customer satisfaction. Continued high levels of vegetation management and increased access road work to provide reliable access to facilities and ensure environmental compliance.

- FY 2003: Continue to refine RCM practices at all of BPA'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. Continue to prepare for the impact of an expected high attrition rate among BPA's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage-scheduling planning to increase customer satisfaction. Continue high levels of vegetation management. Continue access road work to provide reliable access to facilities and ensure environmental compliance.
- FY 2004: Continue to refine RCM practices at all of BPA'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. Continue to prepare for the impact of an expected high attrition rate among BPA's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage-scheduling planning to increase customer satisfaction. Continue high levels of vegetation management. Continue access road work to provide reliable access to facilities and ensure environmental compliance.
- Transmission Line Maintenance: Maintain and repair nearly 24,135 km (15,000 circuit miles) of high voltage transmission lines, of which over 6,436 km (4,000 circuit miles) are 500-kV transmission EHV (extra-high voltage), maintenance which 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.
- Substation Maintenance: Provides for service and repair of the transmission system power equipment located at more than 360 work sites annually.
- System Protection Maintenance: Provides for the maintenance of relaying and metering 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.

(dollars in thousands)

FY 2002	FY 2003	FY 2004
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- **Power System Control Maintenance:** Provides for the testing, repair, and field engineering support of BPA’s highly complex equipment, communications and control systems, including seven major microwave systems and other critical communications and control systems that support the power system.
- **Non-Electric Plant Maintenance:** Provides for the maintenance of BPA’s non-electric facilities. Includes site, building, and building utility maintenance; custodial services; station utility; and other maintenance service activities on BPA-owned or BPA-leased non-electric facilities.
- **Maintenance Standards & Engineering:** Provides for establishing, monitoring, and updating system maintenance standards, policies, and procedures; and for the review and update of long-range plans for maintenance of the electric power transmission system.

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<b>Total, Transmission Business Line - Operating Expense .....</b>	<b>254,461</b>	<b>261,733</b>	<b>272,934</b>
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## Explanation of Funding Changes From FY 2003 to FY 2004

FY 2004 vs. FY 2003 (\$000)
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**Engineering**

- Minor increase reflects changes in program activities such as research and development ..... +1,238

**Operations**

- Increase primarily due to deferred program costs offset by near-term cost efficiencies ..... +4,416

**Maintenance**

- Increase primarily due to deferred program costs offset by near-term cost efficiencies ..... +5,547

<b>Total Funding Change, Transmission Business Line – Operating Expense .....</b>	+11,201
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# **Interest, Pension and Post-retirement Benefits — Operating Expense and Capital Transfers**

## **Operating Expense**

### **Mission Supporting Goals and Objectives**

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

Since receiving Treasury borrowing authority in 1974 under the Transmission System Act, all BPA borrowing has been at market rates. As of October 1, 1996, all of BPA's repayment obligations on FCRPS appropriated investment (Corps and Bureau FCRPS investment and BPA investment financed with appropriations prior to the Transmission System Act) which were unpaid as of September 30, 1996, were restructured and assigned new current-market interest rates. The Bonneville Appropriations Refinancing Act of 1996 (Act) called for resetting (reducing) the unpaid principal of FCRPS appropriations and reassigning (increasing) interest rates. New principal amounts were established as of the beginning of FY 1997 at the present value of the principal and annual interest payments BPA would make to the U.S. 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. BPA's outstanding repayment obligations on appropriations at the end of FY 1996 were \$6.7 billion with a weighted average interest rate of 3.4 percent. The refinancing reduced the principal amount to \$4.1 billion with a weighted average interest rate of 7.1 percent. Implementation of the refinancing took place in 1997 after audited actual financial data was available. As called for in the legislation, BPA submitted its calculations and interest rate assignments implementing the 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 BPA, 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 BPA's appropriation refinancing legislation.

The Administration has proposed legislation to require all federal agencies to pay the full normal Government share of the accruing cost of retirement for current Civil Service Retirement System (CSRS) employees. The legislation also requires agencies to pay the full accruing cost of post-retirement health benefits for current civilian employees and the post-retirement health costs of all retirees.

Bonneville Pension and Post-retirement Benefits costs, consistent with the proposed legislation, are estimated as follows: \$17.0 million in FY 2003, \$18.7 million in FY 2004, \$18.9 million in FY 2005, \$19.2 million in FY 2006, \$19.5 million in FY 2007, and \$18 million in FY 2008. These costs would be paid to a receipt account with the Office of Personnel Management. These estimates include a small DOE allocation of Pension and Post-retirement Benefit costs associated with the General Services Administration and the U.S. Geological Survey for FYs 2002-2003. The associated Corps, Bureau, and USFW costs are assumed to be paid by the respective agencies with the power related portion of these costs reimbursed through direct funding by Bonneville. These estimates are subject to revision following additional review.

Bonneville has been paying its unfunded liability of the CSRS and post-retirement benefits into the General Fund of the U.S. 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 ten-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. BPA paid \$55.2 million in FY 2002, and the following amounts are to be recovered by Bonneville through rates and paid into the General Fund of the U.S. Treasury: \$35.1 million in FY 2003, \$30.9 million in FY 2004, \$26.5 million in FY 2005, \$23.2 million in FY 2006, \$21.1 million in FY 2007, and \$19 million in FY 2008. Cost estimates include Bonneville and the power related portion of Corps, Bureau of Reclamation, and the United States Fish & Wildlife Pension and Post-retirement Benefits.



## Funding Schedule (Accrued Expenditures)

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	%Change
BPA Bond Interest (Net) .....	89,126	124,195	138,489	+14,294	+11.5%
BPA Appropriation Interest .....	66,902	65,279	63,484	-1,795	-2.7%
Corps of Engineers Appropriation Interest	198,713	166,634	175,193	+8,559	+5.1%
Lower Snake River Comp Plan Interest ....	16,144	16,458	16,458	0	0.0%
Bureau of Reclamation Appropriation Interest .....	43,792	43,616	42,396	-1,220	-2.8%
<b>Subtotal, Interest – Operating Expense .....</b>	<b>414,677</b>	<b>416,182</b>	<b>436,020</b>	<b>+19,838</b>	<b>+4.8%</b>
<b>Pension &amp; Post-retirement Benefits .....</b>	<b>55,200</b>	<b>35,100</b>	<b>30,900</b>	<b>-4,200</b>	<b>-12.0%</b>
<b>Total, Interest, Pension and Post-retirement Benefits .....</b>	<b>469,877</b>	<b>451,282</b>	<b>466,920</b>	<b>+15,638</b>	<b>+3.5%</b>



# Capital Transfers

## Mission Supporting Goals and Objectives

This activity conveys funds to the U.S. 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.

