TENNESSEE VALLEY AUTHORITY

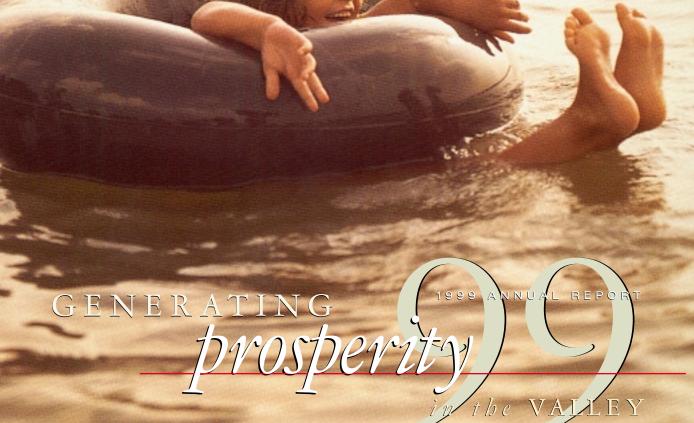




TABLE of Contents

- 1 Financial Highlights
- 2 Corporate Profile
- 4 Letter From the Chairman
- 7 Stimulating Sustainable Economic Growth
- 11 Supplying Low-Cost, Reliable Power
- 14 Supporting a Thriving River System
- 18 Highlights From 1999
- **20** Financial Table of Contents
- 21 Management's Discussion and Analysis
- **28** Financial Statements
- **33** Notes to Financial Statements
- 42 Auditor's and Management's Reports
- **43** Investor Information
- **44** 11-Year Comparative Data
- **46** Executive Committee
- **48** Forward-Looking Statements

Financial Highlights—Power Program

At September 30 or for the years ended September 30, as appropriate

(in millions)	1999	1998	Percent Change
Operating revenues	\$ 6,595	\$ 6,729	(2)
Operating expenses	(4,907)	(4,549)	8
Operating income	1,688	2,180	(23)
Other (expense) income, net	(9)	12	NM
Interest expense	(1,777)	(1,959)	(9)
Cumulative effect of change in accounting principle	217	_	NM
Net income	\$ 119	\$ 233	NM
Total assets	\$ 33,386	\$ 33,615	(1)
Discount notes	\$ 982	\$ 1,757	(44)
Long-term debt, including current maturities	25,394	24,927	2
Total indebtedness	\$ 26,376	\$ 26,684	(1)
Cash flows from operations	\$ 1,431	\$ 1,394	3
Capital expenditures	\$ 829	\$ 637	30

Power System Statistics

For the years ended September 30	1999	1998	Percent Change
System input (millions of kilowatt-hours)			
System generation			
Hydro, including pumped storage	11,065	15,705	(30)
Fossil	91,630	94,311	(3)
Nuclear	44,514	44,173	1
Combustion turbine	1,025	1,295	(21)
Total net generation	148,234	155,484	(5)
Purchased	12,770	13,051	(2)
Total system input	161,004	168,535	(4)
System output (millions of kilowatt-hours)			
Sales			
Municipalities and cooperatives	122,880	123,330	_
Industries directly served	22,885	18,514	24
Federal agencies and other	10,190	21,293	(52)
Total sales	155,955	163,137	(4)
Other	1,232	1,663	(26)
Losses	3,817	3,735	2
Total system output	161,004	168,535	(4)
Net winter dependable capacity (megawatts)	28,502	28,498	_
System peak load (megawatts)—summer	28,295	27,253	4
System peak load (megawatts)—winter	26,388	23,204	14
Annual load factor	61.6	64.0	(4)
Number of employees as of September 30	13,322	13,818	(4)
Percent net winter dependable capacity by fuel source			
Fossil	53%	53%	_
Nuclear	20%	20%	_
Hydro	19%	19%	_
Combustion turbine	8%	8%	_

in the VALLEY ...



CORPORATE

THE TENNESSEE VALLEY AUTHORITY (TVA), a wholly owned U.S. government corporation established by the TVA Act in 1933, generates prosperity to improve the quality of life for nearly eight million people in the Tennessee Valley region. As the nation's largest wholesale producer of electricity and the operator of the nation's largest public power system, TVA strengthens the regional economy by promoting economic development, supplying low-cost, reliable power, and supporting a thriving river system. TVA provides power to the Valley by balancing the competing needs of power supply, flood control, navigation, land use, water quality, and recreation.

TVA generates and transmits an ample supply of power to the people of the Valley at the lowest feasible rates meeting all its financial needs through cash flows and by issuing debt. No U.S. tax dollars support the TVA power system.

ELECTRICITY eneration

Average Monthly Residential Power Bill 1,000 kilowatt-hours



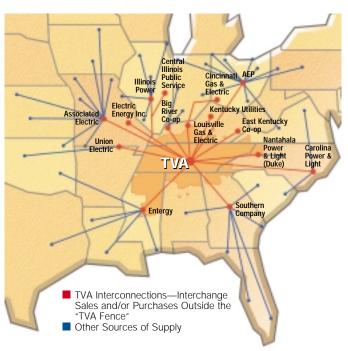
TVA provides power to the Valley at the lowest feasible price, consistent with its federal mandate.

