United States General Accounting Office

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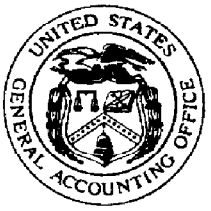
Briefing Report to the Ranking Minority Member, Committee on Appropriations, U.S. Senate

April 1994

BONNEVILLE POWER ADMINISTRATION

Borrowing Practices and Financial Condition



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United States
General Accounting Office
Washington, D.C. 20548

Accounting and Information
Management Division

B-256491

April 19, 1994

The Honorable Mark Hatfield
Ranking Minority Member
Committee on Appropriations
United States Senate

Dear Senator Hatfield:

This briefing report responds to your request for information on the borrowing practices and overall financial condition of the Bonneville Power Administration (BPA). It documents the briefings we have provided your office.

Background

BPA markets and distributes power generated at federal dams on the Columbia River and its tributaries. The agency (1) sells power from the dams and other generating plants to public and private utilities and direct service industries and (2) builds and operates transmission lines that deliver the electricity.

BPA is part of the Federal Columbia River Power System (FCRPS), which also includes the power-related operations of the U.S. Army Corps of Engineers and the Bureau of Reclamation. The Corps and Bureau are responsible for constructing, operating, and maintaining the FCRPS dams. The three entities are separately managed and financed, but the facilities are operated as an integrated power system with combined financial results. Because BPA is responsible for servicing all of the debt and financing all of the operations of the FCRPS, it was necessary to look at the entire FCRPS to review BPA's borrowing practices and financial condition.

BPA is one of the federal government's six power marketing administrations. Although it is a part of the U.S. Department of Energy, BPA receives no annual appropriation. The agency is required by law to set its rates to generate revenues sufficient to recover all costs and expenses incurred by the BPA Administrator pursuant to law. BPA, however, does have authority to borrow for its capital programs by issuing bonds to the U.S. Treasury. Bond borrowing authority is capped at $3.75 billion ($2.5 billion for transmission and other and $1.25 billion for conservation and renewable energy investments). BPA also is required to repay funds

appropriated to the Corps and Bureau (appropriated debt[1]) for investment in facilities attributable to power generation and certain fish and wildlife capital projects. BPA is required to make annual payments to Treasury that include debt servicing costs[2] on bonds, appropriated debt, and annual operating expenses of the Corps and Bureau.

Results in Brief

For nearly all of its capital investments, BPA uses debt financing—that is, BPA borrows money and repays the debt, with interest, through future revenues. Substantially all of BPA's new borrowing is projected to come from Treasury. By contrast, investor-owned utilities, public utilities, and federal entities like the Tennessee Valley Authority (TVA) generally use a higher portion of their current revenues to pay for capital expenditures than BPA does. Based on BPA's current projections, the bond borrowing caps will be reached in 1997 for transmission and other and in 1999 for conservation and renewable energy investments.

BPA faces significant operating and financial risks because of its heavy reliance on borrowing, recent operating losses, and various uncertainties. BPA has taken several steps to reduce its risks, including deferral of capital programs, increasing rates, cutting costs, and negotiating an interim rate adjustment that is triggered if reserves fall below a certain level, but the risks remain. In the short term, BPA's low financial reserves[3] provide little flexibility to respond to further operating losses, increasing the possibility that BPA would be unable to make its annual payment to Treasury. In the longer term, BPA's financial viability could also be jeopardized if the gap between BPA rates and the cost of alternative energy sources continues to narrow. Such a scenario could cause some BPA customers to meet their energy needs elsewhere, leaving a dwindling pool of ratepayers to pay off the substantial debt accumulated from previous years.

Borrowing Practices

Although most utilities rely on some level of debt financing for their capital programs, BPA currently finances all of its capital programs—electrical generation and transmission, conservation and renewable resources, and fish and wildlife—using debt financing. As a result, BPA is more heavily leveraged than other utilities. For example,

[1]Appropriated debt represents funds appropriated to the Corps and Bureau for construction and replacement of Corps and Bureau generating facilities that by law BPA is required to repay, with interest, to Treasury.

[2]Debt servicing costs consist of interest expense and principal payments.

[3]Financial reserves represent cash plus "deferred borrowing." See appendix I for a discussion of deferred borrowing.

BPA's long-term debt in fiscal year 1991 was equal to 96 percent of its total assets, while the figures for public utilities, investor-owned utilities, and TVA were 67 percent, 37 percent, and 79 percent, respectively. BPA's total debt as of September 30, 1993, was $16.3 billion.