### Funding Schedule (Accrued Expenditures)

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
BPA Bond Amortization .....	308,101	170,000	123,700	-46,300	-27.2%
Bureau Bond Amortization .....	0	17,766	758	-17,008	-95.7%
BPA Appropriation Amortization .....	23,913	26,247	17,020	-9,227	-35.2%
Corps Appropriation Amortization .....	172,998	98,218	79,504	-18,714	-19.1%
Total, Capital Transfers .....	505,012	312,231	220,982	-91,249	-29.2%

**BONNEVILLE POWER ADMINISTRATION  
TOTAL OBLIGATIONS/OUTLAYS**

(in millions of dollars)

KGF 24-Jan-03

**BP-1 SUMMARY**

1,3/

	2002		2003		2004		2005	2006	2007	2008
	<b>Oblig.</b>	<b>Outlays</b>	<b>Oblig.</b>	<b>Outlays</b>	<b>Oblig.</b>	<b>Outlays</b>	<b>Oblig.</b>	<b>Oblig.</b>	<b>Oblig.</b>	<b>Oblig.</b>
1 Residential Exchange	144	144	143	143	143	143	143	143	143	143
2 Power Business Line 2/	2,113	2,113	2,100	2,100	2,339	2,339	2,373	2,269	1,653	1,678
3 Transmission Business Line	513	513	592	592	603	603	511	419	565	646
4 Conservation & Energy Efficiency	90	90	111	111	91	91	84	72	83	92
5 Fish & Wildlife	150	150	192	192	170	170	169	155	173	189
6 Interest/ Pension 4/	470	470	451	451	467	467	485	512	575	592
7 Associated Project Costs - Capital	73	73	129	129	105	105	94	36	81	114
8 Capital Equipment	22	22	44	44	26	26	16	5	9	16
9 Planning Council	8	8	9	9	9	9	9	9	9	9
10 Projects Funded in Advance	34	34	97	97	133	133	80	25	25	25
11 Capitalized Bond Premiums	0	0	0	0	3	3	2	1	2	3
<b>12 TOTAL OBLIGATIONS/OUTLAYS 3/</b>	<b>3,906</b>	<b>3,906</b>	<b>3,868</b>	<b>3,868</b>	<b>4,089</b>	<b>4,089</b>	<b>3,966</b>	<b>3,646</b>	<b>3,318</b>	<b>3,507</b>

## REVENUES AND REIMBURSEMENTS

(in millions of dollars)

FISCAL YEAR

BP-1 SUMMARY	2002		2003		2004		2005	2006	2007	2008
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
13 Revenues 5/	3,471	3,471	3,800	3,800	3,967	3,967	4,010	3,885	3,445	3,525
14 Projects Funded in Advance	34	34	97	97	133	133	80	25	25	25
15 <b>TOTAL</b>	<b>3,505</b>	<b>3,505</b>	<b>3,897</b>	<b>3,897</b>	<b>4,100</b>	<b>4,100</b>	<b>4,090</b>	<b>3,910</b>	<b>3,470</b>	<b>3,550</b>
<b>BUDGET AUTHORITY (NET)</b>	<b>190</b>		<b>(29)</b>		<b>(11)</b>		<b>(124)</b>	<b>(263)</b>	<b>(152)</b>	<b>(43)</b>
16 <b>OUTLAYS (NET) 6/</b>		<b>401</b>		<b>(29)</b>		<b>(11)</b>	<b>(124)</b>	<b>(263)</b>	<b>(152)</b>	<b>(43)</b>

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

- 1/ This FY 2004 budget includes capital and expense estimates for the Power Business Line consistent with the conclusion of the business line's public review process, called Financial Choices. Approximately \$350 million in cost savings, deferrals and other actions are included in these estimates through FY 2006. The Transmission Business Line capital and expense estimates are based on the TBL rate Settlement Agreement and will form the basis for the initial transmission 2004 rate proposal. Capital investment levels also reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process. In addition, estimates included in this budget also reflect 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. FY 2002 cost estimates are based on audited actual results.

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 in the Pacific Northwest.

- 2/ The Power Business Line 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 funding estimates.

Total obligations for FY2002 in this budget have been reconciled to the Statement of Budgetary Resources (SBR). A miscellaneous accounting adjustment line was added to the Program and Finance schedule in this budget to reflect the net difference between total operating expenses and total capital investment per this budget versus the SBR total obligations calculation. In addition, the total obligation amount for FY2002 throughout this budget has been adjusted to reflect the SBR. The SBR obligations take into account the net effects of certain balance sheet accounts as well as total expenditures.

- 4/ See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates.
- 5/ Revenues 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 CRAC adjustments, reduced cost estimates, 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, however causing the same net outlay result. Adjustments for depreciation, 4(h)(10)(C) and Fish Cost Contingency Fund credits are also assumed.
- 6/ 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 outlay estimates could change due to changing market conditions, hydro conditions and the continuing restructuring of the electric industry.

BP-2

EXPENSED OBLIGATIONS/OUTLAYS 1,4/

Current Services

(in millions of dollars)

FISCAL YEAR

	2002		2003		2004		2005	2006	2007	2008
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
1 Residential Exchange	144	144	143	143	143	143	143	143	143	143
2 Power Business Line 2/	2,113	2,113	2,100	2,100	2,339	2,339	2,373	2,269	1,653	1,678
3 Transmission Business Line	254	254	262	262	273	273	280	288	295	302
4 Conservation & Energy Efficiency	61	61	64	64	63	63	63	64	64	64
5 Fish & Wildlife	144	144	156	156	134	134	139	144	148	153
6 Interest/ Pension 3/	470	470	451	451	467	467	485	512	575	592
7 Planning Council	8	8	9	9	9	9	9	9	9	9
<b>8 OBLIGATIONS/ OUTLAYS</b>	<b>3,194</b>	<b>3,194</b>	<b>3,185</b>	<b>3,185</b>	<b>3,428</b>	<b>3,428</b>	<b>3,492</b>	<b>3,429</b>	<b>2,887</b>	<b>2,941</b>
9 Projects Funded in Advance	34	34	97	97	133	133	80	25	25	25