Business Description

- ♦ Nation's largest wholesale producer of electricity
- ♦ 28,502 megawatts of capacity (net winter dependable)
- ♦ 11 fossil plants (59 units)
- ♦ 3 nuclear plants (5 units)
- ♦ 29 hydro plants (109 units)
- ♦ 4 combustion turbine plants (48 units)
- ♦ 1 pumped storage plant (4 units)

TVA stimulates economic growth to solve regional problems, protect natural resources, create jobs, and build partnerships for the public benefit.

ELECTRICITY transmission



TVA serves the public interest through an ample supply of reliable power.

Business Description

- ♦ Reliable under severe contingencies
- ♦ Well positioned for power transfers
- ♦ 17,000 miles of transmission line
- ♦ 130,000 transmission-line structures
- ♦ 850 individual interchange and delivery points
- ♦ 240,000 right-of-way acres
- ♦ 20,000 communication circuits
- ♦ 80,000 square mile service area



INTEGRATED RESOURCE

<u>management</u>

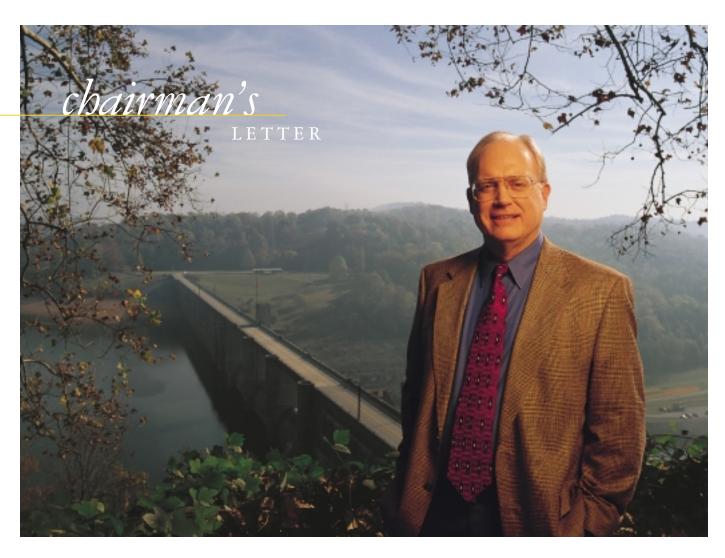


TVA balances the competing needs of navigation, flood control, power supply, land use, water quality, and recreation

Benefits to the Valley in 1999

- ♦ Nation's fifth-largest river system
- ♦ 650 miles of navigable river
- ♦ 25 dams for flood control
- ♦ 480,000 acres of recreation lakes
- ♦ 277,000 acres of reservoir land
- ♦ 11,000 miles of public shoreline
- ♦ \$304 million in tax-equivalent payments to Valley states
- ♦ \$829 million of capital investment in the Valley
- ♦ \$828 million TVA payroll
- ♦ 13,322 TVA jobs
- ♦ \$23 million of economic-development loan commitments to Valley businesses
- ♦ \$951 million spent with Valley firms for products and services
- ♦ 49 million tons of goods shipped
- ♦ Millions of dollars in flood damage avoided

... to IMPROVE the Quality of



Chairman Craven Crowell at Norris Dam, Norris, Tenn.

SINCE ITS CREATION IN 1933, THE TENNESSEE

Valley Authority has honored its congressional mandate to support and enhance the economic vitality of the seven-state Tennessee Valley region. This is a role TVA takes seriously as it carries out the mission of public power—of serving the public interest—in a vibrant and dynamic region.

TVA has long been an integral part of this economy, which is now growing at almost twice the national rate. By supplying one of the most basic ingredients of economic growth—electric power— TVA is a key partner in helping generate prosperity for the nearly eight million people we serve.

Because TVA's core product is so essential to so many, the reliability and availability of our power plants and transmission system is a top priority. Through meticulous attention to maintenance and modernization, aggressive pursuit of greater productivity, and optimizing the use of assets, TVA is able to ensure its plants are available when they are needed most. Our commitment to reliability and availability paid off during July and August when TVA met 16 peak demands higher than our 1998 record and set a new all-time peak of 28,295 megawatts.

Greater reliance on electronic technology by our customers also will make power reliability more important than ever. Only electricity has the flexibility and precision to fuel this technological engine. As our customers integrate more sophisticated technology into their business operations and day-to-day lives, the reliability and availability of TVA power will become ever more vital to the continued growth of our regional economy. In light of increasing demand, TVA is conducting a comprehensive study to ensure that future capacity and transmission demands are met.

Beyond assuring that TVA power is reliable and available, TVA has an obligation to ensure that its power is an affordable, competitive value. We keep our customers' energy costs as low as possible so that they, in turn, can offer competitive value to their customers. As a result, TVA's energy prices are among the lowest in the nation.

TVA's continued success in offering competitive rates is a result of our aggressive approach to lowering costs, including interest expense. TVA's innovative financing strategies and the refinancing of the debt held formerly by the Federal Financing

Bank have enabled TVA to reduce its outstanding debt by \$1.3 billion since 1996, lowering the weighted-average coupon rate on outstanding long-term debt from 7.35 percent to 6.67 percent and attracting more than 370,000 investors in all 50 states and 35 countries.