In 1990, BPA had proposed a plan that would have financed approximately 35 percent of its new capital investments from current revenues between 1992 and 2001, but it withdrew the proposal when customers objected to the resulting projected increase in electricity rates. Revenue financing increases current rates because it is essentially a down payment on capital investments. BPA adopted its current plan after more than a year-long public process with customers to examine a number of alternative risk mitigation/reserve funding policies. The 10-Year Financial Plan, issued in 1993, calls for the use of debt to finance all of its nearly $7 billion in capital programs through 2001. Such continued reliance on debt financing will result in BPA remaining highly leveraged.

BPA's past and future borrowing relies heavily on Treasury. BPA has three forms of debt—bonds, appropriated debt, and third-party financing.[4] BPA's plan for fiscal years 1993 through 2001 relies on Treasury for about 90 percent of its borrowing—76 percent from bonds and 14 percent from appropriated debt.

BPA's highly leveraged structure means that much of the agency's revenues go toward debt servicing costs. We estimate that approximately 54 percent of BPA's revenues were used to pay debt servicing costs in fiscal year 1993. The accessibility of low-interest Treasury financing plays a substantial role in BPA's approach to financing capital projects. The immediate effect on ratepayers is lessened by borrowing the money and repaying it over periods no greater than the investments' average useful life or 50 years, whichever is less, rather than by increasing current rates to pay the cost of capital projects.

If BPA is to proceed with its $7 billion capital program and borrowing plans, it will need congressional approval for an increase in its bond borrowing caps or access to other new sources of debt. At the end of fiscal year 1993, BPA had approximately $710 million remaining of its $2.5 billion in transmission and other authority and approximately $708 million

[4]Third-party financing refers to BPA's use of its contracting authority to acquire all or part of the generating capacity of power projects or other entities. Under this arrangement, BPA contracts to pay for all or part of the annual project budgets, including debt service, whether or not the projects are completed. In addition to five nuclear power projects, small hydro projects have been financed in this manner. BPA does not have the authority to borrow from non-federal sources.

remaining of its $1.25 billion authority for conservation and renewable energy investments.

Financial Condition

BPA has encountered financial difficulty in recent years. In fiscal years 1992 and 1993, it incurred operating losses of $274 million and $297 million, respectively. These losses resulted primarily from lower than expected waterflow for hydropower generation and deflated world aluminum prices (aluminum companies consume about one-fourth of BPA's power, but the industry is subject to drastic price shifts from year to year because of supply and demand). Rates for aluminum companies are indexed to the market price of aluminum. Low waterflow forced BPA to purchase more power than planned. BPA covered these losses using its financial reserves, which were $877 million at the end of fiscal year 1991. During fiscal years 1992 and 1993, BPA had initially planned to add $185 million to its reserves, but instead it had to deplete them by $671 million. At the end of fiscal year 1993, BPA's Reserves stood at $206 million, nearly a 10-year low.

BPA's management has taken several steps to deal with these losses, including a major refinancing of debt at lower interest rates, the deferral of many capital projects, across-the-board cuts in operating expenses, and a 15-percent rate increase for fiscal years 1994 through 1995. These steps are intended to (1) increase reserves to $370 million by October 1995 and (2) provide an 85-percent probability that BPA will be able to make its fiscal years 1994 through 1995 payments to the Treasury in full and on time. Also, through the Interim Rate Adjustment, BPA can trigger an increase in rates of up to 10 percent if reserves drop below $145 million at the end of fiscal year 1994. In past years, BPA's annual plans to increase reserves have varied from the amount of actual changes in reserves by as much as $500 million. BPA's forecasting is especially difficult because it rests on such unpredictable factors as weather (more specifically, the amount of streamflow on the Columbia and Snake rivers) and the price of aluminum on the world market. BPA is also burdened with substantial debt from nonenergy-producing investments. Approximately 30 percent of its debt servicing costs are for nonenergy-producing projects, principally mothballed nuclear power plants that never came on line.

Notwithstanding the actions BPA has taken, the agency's highly leveraged position and resultant debt servicing costs, combined with the current low reserve level, give BPA little flexibility in dealing with operating risks in the short term. Other factors, including potential costs for decommissioning nuclear plants and preserving threatened or endangered salmon on the

Columbia and Snake Rivers, further reduce BPA's flexibility. For now, BPA remains the lowest cost producer of electricity in the Northwest. The recent 15 percent rate increase has narrowed the gap between BPA's rates and the cost of alternative energy sources. As the gap closes, some of BPA's customers could go elsewhere for their electricity needs, leaving fewer ratepayers to service the accumulated debt.

Appendix I provides additional detail on the major points discussed in this letter. It also includes discussions on the financial impact of BPA borrowing on Treasury and BPA's use of deferred borrowing as a cash management tool.