**CAPITAL OBLIGATIONS/OUTLAYS**  
(in millions of dollars)

BP-2 continued	2002		2003		2004		2005	2006	2007	2008
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
10 Conservation & Energy Efficiency	29	29	47	47	28	28	21	8	19	28
11 Transmission Business Line	259	259	330	330	330	330	231	131	270	344
12 Associated Project Costs - Capital	73	73	129	129	105	105	94	36	81	114
13 Fish & Wildlife	6	6	36	36	36	36	30	11	25	36
14 Capital Equipment	22	22	44	44	26	26	16	5	9	16
15 Capitalized Bond Premiums	0	0	0	0	3	3	2	1	2	3
<b>16 TOTAL CAPITAL INVESTMENTS 15</b>	<b>389</b>	<b>389</b>	<b>586</b>	<b>586</b>	<b>528</b>	<b>528</b>	<b>394</b>	<b>192</b>	<b>406</b>	<b>541</b>
<b>17 BORROWING AUTHORITY TO FINANCE CAPITAL OBLIGATIONS 4,5/</b>	<b>389</b>		<b>586</b>		<b>528</b>		<b>394</b>	<b>192</b>	<b>406</b>	<b>541</b>
<b>18 BORROWING AUTHORITY TO FINANCE OTHER OBLIGATIONS</b>	<b>1</b>		<b>(305)</b>		<b>(318)</b>		<b>(78)</b>	<b>(175)</b>	<b>(234)</b>	<b>(194)</b>
<b>19 TOTAL BORROWING AUTHORITY</b>	<b>389</b>		<b>281</b>		<b>210</b>		<b>316</b>	<b>17</b>	<b>172</b>	<b>347</b>

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

1/ This FY 2004 budget includes capital and expense estimates for the Power Business Line consistent with the conclusion of the business line's public review process, called Financial Choices. Approximately \$350 million in cost savings, deferrals and other actions are included in these estimates through FY 2006. The Transmission Business Line capital and expense estimates are based on the TBL rate Settlement Agreement and will form the basis for the initial transmission 2004 rate proposal. Capital investment levels also reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process. In addition, estimates included in this budget also reflect 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. FY 2002 cost estimates are based on audited actual results.

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 in the Pacific Northwest.

- 2/ The Power Business Line 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 & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates.
- 4/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of funding estimates.
- 5/ 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 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 "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.

BP-3

**CURRENT SERVICES**  
(in millions of dollars)

**CAPITAL TRANSFERS**

Amortization:  
 20 BPA Bonds  
 21 Bureau Bonds  
 22 BPA Appropriations  
 23 Corps Appropriations  
 24 **TOTAL CAPITAL TRANSFERS**

2002 Pymts
308
0
24
173
<b>505</b>

**FISCAL YEAR**

2003 Pymts
170
18
26
98
<b>312</b>

2004 Pymts	2005 Pymts	2006 Pymts	2007 Pymts	2008 Pymts
124	179	144	241	248
1	0	0	0	0
17	134	16	24	11
80	115	120	59	131
<b>222</b>	<b>428</b>	<b>280</b>	<b>324</b>	<b>390</b>

25 **FULL-TIME EQUIVALENT (FTE)**

<b>3,121</b>
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**STAFFING**

<b>3,260</b>
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<b>3,252</b>	<b>3,237</b>	<b>3,230</b>	<b>3,204</b>	<b>3,204</b>
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**PROGRAM & FINANCING SUMMARY**

Current Services  
(in millions of dollars)

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

		est.						
		2002	2003	2004	2005	2006	2007	2008
Program by activities:								
Operating expenses:								
0.01	Power Business Line	1,894	1,872	2,100	2,126	2,015	1,390	1,408
0.02	Residential Exchange	144	143	143	143	143	143	143
Associated Project Costs:								
0.05	Bureau of Reclamation	51	59	63	65	67	68	70
0.06	Corps of Engineers	132	135	140	144	149	153	157
0.07	Colville Settlement	21	19	20	21	21	23	23
0.19	U.S. Fish & Wildlife Service	15	15	16	17	18	19	20
0.20	Planning Council	8	9	9	9	9	9	9
0.21	Fish & Wildlife	144	156	134	139	144	148	153
0.23	Transmission Business Line	254	262	273	280	288	295	302
0.24	Conservation & Energy Efficiency	61	64	63	63	64	64	64
0.25	Interest	415	416	436	458	489	554	574
0.26	Pension and Health Benefits 1/	55	35	31	27	23	21	18
0.91	<b>Total operating expenses 2/</b>	<b>3,194</b>	<b>3,185</b>	<b>3,428</b>	<b>3,492</b>	<b>3,430</b>	<b>2,887</b>	<b>2,941</b>
Capital investment:								
1.01	Power Business Line	73	129	105	94	36	81	114
1.02	Transmission Services	259	330	330	231	131	270	344
1.03	Conservation & Energy Efficiency	29	47	28	21	8	19	28
1.04	Fish & Wildlife	6	36	36	30	11	25	36
1.05	Capital Equipment	22	44	26	16	5	9	16
1.06	Capitalized Bond Premiums	0	0	3	2	1	2	3
1.07	<b>Total Capital Investment 3/</b>	<b>389</b>	<b>586</b>	<b>528</b>	<b>394</b>	<b>192</b>	<b>406</b>	<b>541</b>
1.08	Misc. Accounting Adjustments	289						
2.01	Projects Funded in Advanced	34	97	133	80	25	25	25
10.00	<b>Total obligations 4/</b>	<b>3,906</b>	<b>3,868</b>	<b>4,089</b>	<b>3,966</b>	<b>3,647</b>	<b>3,318</b>	<b>3,507</b>

The accompanying notes are an integral part of this table.

- 1/ See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates.
- 2/ Reflects expense obligations, not accrued expenses.
- 3/ Reflects capital obligations, not capital expenditures.
- 4/ This FY 2004 budget includes capital and expense estimates for the Power Business Line consistent with the conclusion of the business line's public review process, called Financial Choices. Approximately \$350 million in cost savings, deferrals and other actions are included in these estimates through FY 2006. The Transmission Business Line capital and expense estimates are based on the TBL rate Settlement Agreement and will form the basis for the initial transmission 2004 rate proposal. Capital investment levels also reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process. In addition, estimates included in this budget also reflect 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. FY 2002 cost estimates are based on audited actual results.

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 in the Pacific Northwest.

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.

Total obligations for FY2002 in this budget have been reconciled to the Statement of Budgetary Resources (SBR). A miscellaneous accounting adjustment line was added to the Program and Finance schedule in this budget to reflect the net difference between total operating expenses and total capital investment per this budget versus the SBR total obligations calculation. In addition, the total obligation amount for FY2002 throughout this budget has been adjusted to reflect the SBR. The SBR obligations take into account the net effects of certain balance sheet accounts as well as total expenditures.