TVA's operations initiatives also have resulted in significant improvements in productivity. The net capacity factor at our nuclear plants has more than doubled since 1993, allowing our five nuclear units to generate power for a record-setting total of more than 1,000 combined operating days. Equivalent availability of our generating plants has risen to more than 87 percent.

Perhaps the most impressive measure of productivity is TVA's generation and transmission costs, which in 1998 were nearly 29 percent below the national average of investor-owned utilities. TVA's generation and transmission costs were the lowest when compared with its largest generating competitors' costs.

So, as we prepare to enter the new millennium, TVA is powerfully positioned, consistently competitive, and fiscally fit. TVA gives the Valley and the nation an edge in fostering new investment that will generate even greater prosperity. In 1999 alone, almost 15,000 commercial and industrial customers began operations in the Tennessee Valley.

As always, TVA is more than a power company. In the nearly seven decades since its creation, TVA has been guided by the higher purpose of serving the public and promoting economic growth in the Tennessee Valley. In laying the foundation for a better quality of life, TVA continues to build on its bedrock vision for generating economic prosperity in the Valley.

TVA will continue to be an advocate for the public good, ensuring that the benefits of electric utility restructuring accrue to all consumers, including those in rural areas of little interest to profit-oriented utilities. TVA will also continue to be a good steward for the environment, preserving and protecting the natural resources with which our region has been so abundantly blessed.

With the creation of the Public Power Institute, TVA will develop technologies and address national issues of air quality, renewable energy supply, and efficient energy production and use. The Institute is an extension of TVA's commitment to public power and the environment and a symbol of the high standards TVA sets for the electric utility industry.

For most electric utilities, megawatts are yardsticks by which they measure their own economic performance. For TVA, the nation's largest wholesale producer of electric power, energy production has always been a means to a much greater end.

Now more than ever, electricity is the energy of choice, and TVA is working to be the supplier of choice in the Tennessee Valley region. It is a leadership role we embrace as we look toward the new millennium and the challenges and opportunities it will bring.

In January 1999 Director Johnny Hayes resigned to join the Gore 2000 presidential campaign. In May, Director Bill Kennoy completed his eightyear term of office. It was a great pleasure to serve with both of them.





In November 1999 Skila Harris and Glenn L. McCullough Jr. were confirmed by the U.S. Senate as TVA directors. Director Harris will serve a term ending in 2008. Director McCullough, who assumed the remaining term of Johnny Hayes, will serve until 2005.

Director Harris, a Kentucky native, has more than 12 years of experience in the energy industry, including work with the U.S. Department of Energy. Director McCullough's credentials in economic development include leadership roles in state and local economic develoment efforts and his recent responsibilities as mayor of Tupelo, Mississippi.

Together they bring to the Board a unique blend of expertise and diversity that supports TVA's vision of generating prosperity in the Valley. We welcome Skila and Glenn at a time when-thanks to the dedicated efforts of our employees—TVA is fiscally sound, our rates are stable, and our power system continues to set records while meeting unprecedented demands for public power.

I look forward to working with Skila and Glenn in preparing TVA for the opportunities of doing business in the restructured marketplace of the future.

Chairman Crowell presides at an **Executive Meeting, with Chief Financial Officer** David Smith (far left) and President and Chief **Operating Officer** Ike Zeringue.



Provide services based on core expertise to solve regional problems, protect natural resources, create jobs, and build partnerships for public benefit.

STIMULATING

sustainabl economic growt

TVA IS IN BUSINESS NOT TO MAKE MONEY, but to make a difference; not to produce profits, but to work for the public good.

The relationship between TVA, as a public enterprise, and its customers goes far beyond that of a private utility. Electricity is such a fundamental part of everyday life that TVA's success in producing and transmitting power efficiently, without federal appropriations, translates directly into prosperity and jobs.

Competitive Rates

The price of electricity can be a significant cost for business and industry, and Valley customers enjoy some of the most competitive power rates in the nation.

The advantage of lower rates gives TVA and distributors of TVA power an important tool for fostering new investment in the Tennessee Valley.

Distributor Partnerships

In addition to providing power at competitive prices, TVA works closely with local power distributors and community leaders to develop innovative ways to attract quality investments.

Since 1995 TVA has offered Valley businesses and industries \$90 million in economic development loans. These loans and other technical and economic development services leveraged an additional \$3.1 billion in capital investment, helping create and retain more than 222,000 jobs.

TVA's Comprehensive Services Program is one such partnership that makes TVA's engineering and technical assistance available to current or potential customers through its distributors.

When North Georgia Electric Membership Corporation in Dalton, Georgia, asked TVA to evaluate electricity use at a plant in Lafayette at risk of closure, TVA engineers found ways the plant could reduce its electricity bill by \$237,000 a year,

allowing the plant to stay open and even plan for expansion.

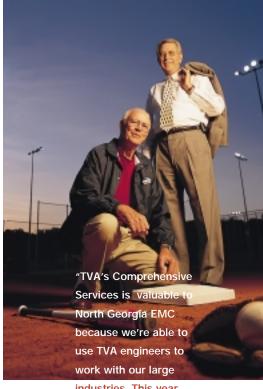
North Georgia EMC also made TVA's engineering expertise part of its bid for a new Dalton-area supermarket. The distributor proposed installing and maintaining a TVAdesigned lighting system for the grocer's parking lot. The proposal helped North Georgia EMC win a new customer and saved the grocery chain \$40,000 in construction costs.