Conclusions

We believe BPA's policy of using debt financing for substantially all capital programs is risky and leaves little flexibility for meeting future challenges. With 54 percent of 1993 revenue going to pay debt servicing costs, a substantial portion of BPA's costs are currently not controllable. Notwithstanding BPA's efforts to reduce controllable costs, actions that would change the financing of capital programs and the level of reserves may be necessary. This situation creates a dilemma for BPA since these efforts to improve flexibility would cause increases in rates and would further narrow the gap between BPA's rates and the cost of alternative energy sources.

Scope and Methodology

In response to your request, we (1) performed a technical analysis of FCRPS' historical and projected financial and operating information, including underlying assumptions, (2) reviewed relevant legislation, (3) reviewed investor-owned, public utility, and TVA financial statements and other financial information, and (4) interviewed BPA management. Our work was performed between May 1993 and March 1994 in accordance with generally accepted government auditing standards.

Certain information, such as the FCRPS 1993 Annual Report, was independently audited by Price Waterhouse (PW). PW issued an unqualified opinion on the FCRPS fiscal year 1993 financial statements, stating that the financial statements were fairly presented in all material respects. In addition, PW's assessment of BPA's internal controls revealed no material weaknesses. We did not audit, and do not express an opinion on, the data BPA provided to us or whether the underlying assumptions included in their projections are reasonable. In addition, we did not review the reasonableness of BPA's $7 billion capital program spending plan.

At the end of our field work, we discussed this report's contents with senior BPA officials, including the Assistant Administrator, Office of Financial Management. We have incorporated their comments in the report as appropriate.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan to make no further distribution until 30 days from the date of this letter. We will then send copies to the Secretary of Energy; the Secretary of the Treasury; the Director, Office of Management and Budget; the Chairman of the Senate Appropriations Committee; and interested congressional committees. Copies will also be made available to others upon request.

Please contact me at (202) 512-8549 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix II.

Sincerely yours,

John W. Hill, Jr.
Director, Audit Support and Analysis

Contents

Abbreviations

BPA	Bonneville Power Administration
FCRPS	Federal Columbia River Power System
GAAP	generally accepted accounting principles
PW	Price Waterhouse
TVA	Tennessee Valley Authority

BPA's Borrowing Practices and Financial Condition

GAO

BPA Treasury Borrowing and Capitalization Policies

Borrow for capital programs

Capitalization policy is to conform with GAAP
- environmental cleanup change
- fish & wildlife and conservation policy unique

Price Waterhouse 1993 audit concluded that capitalization and borrowing policies are materially appropriate

BPA Treasury Borrowing and Capitalization Policies

BPA's policy is to use debt financing for substantially all capital programs. BPA capitalizes items using criteria for generally accepted accounting principles (GAAP). GAAP generally allows items to be capitalized that provide future benefit to the entity (for example, building a dam).

BPA's capitalization policies contribute to a loss of financial flexibility. For instance, we found that beginning in fiscal year 1993, the agency began capitalizing, and thus debt financing, certain environmental cleanup costs. In addition, BPA's capitalization of fish and wildlife and conservation projects is not a standard industry practice. The periods of amortization used by BPA are 20 years for conservation and 15 years for substantial fish and wildlife investments, which correspond with the terms over which BPA recovers costs. Utilities typically do not capitalize these projects and, when they do, the amortization period is usually 10 years or less. It is important to note that the difference between BPA's capitalization policies and industry practice is not material to the FCRPS financial statements. Debt financing of these items reduces the impact on current rates but gives BPA more debt servicing costs and less flexibility in future years.

The independent auditors have concluded that BPA's capitalization policies are in all material respects appropriate under GAAP.

GAO

BPA Relies on Treasury Borrowing for Most Capital Programs

BPA's 10-Year Financial Plan anticipates

- approximately 90% of new borrowing from Treasury
- an increase in the Treasury bond borrowing cap

BPA Relies on Treasury Borrowing for Most Capital Programs

In total, nearly 90 percent of BPA's projected new debt (13.6 percent appropriated debt and 76 percent bonds) during fiscal years 1993 through 2001 would come from Treasury, thus increasing BPA's reliance on federal debt. The projected increase in bonds would require an increase in the $3.75 billion bond borrowing cap.