**Program and Financing (continued)**

Current Services  
(in millions of dollars)

	est.						
	2002	2003	2004	2005	2006	2007	2008
Financing:							
21.90 Unobligated balance available, start of year: Treasury balance 3/	(121)	(240)	(240)	(240)	(240)	(240)	(240)
24.40 Unobligated balance available, end of year: Treasury balance 3/	(240)	(240)	(240)	(240)	(240)	(240)	(240)
25.00 Unobligated balance lapsing	0	0	0	0	0	0	0
<b>39.00 Budget authority (gross)</b>	<b>3,820</b>	<b>3,868</b>	<b>4,089</b>	<b>3,966</b>	<b>3,647</b>	<b>3,318</b>	<b>3,507</b>
Budget Authority:							
66.10 Contract Authority	235						
67.10 Permanent Authority: Authority to borrow (indefinite) 4/	390	281	210	316	17	172	347
69.00 Spending authority from off-setting collections	3,738	3,899	4,100	4,090	3,910	3,470	3,550
69.47 Portion applied to debt reduction 5/	(308)	(312)	(221)	(440)	(280)	(324)	(390)
<b>69.90 Spending authority from offsetting collections (adjusted)</b>	<b>3,430</b>	<b>3,587</b>	<b>3,879</b>	<b>3,650</b>	<b>3,630</b>	<b>3,146</b>	<b>3,160</b>
Relation of obligations to outlays:							
71.00 Total obligations	3,906	3,868	4,089	3,966	3,647	3,318	3,507
Obligated balance, start of year:							
72.47 Authority to borrow	487	397	397	397	397	397	397
74.47 Authority to borrow	(397)	(397)	(397)	(397)	(397)	(397)	(397)
87.00 Outlays (gross)	4,140	3,868	4,089	3,966	3,647	3,318	3,507
Adjustments to budget authority and outlays:							
Deductions for offsetting collections:							
88.00 Federal funds	(89)	(90)	(90)	(90)	(90)	(90)	(90)
88.40 Non-Federal sources	(3,650)	(3,807)	(4,010)	(4,000)	(3,820)	(3,380)	(3,460)
88.90 Total, offsetting collections	(3,739)	(3,897)	(4,100)	(4,090)	(3,910)	(3,470)	(3,550)
<b>89.00 Budget authority (net)</b>	<b>190</b>	<b>(29)</b>	<b>(11)</b>	<b>(124)</b>	<b>(263)</b>	<b>(152)</b>	<b>(43)</b>
<b>90.00 Outlays (net) 6/</b>	<b>401</b>	<b>(29)</b>	<b>(11)</b>	<b>(124)</b>	<b>(263)</b>	<b>(152)</b>	<b>(43)</b>

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

3/ Treasury balance and unobligated balance estimates assume that BPA will borrow the amount needed to finance the full capital program. Actual Treasury borrowing and cash balances will be different, depending on net revenues, Treasury interest rates, and other cash management factors. Borrowing could be higher such that cash balances at the end of each year could equal total reserves.

- 4/ The Permanent Authority: Authority to borrow (indefinite) amounts reflect both BPA's capital program financing needs and either the use of, or creation of, deferred borrowing. Deferred borrowing is created when, as a cash and debt management decision, BPA uses cash from revenues to liquidate capital obligations in lieu of borrowing. 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 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 borrowing authority and cash in the BPA Fund. The two amounts which comprise the net amount on line 67.15 above are as follows:

	FISCAL YEAR						
	2002	2003	2004	2005	2006	2007	2008
<b>Borrowing Authority:</b>							
to finance capital obligations	388	586	528	394	192	406	541
to finance other obligations	1	(305)	(318)	(78)	(175)	(234)	(194)
<b>Total Borrowing Authority (67.15)</b>	<b>389</b>	<b>281</b>	<b>210</b>	<b>316</b>	<b>17</b>	<b>172</b>	<b>347</b>

- 5/ Includes amortization of BPA and Corps of Engineers appropriations and amortization of BPA bonds. Line 69.47 is referred to as capital transfers on BP-3.
- 6/ 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 outlay estimates could change due to changing market conditions, hydro conditions and the 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 CRAC adjustments, reduced cost estimates, 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, however causing the same net outlay result. Adjustments for depreciation, 4(h)(10)(C) and Fish Cost Contingency Fund credits are also assumed.

**CAPITAL OBLIGATIONS/OUTLAYS**  
**With Proposed Borrowing Authority Legislation**

(in millions of dollars)

**FISCAL YEAR**

BP-2	2002		2003		2004		2005	2006	2007	2008
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
10 Conservation & Energy Efficiency Services	29	29	47	47	28	28	26	27	28	28
11 Transmission Business Line	259	259	330	330	330	330	281	422	392	344
12 Associated Project Costs - Capital	73	73	129	129	105	105	114	117	118	114
13 Fish & Wildlife	6	6	36	36	36	36	36	36	36	36
14 Capital Equipment	22	22	44	44	26	26	19	17	13	16
15 Capitalized Bond Premiums	0	0	0	0	3	3	3	3	3	3
16 <b>TOTAL CAPITAL INVESTMENTS</b> <sup>1/</sup>	<b>389</b>	<b>389</b>	<b>586</b>	<b>586</b>	<b>528</b>	<b>528</b>	<b>479</b>	<b>622</b>	<b>590</b>	<b>541</b>

1/ The Power Business Line includes Fish & Wildlife, Residential Exchange, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately

**TOTAL OBLIGATIONS/ OUTLAYS** <sup>3/</sup>

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 funding estimates.

The Administration is proposing a \$700 million increase in Bonneville's borrowing authority for planned infrastructure investments. This table assumes a \$700 million increase in capital investments over FYs 2005-2007.