In Middleton, Tennessee, the Thyssen Dover Elevator Company was faced with the decision on where to consolidate its manufacturing operations. Thyssen Dover asked Tippah Electric Power Association to analyze the power needs associated with the expansion and consolidation of their operations in Middleton. In turn, Tippah EPA called on TVA's Comprehensive Services, which assisted on a redesign and renovation of the existing building and grounds, including a

landscape design and an outdoor lighting plan.

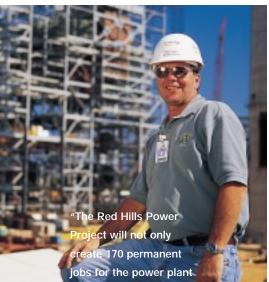
Throughout the Valley, TVA's Site Selector program is an information partnership with eight regional industrial development associations that helps relocating businesses and industries find sites that best fit their needs. Site Selector software offers detailed data on prospective sites and navigable 3-D computer images of available buildings. It also provides statistics for the surrounding county, including such information as unemployment figures and transportation options.

Last fall TVA joined distributors and business and community leaders at groundbreaking ceremonies for a new 440-megawatt power-production facility—the Red Hills Power Project in northeast



industries. This year, Comprehensive Services did the lighting design for seven ball fields, allowing us to provide the design without charging the county one penny."

—Jim Abney (right), Manager of Marketing and Economic Development, North Georgia Electric Membership Corporation, Dalton, Ga., with Mark Fletcher, County Commissioner, Catoosa County, Ga., District 1



and mining operations, it has already helped boost one town's sales tax revenues 30% higher than last year's and will help spur further economic growth in the area."

-Randy Ransdell, Director, Plant Manager, Red Hills Power Plant, Choctaw County, Miss.

"TVA helped Thyssen Dover perform engineering analysis work of our power needs. As a result we were able to reduce the cost requirements for electrical equipment by 25%. TVA also advised us on our landscaping. We took their suggestions and improved our whole building facade 1,000% because of the way it looks."

-Vince Avirett, Manufacturing Projects Manager, Thyssen Dover Elevator Co., Middleton, Tenn. Mississippi. The power plant is owned by Tractebel Power Inc. and will be operated by Choctaw Generation, a subsidiary of Tractebel Power. The power plant will use clean-coal technology to burn lignite coal mined near the plant. The mine is a joint venture between Phillips Coal Company and North American Coal Company. TVA has contracted with Choctaw to buy the plant's output, with production scheduled to begin in late 2000.

Small-Business Support

TVA's commitment to economic development is not limited to large projects. In the past decade 18 small-

business incubators jointly sponsored by TVA and local communities have helped launch more than 650 active businesses and create 4,900 active jobs. Incubators help new businesses minimize start-up

costs by sharing space, services, and equipment. Most incubators offer on-site technical support, and TVA's incubator loan fund helps some tenants meet short-term needs for capital and cash flow.

Residential Incentives

TVA's commitment to economic growth extends to residential consumers. TVA and distributors of TVA power have worked together to create the energy right® program, which offers a combination of low-interest loans and incentives to customers who install heat pumps and who buy all-electric homes and energy-efficient manufactured homes. This program, which grew by 29 percent in 1999, has had a positive impact on more than 110,000 Valley homes since its inception.

Corporate Citizen

TVA is itself a Valley resident and takes pride in being a good corporate citizen, stoking the fires of economic growth through its own payroll, purchases, and tax-equivalent payments.





The wages and salaries of TVA's 13,322 employees add more than \$800 million a year to the regional economy. TVA purchases of goods and services for the past year brought more than \$950 million to the coffers of Valley-based businesses. And in 1999 Valley schools and other community endeavors shared in more than \$300 million that TVA paid state and local governments in tax-equivalent payments, making TVA one of the region's biggest "taxpayers."

Conclusion

Whether it's helping Valley residents educate their

children, or helping local communities attract new jobs . . .

Whether it's helping homeowners get the most from every energy dollar, or helping small businesses get off the ground . . .

Wherever there has been a need for technical expertise . . .

Whenever a need has arisen for the broad-based support only a public utility can provide, TVA has been there, consistently working for the public good as a faithful steward of the Valley's resources and a champion for high-quality economic growth.

covered everything from hybridizing tomatoes to boardroom politics.

If TVA hadn't donated its surplus computers, as well as the mentoring and tutoring by TVA employees, we'd have been two years behind."

—Tom Scruggs, Principal, Oakhaven School, Memphis, Tenn.



Meet the changing needs of power distributors and directly served customers for energy products and services in changing markets.

SUPPLYING

low-cost, 1. low-c

TVA HELPS GENERATE PROSPERITY IN THE

Valley by providing the electric power to meet the changing needs of power distributors and directly served customers.

Throughout the year TVA's power system produced record amounts of power, with a remarkable degree of reliability. In particular, the summer of 1999 was the most challenging ever for our powergenerating facilities and transmission system.