Table I.1: Projected Sources of New Debt for Fiscal Years 1993 Through 2001

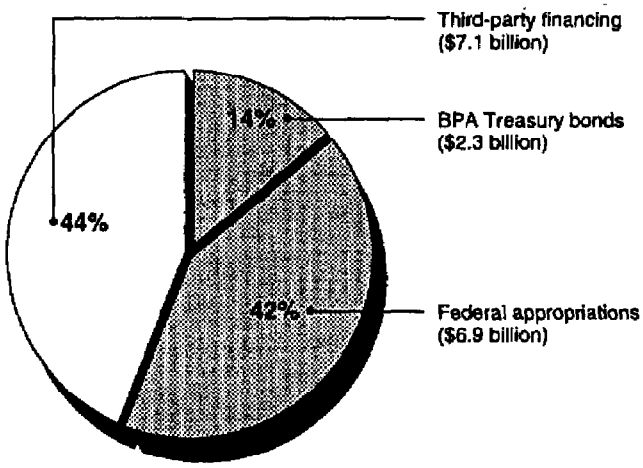
Dollars in millions

	Amount	Percentage
Appropriated debt	$ 938	13.6
BPA Treasury bonds	5,240	76.0
Third-party financing	720	10.4
Total new borrowing	**$6,898**	**100**

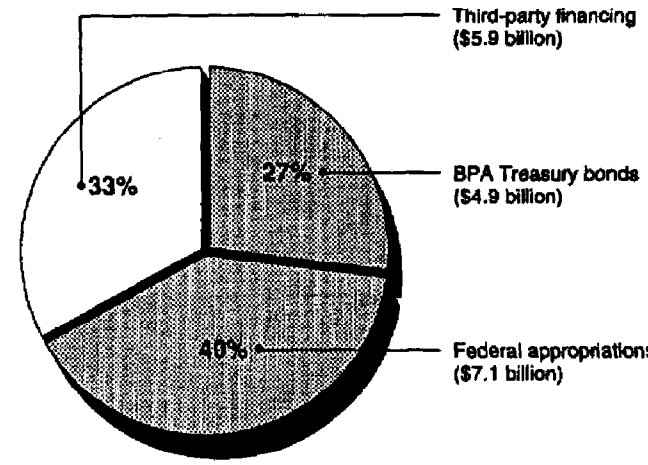
The 10-year financial plan projects issuing bonds to finance $5.24 billion for investments in transmission construction, conservation and renewable resources, and fish and wildlife projects. The plan also projects appropriated debt borrowing totaling $938 million during that period for improvements and replacements to power generating facilities. The remaining $720 million of BPA's projected new debt is from third-party financing.

GAO BPA Projects Increased Reliance on Treasury Borrowing

Total Debt as of September 30, 1993 $16.3 Billion



Total Debt Projected for Fiscal Year 2001 $17.9 Billion



BPA Projects Increased Reliance on Treasury Borrowing

BPA is responsible for servicing debt on two types of federal borrowing—appropriated debt and bonds. These two types of borrowing accounted for 56 percent of BPA's debt at the end of fiscal year 1993. BPA is projecting cumulative outstanding borrowing from these sources to increase to 67 percent by fiscal year 2001.

The projected increase in total debt from $16.3 billion in fiscal year 1993 to $17.9 billion in fiscal year 2001 is the result of BPA's 10-year capital program of nearly $7 billion, net of principal repayments.

GAO

Reasons Why BPA Is More Leveraged than Other Entities

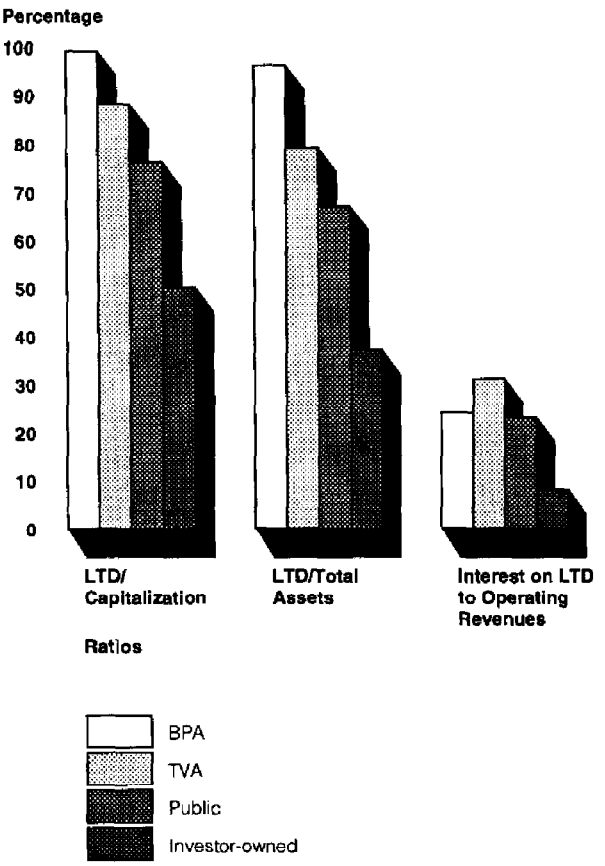
Treasury provides access to low-cost debt financing

Debt financing exerts less upward pressure on current rates

Reasons Why BPA Is More Leveraged Than Other Entities

Utilities generally rely on some level of debt financing of capital programs. BPA's heavy reliance on debt financing to meet its capital obligations is comparable to a similar governmental entity, the Tennessee Valley Authority (TVA). However, BPA has even greater reliance on debt financing than TVA and, compared to public and investor-owned utilities, BPA is significantly more leveraged. It should be noted that unlike some public and investor-owned utilities, ratepayers do not have ownership in FCRPS.