**BONNEVILLE POWER ADMINISTRATION  
BPA STATUS of BORROWING  
CURRENT LEGISLATION**  
(in millions of dollars)

BP-4A

Fiscal Year

	2002			2003			
	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out- standing	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out- standing
<b>Start-of-Year: Total</b>	2,997	3,039	2,689	2,649	3,078	2,764	2,770
<b>Plus: Annual Increase 1/ Cum.-Annual Borrowing A. Increase Treasury Borrowing (Cash)</b>	389	389	389	586	586	586	586
<b>Less: Total BPA Bond Amortization</b>	308	308	308	170	170	170	170
<b>Net Increase/(Decrease): Total</b>	81	81	81	416	416	416	416
<b>Cum.-End-of-Year: Total</b>	3,078	2,764	2,770	3,065	3,494	3,180	3,186
<b>Total Remaining Borrowing Authority</b>			<u>980</u>				<u>564</u>
<b>Total Legislated Borrowing Authority</b>			3,750				3,750

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

1/ 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. For the preparation of this budget, BPA minimizes its level of Federal debt financing by assuming an optimal allocation of borrowing resources between the Transmission System Act cap and the

Northwest Power Act cap. In addition, BPA continues to seek a reduction in its level of debt financing through the following: a) further reduction in capital spending, B) revenue financing, and c) exploring the use of third-party financing, if feasible.

Capital investments reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process.

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 in the Pacific Northwest.

**BONNEVILLE POWER ADMINISTRATION**  
**BPA STATUS of BORROWING**  
**CURRENT LEGISLATION**  
(in millions of dollars)

BP-4B

Fiscal Year

	2004				2005			
	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out-standing	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out-standing
<b>Start-of-Year: Total</b>	3,065	3,494	3,180	3,186	3,468	3,897	3,583	3,589
<b>Plus: Annual Increase 1/</b>								
Cum.-Annual Borrowing A. Increase	527	527	527		394	394	394	
Treasury Borrowing (Cash)				527				394
<b>Less:</b>								
Total BPA Bond Amortization 2/	124	124	124	124	179	179	179	179
<b>Net Increase/(Decrease):</b>								
Total	403	403	403	403	215	215	215	215
Cum.-End-of-Year: Total	3,468	3,897	3,583	3,589	3,683	4,112	3,798	3,804
<b>Total Remaining Borrowing Authority</b>				<u>161</u>				<u>(54)</u>
<b>Total Legislated Borrowing Authority</b>				3,750				3,750

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Northwest Power Act cap. In addition, BPA continues to seek a reduction in its level of debt financing through the following: a) further reduction in capital spending, B) revenue financing, and c) exploring the use of third-party financing, if feasible.

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**BONNEVILLE POWER ADMINISTRATION**  
**BPA STATUS of BORROWING**  
**CURRENT LEGISLATION**  
(in millions of dollars)

BP-4C

Fiscal Year

	2006				2007			
	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out-standing	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out-standing
<b>Start-of-Year: Total</b>	3,683	4,112	3,798	3,804	3,731	4,160	3,846	3,852
<b>Plus: Annual Increase 1/</b>								
Cum.-Annual Borrowing A. Increase	192	192	192		406	406	406	
Treasury Borrowing (Cash)				192				406
<b>Less:</b>								
Total BPA Bond Amortization 2/	144	144	144	144	241	241	241	241
<b>Net Increase/(Decrease):</b>								
Total	48	48	48	48	165	165	165	165
Cum.-End-of-Year: Total	3,731	4,160	3,846	3,852	3,896	4,325	4,011	4,017
<b>Total Remaining Borrowing Authority</b>				<u>(102)</u>				<u>(267)</u>
<b>Total Legislated Borrowing Authority</b>				3,750				3,750

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

1/ 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. For the preparation of this budget, BPA minimizes its level of Federal debt financing by assuming an optimal allocation of borrowing resources between the Transmission System Act cap and the Northwest Power Act cap. In addition, BPA continues to seek a reduction in its level of debt financing through the following: a) further reduction in capital spending, B) revenue financing, and c) exploring the use of third-party financing, if feasible.

Capital investments reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process.

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 in the Pacific Northwest.

**BONNEVILLE POWER ADMINISTRATION  
BPA STATUS of BORROWING  
CURRENT LEGISLATION**  
(in millions of dollars)

BP-4D

Fiscal Year

		<b>2008</b>			
		Net Capital		Net Capital	Bonds
		Net Capital	Obs Subject to BA	Capital Expend.	Out-standing
		Obs			
<b>Start-of-Year: Total</b>		3,896	4,325	4,011	4,017
<b>Plus: Annual Increase 1/</b>					
Cum.-Annual Borrowing A. Increase	541	541	541		
Treasury Borrowing (Cash)					541
<b>Less:</b>					
Total BPA Bond Amortization 2/	248	248	248	248	248
<b>Net Increase/(Decrease):</b>					
Total	293	293	293	293	293
Cum.-End-of-Year: Total	4,189	4,618	4,304	4,310	
<b>Total Remaining Borrowing Authority</b>					<u>(560)</u>
<b>Total Legislated Borrowing Authority</b>					3,750

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

1/ 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. For the preparation of this budget, BPA minimizes its level of Federal debt financing by assuming an optimal allocation of borrowing resources between the Transmission System Act cap and the Northwest Power Act cap. In addition, BPA continues to seek a reduction in its level of debt financing through the following: a) further reduction in capital spending, B) revenue financing, and c) exploring the use of third-party financing, if feasible.

Capital investments reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process.

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 in the Pacific Northwest.



**BONNEVILLE POWER ADMINISTRATION  
BPA STATUS of BORROWING  
PROPOSED LEGISLATION**  
(in millions of dollars)

BP-4A

Fiscal Year

	2002			2003			
	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out-standing	Net Capital Obs	Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out-standing
<b>Start-of-Year: Total</b>	2,997	3,039	2,689	2,649	3,078	2,764	2,770
<b>Plus: Annual Increase 1/ Cum.-Annual Borrowing A. Increase Treasury Borrowing (Cash)</b>	389	389	389	586	586	586	586
<b>Less: Total BPA Bond Amortization</b>	308	308	308	170	170	170	170
<b>Net Increase/(Decrease): Total</b>	81	81	81	416	416	416	416
<b>Cum.-End-of-Year: Total</b>	3,078	2,764	2,770	3,065	3,494	3,180	3,186
<b>Total Remaining Borrowing Authority</b>			<u>980</u>				<u>564</u>
<b>Total Legislated Borrowing Authority</b>			3,750				3,750

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

1/ 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 investments reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process.

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 in the Pacific Northwest.