On July 30, during the extended heat wave that tested power producers across the nation, TVA met an all-time peak demand of 28,295 megawatts, marking the seventh time in nine days that TVA met demands higher than the 1998 record of 27,253 megawatts. By summer's end TVA's power system met 16 peak demand days higher than the 1998 peak. From July 22 through July 31 TVA set a new system generation record of more than 5.2 billion kilowatt-hours. For the year, TVA generated more than 148 billion kilowatt-hours.

In line with TVA's long-term commitment to meeting the electricity needs of the Tennessee Valley, we have taken the steps necessary to keep up with our region's ever-increasing demand for electric power. During the past 10 years, as the Valley's economy grew at about 4 percent annually, the demand for TVA power increased an average of around 3 percent annually, compared with our earlier projections of 2.2 percent.

TVA has added baseload generating capacity in the past five years, and we are studying how we can best meet future demand. Since 1994 TVA has added substantial generating capacity, including 2,321 megawatts from the restart of Browns Ferry Nuclear Unit 3, the start-up of Watts Bar Unit 1, and the power upgrades of Browns Ferry Units 2 and 3. Over the next several years TVA plans to add another 2,100 megawatts of generating capacity through improvements to existing units and the addition of peaking units.

TVA has also been able to reliably meet increasing demand for power because the power system as a whole is operating more efficiently than at any time in the past three decades. TVA's nuclear sys-

tem ended the year with a net capacity factor of 90.5 percent, generating an all-time high of more than 44.5 million megawatt-hours. TVA's fossil and hydro modernization efforts continue to reduce costs, improve efficiency and boost generating output. Overall, TVA has increased output by about 20 percent since 1993.

TVA's ability to support regional economic growth is dependent upon both a reliable supply of power and competitive prices. TVA's Ten-Year Business Plan challenges TVA to ensure that its electricity prices remain competitive as the electric power industry is restructured.

Since TVA adopted the Ten-Year Business Plan in 1997, it has made progress toward ensuring that its prices remain competitive through excellent operational performance and sound financial management with the following results:

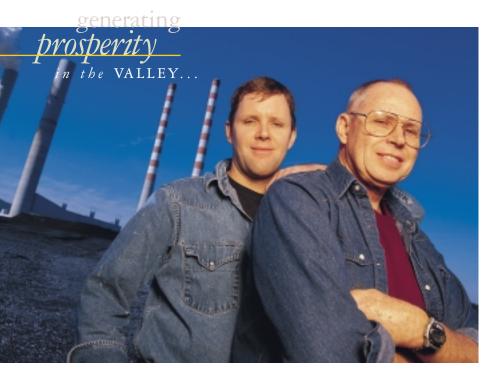
- ♦ Reducing debt by a total of \$1.3 billion from its peak in 1996.
- ♦ Saving over \$350 million in annual interest
- ♦ Reducing the amount of interest expense compared to sales to 26.9 percent—the lowest percentage in 20 years.
- ♦ Managing a \$724 million fund to cover the future costs of decommissioning all of TVA's nuclear plants.

Efforts by the Tennessee Valley Congressional Delegation and the Administration on behalf of TVA in 1998 to refinance the \$3.2 billion in high-



several years, and the No. 1 rating from the Institute of Nuclear **Power Operations** confirms that everyone at Watts Bar is doing a great job."

-Donna Hitch, Radio Chemical Laboratory Analyst, Watts Bar Nuclear Plant, Spring City, Tenn.



"Our piping system had 16 bends, and wherever the ash hit the pipe, it would wear out. Every week we had to replace a part of it. The Economizer Transport Piping Team took most of the bends out and changed the velocity. This has freed up people to work on other jobs, and Operations doesn't have to go every day to check the line for wear."

-Jerry Ball (right), Steamfitter, Cumberland Fossil Plant, Cumberland City, Tenn., with his son and fellow team member, Daryl

interest debt held by the Federal Financing Bank (FFB) significantly contributed to lowering TVA's interest costs in 1999. Completion of the FFB refinancing in 1999 marked the transition of all power bonds into the public bond market, where TVA has used innovative issues to steadily expand its investor base to more than 370,000 investors in all 50 states and in 35 countries around the world, contributing to lower interest costs for TVA.

But the best measure of TVA's progress on

with DAVID SMITH, Chief Financial Officer

Shouldn't the playing field be leveled for all electric utilities as the industry is restructured?

The essence of the question is whether all industry participants should be treated the same. The fact is the primary purpose of publicpower agencies like TVA is to serve and protect the public interest, while the primary purpose of private utilities is to increase shareholder wealth. We believe that electric industry restructuring should be designed to ensure fair competition between public-power providers and private utilities, allowing them to coexist with their differences.

Don't forget that most of the calls to "level the playing field" would impose additional regulatory requirements or financial burdens

intended to protect or serve the public interest. But since TVA's fundamental mission is to serve the public interest, imposing additional requirements and burdens on TVA would serve no purpose other than to increase prices for TVA's customers and slow economic growth within the Tennessee Valley region.

In the future, TVA's rates and those of most competitors should be regulated by the forces of a freely competitive marketplace.

But remember what regulates TVA's actions now: TVA, as a wholly owned government corporation, is governed by a Board of presidential appointees who are charged first and foremost with serving the public interest.