Figure I.1: BPA Is More Highly Leveraged Than Other Entities



Legend

LTD = Long-term debt

Sources: BPA's 1991 Annual Report; TVA's 1991 Annual Report; Department of Energy 1991 industry survey.

To illustrate the impact of this leveraged condition on operations, we found that for fiscal year 1991 approximately 24 percent of operating revenue was used to pay interest expense. However, interest increased to 36 percent and 37 percent, respectively, of operating revenues in fiscal years 1992 and 1993 due to decreased operating revenue and increased interest expense. We estimate that approximately 54 percent of BPA's revenues were used to pay debt servicing costs in fiscal year 1993. BPA's large fixed debt service costs leave it with reduced flexibility to react to changing market conditions.

We believe that BPA's current and planned use of 100-percent debt financing is partly due to the availability of relatively low-cost Treasury debt. Other entities of BPA's size and financial condition would have difficulty borrowing similar amounts at Treasury's interest rates. Also, debt financing exerts less upward pressure on current rates. BPA faces tremendous pressure from ratepayers to minimize current rates.

GAO

BPA Can Influence When Treasury Caps Are Reached

Capital programs spending determines when the $3.75 billion cap is reached

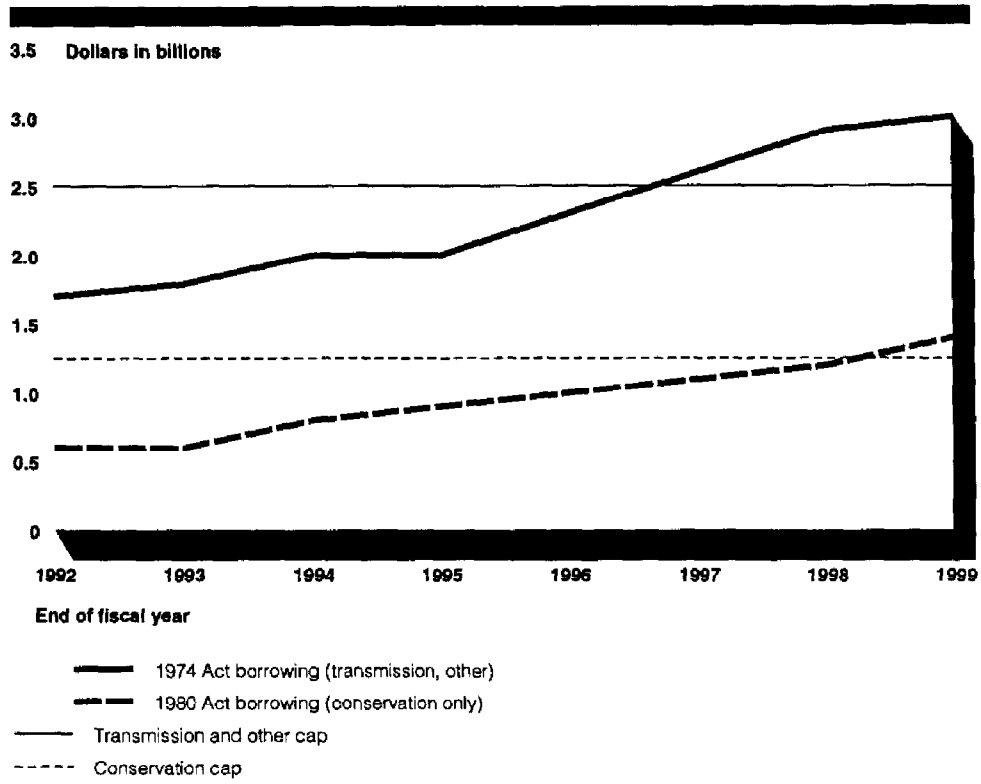
BPA has detailed plans for transmission, conservation, and fish and wildlife capital spending

BPA has deferred capital programs from fiscal years 1994 and 1995 to 1996 and 1997