**BONNEVILLE POWER ADMINISTRATION**  
**BPA STATUS of BORROWING**  
**PROPOSED LEGISLATION**  
(in millions of dollars)

BP-4B

Fiscal Year

	2004				2005			
	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out-standing	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out-standing
<b>Start-of-Year: Total</b>	3,065	3,494	3,180	3,186	3,468	3,897	3,583	3,589
<b>Plus: Annual Increase 1/</b>								
Cum.-Annual Borrowing A. Increase	527	527	527		479	479	479	
Treasury Borrowing (Cash)				527				479
<b>Less:</b>								
Total BPA Bond Amortization 2/	124	124	124	124	179	179	179	179
<b>Net Increase/(Decrease):</b>								
Total	403	403	403	403	300	300	300	300
Cum.-End-of-Year: Total	3,468	3,897	3,583	3,589	3,768	4,197	3,883	3,889
<b>Total Remaining Borrowing Authority</b>				<u>861</u>				<u>561</u>
<b>Total Legislated Borrowing Authority</b>				4,450				4,450

The accompanying notes are an integral part of this table.

1/ 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 investments reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process.

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**BONNEVILLE POWER ADMINISTRATION  
BPA STATUS of BORROWING  
PROPOSED LEGISLATION**  
(in millions of dollars)

BP-4C

Fiscal Year

	2006				2007			
	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out-standing	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out-standing
<b>Start-of-Year: Total</b>	3,768	4,197	3,883	3,889	4,246	4,675	4,361	4,367
<b>Plus: Annual Increase 1/ Cum.-Annual Borrowing A. Increase Treasury Borrowing (Cash)</b>	622	622	622	622	590	590	590	590
<b>Less: Total BPA Bond Amortization 2/</b>	144	144	144	144	241	241	241	241
<b>Net Increase/(Decrease): Total</b>	478	478	478	478	349	349	349	349
<b>Cum.-End-of-Year: Total</b>	4,246	4,675	4,361	4,367	4,595	5,024	4,710	4,716
<b>Total Remaining Borrowing Authority Total Legislated Borrowing Authority</b>				<u>83</u>				<u>(266)</u>
				4,450				4,450

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Capital investments reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process.

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 in the Pacific Northwest.

**BONNEVILLE POWER ADMINISTRATION  
BPA STATUS of BORROWING  
PROPOSED LEGISLATION**

(in millions of dollars)

BP-4D

Fiscal Year

		<b>2008</b>			
		Net Capital		Net Capital Expend.	Bonds Out- standing
Net Capital Obs	Obs Subject to BA	Net Capital Obs	Obs Subject to BA		
<b>Start-of-Year: Total</b>		4,595	5,024	4,710	4,716
<b>Plus: Annual Increase 1/ Cum.-Annual Borrowing A. Increase</b>		541	541	541	
Treasury Borrowing (Cash)					541
<b>Less:</b>					
Total BPA Bond Amortization 2/		248	248	248	248
<b>Net Increase/(Decrease):</b>					
Total		293	293	293	293
Cum.-End-of-Year: Total		4,888	5,317	5,003	5,009
<b>Total Remaining Borrowing Authority</b>					<u>(559)</u>
<b>Total Legislated Borrowing Authority</b>					4,450

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

1/ 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 investments reflect management decisions from BPA's Cross-Agency Capital Allocation Board review process modified to reflect cost reductions from the Financial Choices process.

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 in the Pacific Northwest.

**TREASURY PAYMENTS**

(in millions of dollars)

		FISCAL YEAR						
		2002	2003	2004	2005	2006	2007	2008
<b>A.</b>	<b>INTEREST ON BONDS &amp; APPROPRIATIONS</b>							
	<b>Bonneville Bond Interest</b>							
1	Bonneville Bond Interest (net)	89	124	138	164	194	248	270
2	AFUDC 1/	58	24	30	27	26	21	18
	<b>Appropriations Interest</b>							
3	Bonneville	67	65	63	62	62	61	59
4	Corps of Engineers 2/	199	167	175	174	174	186	186
5	Lower Snake River Comp. Plan	16	16	16	16	16	16	16
6	Bureau of Reclamation Interest 3/	44	44	42	42	42	42	42
<b>7</b>	<b>Total Bond and Approp. Interest</b>	<b>473</b>	<b>440</b>	<b>464</b>	<b>485</b>	<b>514</b>	<b>574</b>	<b>591</b>
<b>B.</b>	<b>ASSOCIATED PROJECT COST</b>							
8	Bureau of Reclamation Irrigation Assistance	0	1	0	0	0	0	3
9	Bureau of Rec. O & M 4/	0	0	0	0	0	0	0
10	Corps of Eng. O & M 4/	<b>7</b>	0	0	0	0	0	0
11	L. Snake River Comp. Plan O & M 4/	0	0	0	0	0	0	0
<b>12</b>	<b>Total Assoc. Project Costs</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>C.</b>	<b>CAPITAL TRANSFERS</b>							
	<b>Amortization</b>							
13	Bonneville Bonds 5/	308	170	124	179	144	241	248
14	Bureau of Reclamation Appropriations	0	18	1	0	0	0	0
15	Corps of Engineers Appropriations	173	98	80	115	120	59	131
	Lower Snake River Comp. Plan	0	0	0	0	0	0	0
17	Bonneville Appropriations	24	26	17	134	16	24	11
	<b>Total Capital Transfers</b>	<b>505</b>	<b>312</b>	<b>222</b>	<b>428</b>	<b>280</b>	<b>324</b>	<b>390</b>
<b>D.</b>	<b>OTHER PAYMENTS</b>							
18	Unfunded CSRS Liability 6/	55	35	31	27	23	21	18
<b>21</b>	<b>TOTAL TREASURY PAYMENTS 7/</b>	<b>1,040</b>	<b>788</b>	<b>717</b>	<b>940</b>	<b>817</b>	<b>919</b>	<b>1,002</b>

The accompanying notes are an integral part of this table.

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

2/ Includes interest on construction funding for Corps of Engineers (Corps) fish bypass facilities at Corps dams in the Columbia River Basin, including Lower Monumental, Ice Harbor, and The Dalles

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

	FISCAL YEAR	2002	2003	2004	2005	2006	2007	2008
Bureau of Reclamation		51	59	63	65	67	68	70
Corps of Engineers		125	135	140	144	149	153	157
Lower Snake River comp Plan		15	15	16	17	18	19	20

Bureau O&M budget estimates do not reflect approximately \$10 million in Bureau of Reclamation cost savings of which \$3 million can be spent in a single fiscal year.

Starting in FY 2003 direct funding for Corps is expected to be accomplished through a transfer appropriation fund symbol. This will assure that the Bonneville Fund contains both the obligation and outlay for Corps direct funded O&M, as is the current Corps capital direct funding.

Bonneville, through FY 2006, also directly funds the Corps of Engineers \$6 million annually for small capital power O & M items. Funding for these small capital power items is included within the Power Business Line capital budget.