The President and Congress have directed TVA's Board to keep prices as low as feasible for the power that TVA is charged with providing to the Tennessee Valley.

Why are TVA's electricity prices among the lowest in the nation?

There are several reasons, but none more important than the fact that we run an extremely efficient power system.

Naturally, our size as the largest public power producer in the country—helps spread fixed costs over a large business base.

Geography also is important, for a couple of reasons. First, our service territory is in the rapidly growing southeastern United States, which covers portions of seven states, two time zones and two yearly peaking periods, winter and summer, affording TVA optimum facility

utilization. Second, the southeastern U.S. has some of the nation's lowest electricity prices because of the low-cost coal mined in the area and the broad mix of generation made possible by the variety of fuel sources (hydro, coal, gas, and nuclear) available in the region.

I cannot leave this question, though, without responding to critics who complain that TVA's low rates are the result of "subsidies." Congress has not provided TVA with any taxpayer funds for its power program for nearly 40 years!

Shouldn't TVA have to pay taxes?

TVA does pay taxes! People can be confused by labels, but in 1999 TVA made payments of more than \$300 million in tax-equivalent payments to the states we

serve and in which we hold power property. These payments are similar to the property and state income taxes paid by private utilities.

As far as federal income taxes are concerned, we are not obligated to pay a "share" of our income to the federal government as private utilities must, because, as our owner, the federal government is entitled to all our retained income.

I say "retained income" to distinguish this from the dividendlike payment we make to the federal government each year, based on the government's original investment in TVA. To date, our payments to the U.S. Treasury on its original \$1.4 billion investment in TVA have totaled more than \$3 billion.

meeting the objectives of the Ten-Year Business Plan is its price of electricity. TVA's power prices are among the most competitive in the nation, with residential prices paid by consumers in the Tennessee Valley 23 percent lower than the national average. TVA's commercial and industrial prices are similarly competitive. These competitive prices are achieved without TVA's receiving any federal funding for the operation of its power program. Based on these prices, it's not hard to understand why individuals and businesses are choosing to reside or make investments in the Tennessee Valley.

TVA is competitive today, and we are dedicated to remaining competitive in the future. We plan to meet this goal through a combination of lowering fixed costs, improving operating efficiency, optimizing capital spending, and increasing power revenues through economic growth. TVA also must continue to provide a reliable source of electricity to meet the needs of our customers in a rapidly expanding economy in the Tennessee Valley. While specific targets established in 1997 in the Ten-Year Business Plan have changed, the plan still provides the blueprint to meet these challenges and to keep TVA competitive.

Fulfilling the Commitment to Deliver Clean, Reliable Public Power

In the spring of 1999 TVA established the Public Power Institute to help fulfill TVA's responsibility to sustain and enhance the environment while continuing to provide low-cost, reliable electricity.

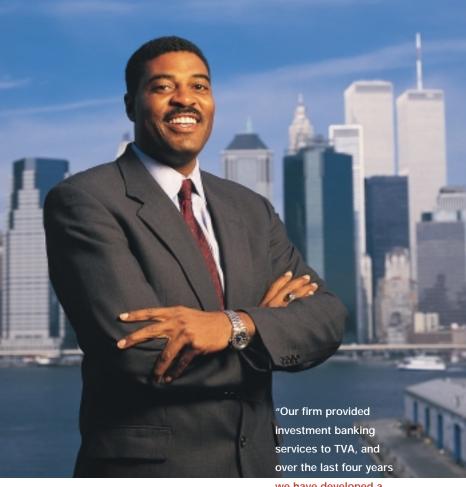
Located at TVA's site in Muscle Shoals, Alabama, the Institute will develop and demonstrate technologies, strategies, and policies for improving air quality and sustaining a reliable energy supply for TVA and other public-power providers.

TVA is committing up to \$5 million in funding to the Institute during its first three years to leverage investments from other institutions that support public power.

"We hope the Institute will stand as a symbol of the vision that public-power companies such as TVA bring to the energy industry," TVA Chairman Craven Crowell said at a National Town Meeting for a Sustainable America, hosted by Vice President Al Gore in Detroit in May 1999. "It's a vision that puts the public good ahead of the bottom line, and a vision that values long-term benefits over shortterm gains."

The Institute will serve as both a research laboratory seeking more sustainable power production and as a public-policy clearinghouse for energy and environmental issues.

TVA's commitment to cleaner energy has always been inspired by the awareness that its power pro-



gram generates electricity "in our own backyard," Crowell said at the National Town Meeting. He also noted TVA's commitment to "place-based values" has led TVA to reduce pollution in the sevenstate region it serves. "If we carelessly pollute our environment to produce power, we'll suffer the consequences in the air we breathe and the water we drink.

"The whole concept of sustainable growth and development isn't really new to us at TVA. Environmental stewardship has always been one of the primary values of TVA."

Y2K Compliance

The reliability and availability of TVA power is vital to our customers. As of September 30, 1999, 100 percent of all mission-critical items being tracked in TVA's Year 2000 Program were completed and tested. In addition, TVA is developing contingency plans to address potential unforeseen problems, working with distributors of TVA power, interconnecting utilities, other customers, and suppliers to minimize the impact of disruptions that may occur along the supply chain. See page 24 for further information on TVA's Year 2000 Program.