BPA Can Influence When Treasury Caps Are Reached

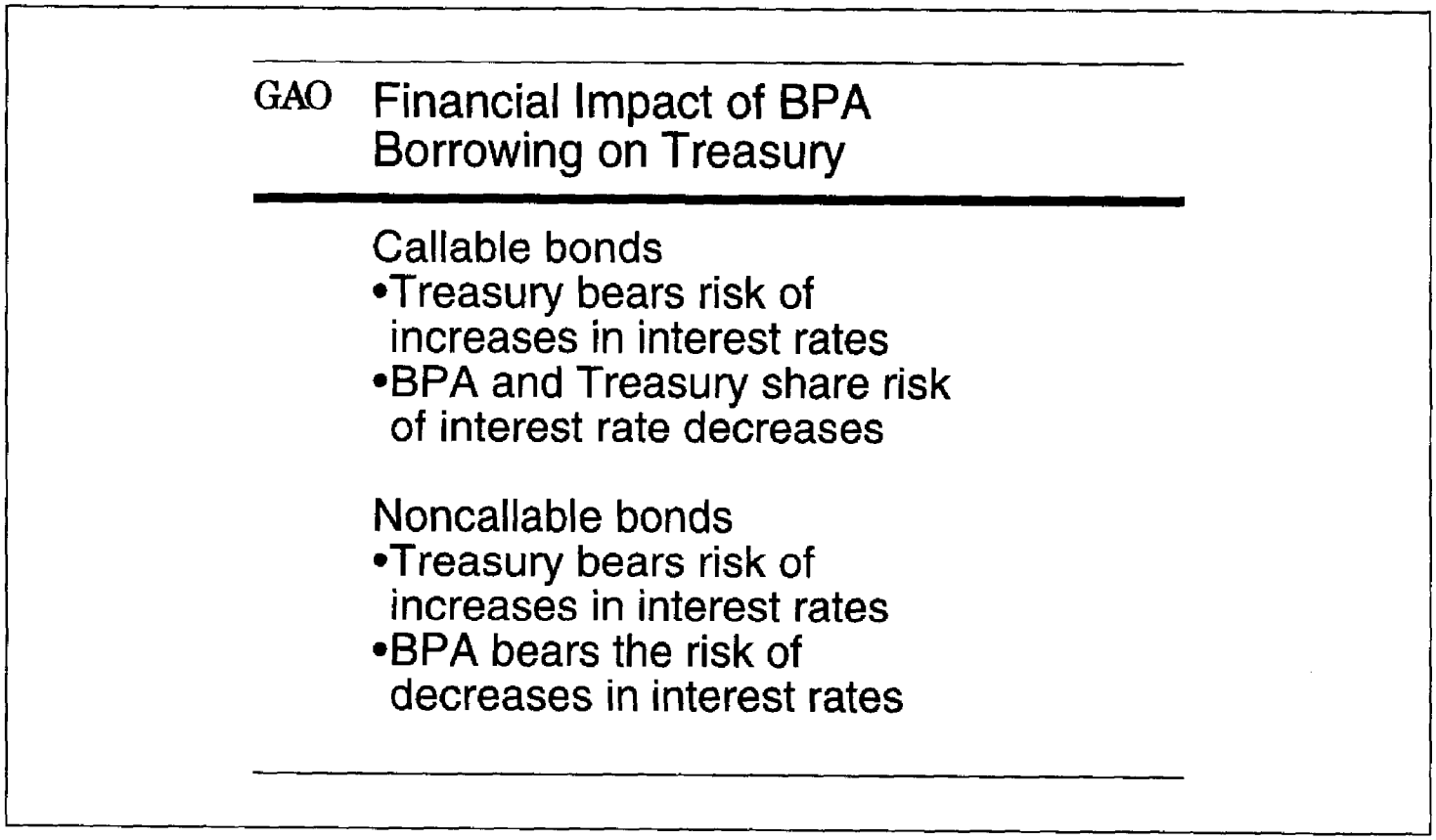
BPA estimates that the $2.5 billion transmission and other cap will be reached during fiscal year 1997, and that the $1.25 billion conservation and renewable energy investment cap will be reached during fiscal year 1999.

Figure I.2: Borrowing for Transmission and Conservation Is Projected to Exceed Caps



Because of BPA's policy of 100-percent debt financing, capital program estimates for transmission, conservation, and fish and wildlife spending combined with principal repayments determine when the $3.75 billion bond borrowing cap will be reached. BPA has detailed plans that support capital spending. Management deferred capital programs from the current rate period (fiscal years 1994 through 1995) to the next rate period (fiscal years 1996 through 1997). This action was taken to minimize the recent rate increase. If capital programs are deferred in the next rate period (fiscal years 1996 through 1997), the date when the bond borrowing caps is reached will be delayed.