5/ FY2002 payment includes a portion of future planned amortization consistent with BPA's capital strategy plan and debt optimization plan.

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

**OBJECT CLASSIFICATION STATEMENT**

(in millions of dollars)

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

DIRECT OBLIGATIONS

**ESTIMATES**

	<b>2002</b>	<b>2003</b>	<b>2004</b>
11.1 Full-time permanent	187	200	211
11.3 Other than full-time permanent	3	3	3
11.5 Other personnel compensation	18	19	20
<b>11.9 Total personnel comp.</b>	<b>208</b>	<b>222</b>	<b>234</b>
12.1 Civilian personnel benefits	49	52	55
21.0 Travel and transportation of persons	9	10	10
22.0 Transportation of things	6	7	7
23.1 Rental payments to GSA	11	12	12
23.2 Rents, other	11	12	13
23.3 Communication, utilities & misc. charges	6	6	6
24.0 Printing and reproduction	0	0	0
25.1 Consulting Services	12	13	13
25.2 Other services	2,803	2,690	2,846
25.3 Purchases from Government Accounts	196	210	222
25.5 R & D Contracts	2	2	2
26.0 Supplies and materials	43	46	48
31.0 Equipment	25	26	28
32.0 Lands and structures	23	24	26
41.0 Grants, subsidies, contributions	25	26	28
43.0 Interest and dividends	477	510	539
99.0 Subtotal obligations	3,906	3,868	4,089
<b>99.9 Total obligations</b>	<b>3,906</b>	<b>3,868</b>	<b>4,089</b>

**Estimate of Proprietary Receipts  
(in millions of dollars)**

	Fiscal Year						
	2002	2003	2004	2005	2006	2007	2008
Bureau Interest	43	44	42	42	42	42	42
Bureau Amortization	0	18	1	0	0	0	0
Bureau O&M	0	0	0	0	0	0	0
Bureau Irrig. Assist.	0	1	0	0	0	0	3
Revenues Collected by Bureau	-7						
Distributed in Treasury Account(credit)		-7	-7	-7	-7	-7	-7
Colville Settlement (credit)	-5	-5	-5	-5	-5	-5	-5
<b>Total 1/</b>	<b>31</b>	<b>51</b>	<b>31</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>33</b>
Corps O& M	7						
CSRS	55	35	31	27	23	21	18
<b>Total 2/</b>	<b>62</b>	<b>35</b>	<b>31</b>	<b>27</b>	<b>23</b>	<b>21</b>	<b>18</b>

1/ Includes amortization of appropriations and irrigation assistance, and interest costs for the Bureau of Reclamation.

The cost of power O&M for Bureau of Reclamation is no longer included in Proprietary Receipts due to Direct Funding by Bonneville. Represents transfers to Account #895000.26

2/ The costs of power O&M for Corps of Engineers 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)

	2002	2003	2004	2005	2006	2007	2008
Bureau of Reclamation	51	59	63	65	67	68	70
Corps of Engineers	125	135	140	144	149	153	157
Lower Snake River comp Plan	15	15	16	17	18	19	20

Bureau O&M budget estimates do not reflect approximately \$10 million in Bureau of Reclamation cost savings of which \$3 million can be spent in a single fiscal year.

Starting in FY 2003 direct funding for Corps is expected to be accomplished through a transfer appropriation fund symbol. This will assure that the Bonneville Fund contains both the obligation and outlay for Corps direct funded O&M, as is the current Corps capital direct funding.

Bonneville, through FY 2006, also directly funds the Corps of Engineers \$6 million annually for small capital power O & M items. Funding for these small capital power items is included within the Power Business Line capital budget.

See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates and the impact of proposed legislative funding.

**Executive Summary**  
**BPA Fish and Wildlife MOA Funding**  
(Dollars in Millions)  
April 2, 2002

	FY	Actual 1996	Actual 1997	Actual 1998	Actual 1999	Actual 2000	Actual 2001	96-01 Total	96-01 Avg
<b>Direct Program Expenses</b>									
	MOA Plan	100.0	100.0	100.0	100.0	100.0	100.0	600.0	100.0
	Avg Expenditure Amount Available 1/	100.0	133.1	153.5	150.6	144.6	138.6		
	Actual (FY 1996-2001) 2/	68.5	82.2	104.9	108.2	108.2	101.1	573.0	95.5
	Carry Forward Balance 3/ 4/	31.5	50.9	48.6	42.5	36.4	37.5		
<b>Reimbursable F&amp;W Expenses of Other Agencies</b>									
	MOA Plan	38.4	40.5	40.5	40.5	40.5	40.5	240.9	40.2
	Avg Expenditure Amount Available	40.2	45.3	50.0	54.4	56.6	60.4		
	Actual (FY 1996-2001)	35.4	35.9	36.4	38.9	37.6	42.4	226.6	37.8
	Carry Forward Balance 4/	4.8	9.4	13.6	15.5	19.0	18.0		
<b>Capital Investments Fixed Expenses</b>									
	MOA Plan	73.1	87.2	105.7	117.7	129.3	129.3	642.3	107.1
	Avg Expenditure Amount Available 1/	111.5	151.9	190.3	233.3	278.4	325.2		
	Actual (FY 1996-2001)	73.0	76.3	74.2	76.1	77.2	77.1	453.9	75.7
	Carry Forward Balance 4/	38.5	75.6	116.1	157.2	201.2	248.1		
<b>Total</b>									
	MOA Plan	211.5	227.7	246.2	258.2	269.8	269.8	1,483.2	247.2
	Avg Expenditure Amount Available 1/	251.7	330.3	393.8	438.3	479.6	524.2		
	Actual Expenditures	176.9	194.4	215.5	223.2	222.9	220.7		
	Carry Forward Balance 4/	74.8	135.9	178.3	215.1	256.6	303.6		
<b>River Operations</b>									
	Power Purchases	0.0	0.0	5.4	47.6	64.8	1,389.6	1,507.4	251.2
	Foregone Revenues	81.7	107.8	116.5	197.8	193.1	115.9	812.8	135.5
	Other 6/	1.6	2.4	-1.9	5.9	79.1	0.0	87.1	14.5
	<b>Total</b>	<b>83.3</b>	<b>110.2</b>	<b>120.0</b>	<b>251.3</b>	<b>337.0</b>	<b>1,505.5</b>	<b>2,407.3</b>	<b>401.2</b>
	<b>Actual Expenditures Grand Total</b>	<b>260.2</b>	<b>304.6</b>	<b>335.5</b>	<b>474.5</b>	<b>559.9</b>	<b>1,726.2</b>	<b>3,660.9</b>	<b>610.1 5/</b>
	ESA Related Transmission Enhancements	0.0	12.7	1.6	0.1	0.9	1.9	17.2	2.9

**Assumptions:**

Expenditure Plan and River Operations equal display in BPA's FY 2003 Congressional Budget. Actual Expenditures for all expenses capital investments reflect FY 1996 - 2001 actual results. This funding stream shows the most likely accruals related to Obligations for the NWPPC prioritization process. Actual accruals may be more or less during a given year within the 6 year MOA period.