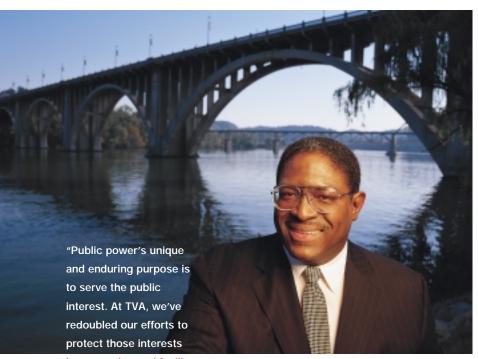
we have developed a great partnership. We are extremely proud to be one of TVA's service providers. Our partnership with TVA has put our firm on the map."

-Ron Blaylock, Chairman & CEO, Blaylock & Partners LP, New York, NY

Minimize flood damage, maintain navigation, support power production, improve water quality, protect public health and the environment, and support recreational uses.

SUPPORTING a

ariving. VIVEV SYSTEM



by convening and facilitating more ongoing discussions among our stakeholders so that their changing values and priorities remain the foundation for our business activities."

-Ron Loving, TVA's Vice President of Program Initiatives

TVA HAS LONG BEEN RECOGNIZED AS A

world-class leader for its river-management system. The methods and tools used by TVA in the integrated development and operation of the Tennessee River are known internationally as the "TVA model."

In the past year TVA took several steps to further strengthen its system of managing flood control, river navigation, and public lands and waters in the Tennessee Valley. In February TVA merged into one organization all responsibilities for managing the river system, including hydropower operations and river management. That organization, River System Operations & Environment, is led by Executive Vice President Kate Jackson, who also serves as TVA's Environmental Executive.

Managing a Major U.S. Waterway

Since its inception, TVA has been leader in flood control, navigation, and recreation management.

The Tennessee River and its tributaries make up the fifth-largest river system in the nation. In managing this system, TVA fulfills flood-control, navigation, and recreation commitments that greatly benefit the regional economy.

TVA's flood-control efforts annually prevent an estimated \$138 million of potential damage in the Tennessee Valley, as well as another \$9 million of potential losses along the Ohio and Mississippi rivers.

TVA also is responsible for maintaining and managing a safe and efficient waterway that totals 800 miles of commercially navigable river. This includes a 652-mile main channel from Knoxville, Tennessee, to Paducah, Kentucky, and 148 miles of tributary channels. Transportation benefits are estimated to total more than \$500 million

In addition, the Tennessee River system comprises a vast resource for outdoor recreation. The demand for recreational use of TVA reservoirs, which have a total surface area of 480,000 acres and 11,000 miles of shoreline, has steadily increased over the years. TVA operates about 100 recreation areas that include boat-launching ramps, picnic facilities, nature trails, wildlife-viewing, swimming, shoreline fishing, camping areas, and other amenities. Many of the Valley's rivers and streams also offer fishing, canoeing, and whitewater boating. Water-based recreation on the Tennessee River system generates millions of dollars annually for the region's economy.

Working to Maintain the Valley's Watershed

TVA formed 11 new Watershed Teams across the Tennessee Valley in 1999 to improve conditions in the Tennessee River watershed.





The new multidisciplinary teams replaced and combined the functions of TVA's former Land Management Offices and River Action Teams. The activities of the new teams include stabilizing shoreline, improving water quality, handling requests for waterfront development and use of TVA lands, helping communities protect and restore their watersheds, and educating the public about the conservation of natural and cultural resources.

The teams provide information, help establish partnerships, and find funding for worthwhile community projects that promote good resource stewardship.

Keeping Lines of Communication Open

In order to optimize the resources of the Tennessee River, TVA is taking new steps to seek input and listen to the needs and concerns of its diverse stakeholders.

TVA routinely seeks input from the public on managing the land and water resources in the Valley. In the past year TVA established a new advisory group to gather insight and knowledge from stakeholders.

with KATE JACKSON, Executive Vice President, River System Operations & Environment

What is "integrated river management"?

To manage the Tennessee River and its tributaries and lakes. TVA must address many objectives-flood control, navigation, power generation, water quality, and recreation. Everyone in the Tennessee Valley is affected to some degree by how we deal with these objectives. And at any given time, the desires of one group will inevitably compete or conflict with the desires of other groups. So it's only by an integrated or a coordinated—management of the river that we can balance all of our objectives to meet our obligations under the TVA Act and achieve the

best results for the overall public good.

Why does TVA begin lowering the levels of its storage-reservoir lakes each August?

The decision to begin the draw-down of reservoir levels August 1 is guided by several objectives, including water quality, environmental concerns, mosquito control, power generation, and navigation. The decision also can be affected by excessive rainfall or drought.

But the overriding consideration is floodstorage capacity. We must make room to store high-elevation runoff water from winter and spring rains.

Studies indicate that

our operation of the reservoir system has helped prevent more than \$5 billion in potential losses from flood damage since the 1930s.

Also, whenever possible, we release the water during drawdowns through the turbines at our hydroelectric dams to generate electricity and help keep power rates low for Valley residents.

What about maintaining water quality?

Because TVA is a public- power provider, our commitment to water quality goes beyond meeting regulatory requirements. Our goal is to set the standard for other hydropower producers in terms of environmentally sound river management.