BPA has several other options which, alone or in combination, could delay reaching the bond-borrowing caps. These options have varying degrees of feasibility. According to BPA, options currently available include revenue financing and greater use of third-party debt. Additional options that would require legislation include direct-market debt offerings, bank debt, and equity offerings.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Financial Impact of BPA Borrowing on Treasury
Callable bonds
•Treasury bears risk of increases in interest rates
•BPA and Treasury share risk of interest rate decreases
Noncallable bonds
•Treasury bears risk of increases in interest rates
•BPA bears the risk of decreases in interest rates

Financial Impact of BPA Borrowing on Treasury

Callable Bonds

At September 30, 1993, approximately $1.4 billion in callable[5] bonds were outstanding. Because these bonds have long-term maturities and fixed rates, Treasury bears the risk of interest rate increases. The risk of interest rates falling is shared, since BPA cannot usually refinance for the first 5 years of the loan.

BPA pays an average interest rate spread of one-half of 1 percent over Treasury's estimated average 24-year yield, which is intended to compensate Treasury for its risk. In addition, a call premium is paid to Treasury if BPA exercises the call at any time, usually after 5 years, and before its term is reached. BPA has taken advantage of low interest rates in recent years by refinancing significant portions of these bonds.

Noncallable Bonds

BPA has also issued bonds with no call provision and terms ranging from 3 to 20 years. At September 30, 1993, approximately $900 million of noncallable bonds were outstanding. For these bonds, Treasury bears the risk of interest rate increases and BPA bears the risk of interest rate decreases.

[5]Callable bonds give the issuer (for example, BPA) the right to retire portions of the bond issue before maturity if desired, but do not require it to do so.

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BPA Uses Deferred Borrowing as a Cash Management Tool

BPA temporarily funds capital programs from current revenues

BPA bonds are issued when cash used for temporary revenue financing is needed

Deferred borrowing appears to be appropriate and within BPA's authority

BPA Uses Deferred Borrowing as a Cash Management Tool

We found that "deferred borrowing," a term BPA uses, is a cash management tool. When cash is available, BPA will temporarily fund capital programs instead of borrowing. When BPA has low cash levels, deferred borrowing is then used to finance capital programs. Other factors, such as market interest rates, determine when and how much deferred borrowing is exercised at any given time. We found the use of deferred borrowing to be within BPA's authority.

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Planning for Sufficient Reserves Is Difficult

BPA's planned increases in reserves have varied from actual by as much as $500 million

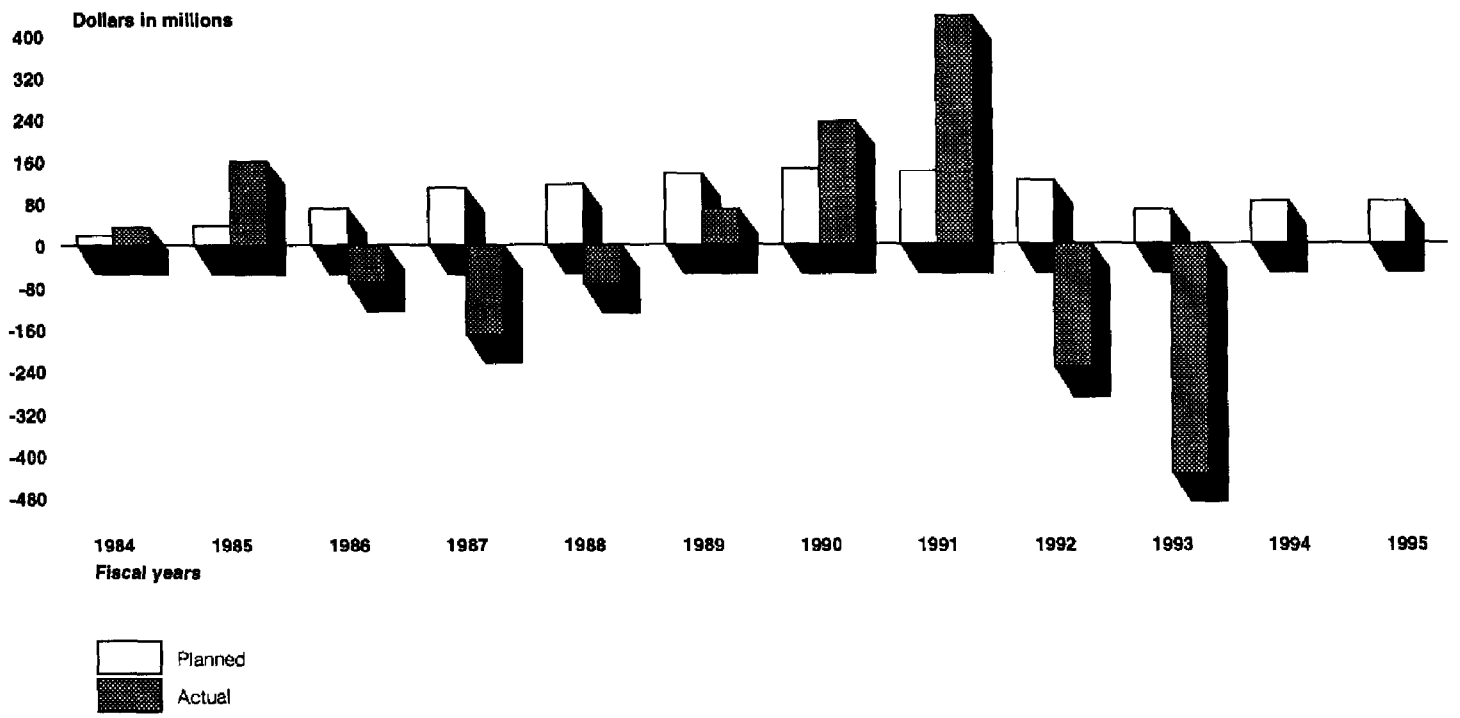
Major risk factors that affect BPA's reserves and net revenues
- streamflow
- aluminum prices
- other (e.g., economy)