**Notes:**

1/ In addition, \$27 million per year in capital funding (borrowing) provided by BPA for the Direct Program through 2001. The Interest and Amortization for this is reflected in the Expenditures Plan for the Capital Investment category.

2/ This information is reported on an accrual basis. For Direct Program management purposes, BPA also reports these expenditures on an obligations basis. Typically the accruals lag the obligations, since not all funds are expended in the year in which they are obligated.

3/ BPA's FY 1996 - 2001 Fish and Wildlife Program Expense Budget is \$100 million per year. Actual expenses for FY 1996 - 2001 were approximately \$37.5 million less than what was available.

4/ Original MOA Plan included interest at 5.093 percent for FY 1999 - 2001. The actual interest rate is determined annually (10/1). The interest rate for FY 1996 is 5.083%, 1997 is 5.093%, 1998 is 4.221%, 1999 is 4.864%, 2000 is 6.193%.

5/ During the initial discussions when developing the MOA, the "96-01 Avg" was estimated to be about \$435 million.

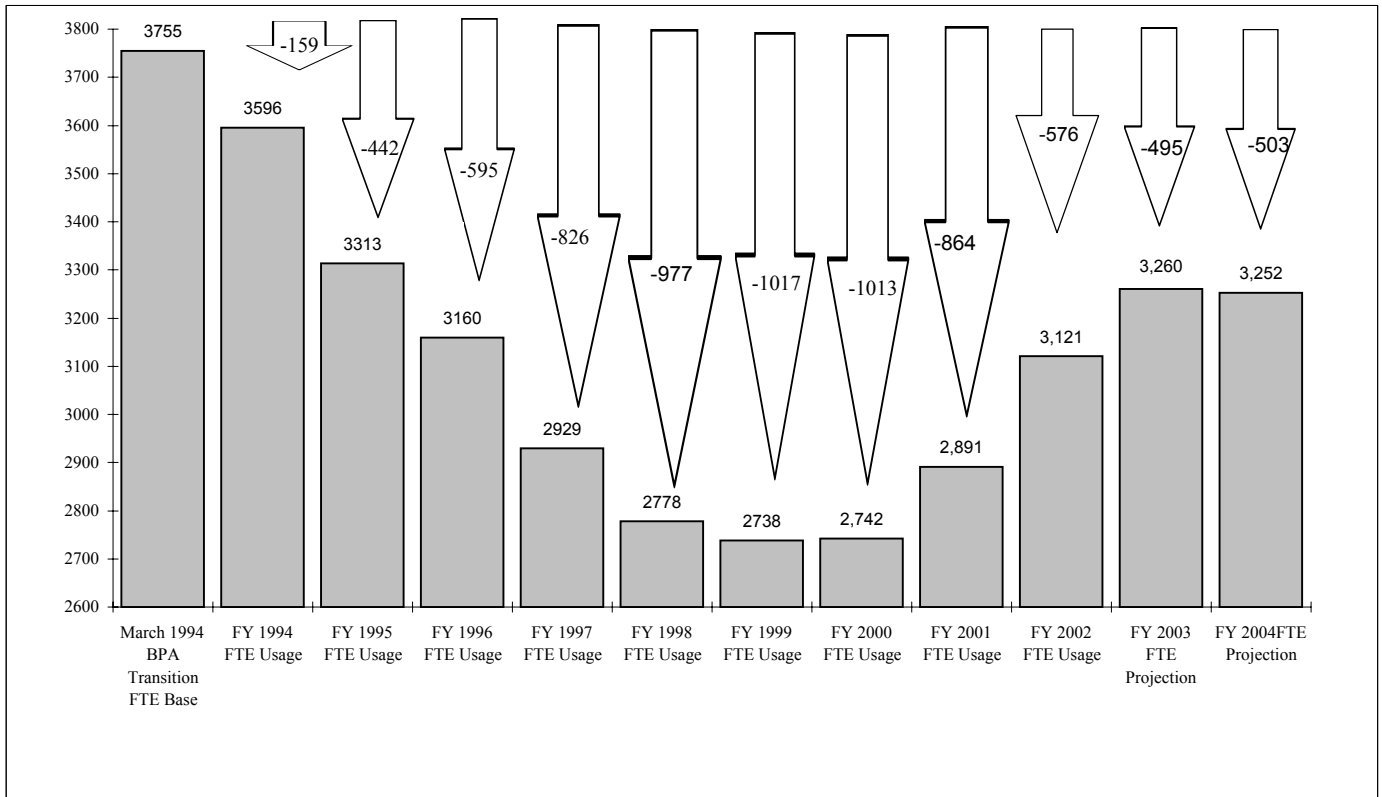
6/ These estimated costs are related to limitations placed on operating ranges (forebay levels and generator efficiency) and other operations for fish which produce effects on power production not identified in Hydro regulation models.

7/ No agreement has been reached at this time on BPA's Fish and Wildlife budget for fiscal years beyond 2001. BPA worked with Columbia Basin tribes, state and federal agencies, and public interest groups to develop an expected range for BPA's fish & wildlife costs for 2002-

2006. As of July 2000 the total estimated annual average financial impact on BPA, for the region's fish and wildlife programs ranges from \$430 million to over \$781 million per year. This range of costs was used to develop the rate proposal for the 2002-2006 power rate case and is consistent with this budget.



**BONNEVILLE FTE  
(Revised January 2003)**



BPA's March 1994 baseline for FY 1994 was the number of filled positions (permanent and temporary, full and part-time, including student programs charged against FTE allocations) whose incumbents were actually on board and charging against BPA FTE. BPA identified this as baselines for both employment and FTE.

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, and 0 in FY 2002.

As part of its strategic staffing efforts and infrastructure project requirements, Bonneville has seen an increase in FTE levels since FY 2000. This increase, peaking in FY 2003, is designed in part to accommodate a shift in critical skills needed to meet the demands of succeeding in a deregulated energy market.