Probability of making Treasury payment set at 85% for 1994-1995

Planning for Sufficient Reserves Is Difficult

BPA's plans to increase financial reserves from year to year have varied from the amount of actual changes in reserves by as much as $500 million despite BPA's thorough planning process. The two major risk factors causing this volatility in reserves and net revenues are streamflow and world aluminum prices. Figure I.3 shows the volatile effect these factors have had on BPA achieving planned reserve levels over time. Other risk factors, such as the economy, have had much less of an impact upon BPA's revenues and reserves.

Figure I.3: BPA Planned Increases in Reserves vs. Actual Changes for Fiscal Years 1984 Through 1993



A major goal of BPA's planning is to assure an acceptable probability of making its annual payments to Treasury each year. BPA has made this payment in full and on time since fiscal year 1984. For fiscal years 1994 and 1995, BPA's plans incorporated an 85 percent probability of making the payment in full and on time. BPA plans to increase that probability in accordance with the plan to 95 percent for the fiscal years 1996 through

1997 rate case. This increased probability would require BPA to assure that a relatively higher level of reserves be available at each year-end, which would, other factors being equal, result in an increase in rates. Figure I.4 shows historical and projected reserves.

Figure I.4: BPA Reserves: Actual for Fiscal Years 1983 Through 1993 and Projected for Fiscal Years 1994 Through 1997

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Factors Placing Upward Pressure on Future Rates

Irrigation payments

Nuclear decommissioning cost

Endangered Species Act requirements

Washington Nuclear Plants (WNP) 4 and 5 litigation

Factors Placing Upward Pressure on Future Rates

From a long-term perspective, BPA's debt of over $16 billion at September 30, 1993, leaves future ratepayers with a significant burden and level of fixed costs. Over $4 billion (27 percent) of BPA's debt is related to nonenergy-producing nuclear plants. In addition, BPA expects to make irrigation payments beginning in fiscal year 1997, placing further pressure on rates. Based on projections from the fiscal year 1993 rate case, the annual debt servicing costs related to the $16 billion of current debt and projected irrigation payments are approximately $1.3 billion from fiscal years 1996 until 2025.

Uncertainties—such as nuclear decommissioning costs for Trojan and potentially Washington Nuclear Plant 2, compliance with the Endangered Species Act, and the outcome of nuclear plant litigation—place additional pressure on BPA's future rates.

Even given the financial pressures BPA has faced, it still appears to be the low cost producer of electricity in the Pacific Northwest. However, some customers perceive a narrowing gap between BPA rates and the cost of alternative energy sources. This perception creates a risk that BPA could eventually lose customers if future rates increase significantly.

GAO Management Efforts

Debt refinancing

Program cuts

Budgetary reporting and control

Competitiveness project

Management Efforts

Management has taken steps which helped keep the fiscal year 1993 rate increase at approximately 15 percent. BPA's program of debt refinancing over the last several years for bonds and third-party financing improved cash flows. BPA has announced significant cuts in program plans, including capital expenditures, since the January 1993 publication of the financing plan. These cuts, which were one of BPA's responses to diminishing revenues and the 1993 rate case, have not significantly changed the agency's projected dates of reaching the bond caps.

Long-term initiatives include increased attention to budgetary reporting and controls and establishment of a project designed to improve BPA's future competitiveness. BPA recently instituted quarterly reporting to certain congressional committees on the results of its operations. The budgetary controls are intended to keep BPA's expenses for fiscal years 1994 and 1995 in line with the budgets from the fiscal year 1993 rate case. The competitiveness project is intended to result in a new business plan that will outline BPA's future strategic policy and resource level decisions. The effectiveness of these actions cannot be determined at this time.

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