Our comprehensive monitoring program designed specifically to guide watershed protection and improvement activities-is an example. Another is our reservoir-release improvement program, which ensures a minimum flow of water and plenty of oxygen for aquatic life below TVA dams. We also work with federal and state agencies and with local groups to identify pollution problems and implement improvements.

How did the drought conditions that hit much of the nation in 1999 affect TVA's river-

system operations?

Heading into June 1999, rainfall across the Tennessee Valley had been below normal since the previous summer. But because of our integrated system, we were able to reach minimum summer target levels on all but two of our lakes by June 1 by releasing only enough water to protect downstream water quality.

In addition, heavy rains in June and July allowed us to generate power at peak levels during an extended heat wave. Our hydroelectric units played a crucial role in helping TVA's power system meet record-setting demands for electricity last summer.



Regional Resource Stewardship Council

In June 1999 TVA announced the creation of a citizen advisory council to provide input on managing the natural resources of the Tennessee Valley. The Regional Resource Stewardship Council will advise TVA on policies, practices, and priorities in deciding how best to use the Valley's resources for the benefit of the general public.

Governors of the seven Valley states will nominate one member each to the council. Other members will represent distributors of TVA power, directly served customers, beneficiaries of navigation and flood-control activities, and recreational and environmental interest groups.

Reservoir Planning Process

TVA's River Operations organization continues to look for more effective methods of communicating with Valley citizens and elected officials about TVA's management of reservoir levels. TVA's annual drawing down of reservoirs to create storage capacity for potential floods, to help maintain water quality, and to generate low-cost hydroelectric power during times of high energy consumption is naturally a matter of intense public interest.

As TVA works to maintain open lines of communication, it is also gearing up for a systemwide reevaluation of its reservoir-management processes and activities. TVA is collecting and studying reservoir-visitation records and National Weather Service data on seasonal rainfall frequencies. TVA is also working on a systematic approach to calculate flood-risk impacts that could result from various policy changes in reservoir operations, as well as updating the tools used to assess the environmental effects of TVA's reservoir-management policies.

♦ TVA and the U.S. Environmental Protection Agency (EPA) signed a partnership agreement to cooperate on environmental programs, including environmental research, policy, and demonstration

> projects. Under the agreement, TVA and EPA will exchange services and share equipment, research facilities, data, and information. The agencies will work together on issues ranging from air and water quality to responses to environmental emergencies.

> In February a ruptured pipeline at a private storage facility spilled some 45,000 gallons of diesel fuel into the Tennessee River at Knoxville, Tennessee. TVA's technical expertise and special operations at two dams upstream and one downstream of the spill helped minimize environmental damage and facilitate cleanup.

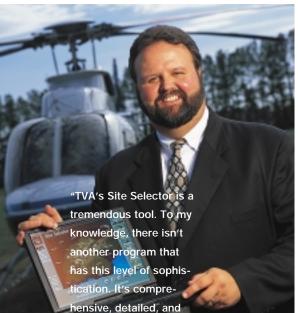
♦ After receiving extensive public input, TVA announced a new shoreline-management policy, which includes modified standards for docks, erosion control, and vegetation. The new policy increases flexibility in accommodating shorelinedevelopment needs while ensuring conservation of natural and cultural resources.

TVA received a patent in March for a cost-effective wastewater-treatment technology that efficiently removes pollutants from water using natural wetlands processes. The technology is being demonstrated in seven locations to treat municipal sewage and contaminated surface and groundwater. The new system is about 50 percent less expensive to operate and maintain than conventional systems.

- ♦ For the third consecutive year a leading nuclearindustry publication, Nucleonics Week, ranked three TVA units among the 25 best in the nation based on productivity, total generation, and operations
- ♦ For the third consecutive time, Sequoyah Nuclear Plant employees set a world refueling record for plants of similar design by returning Unit 2 to service in just 23 days, beating the old record by almost a week.

and maintenance costs.

- ♦ Unit 1 at Watts Bar Nuclear Plant set a TVA record for pressurized water reactors by operating continuously for 352 days before shutting down for planned refueling and maintenance.
- Modifications made during refueling outages at Browns Ferry and Watts Bar nuclear plants increased generation capacity by 126 megawatts.
- ♦ In January TVA's Transmission/Power Supply Group restored power the same day that tornadoes, which destroyed or damaged parts of Jackson and Clarksville, Tennessee, also damaged 58 transmission structures and 15 transmission lines.
- ♦ Work is in progress to automate the operation of all 29 TVA hydro facilities. Douglas Dam in upper northeast Tennessee is the first hydro facility to be controlled and managed from TVA's new Hydro



graphically developed. It has changed the way we're doing proposals, shortened our response time, enhanced the look and the professionalism, and taken our presentations and our community's presentations to a whole different level."

-Mike Philpot, Executive Director, West Tennessee Industrial Association, Jackson, Tenn. Dispatch Control Center. Automation work at Cherokee, Fontana, and Norris dams was also completed in 1999.

- ♦ For 1997, Electric Light & Power ranked TVA as the largest generator of electricity in the country for the third straight year. Among the 50 largest utility generators in the country, TVA was ranked the third lowest in total operations and maintenance costs.
- ♦ Electric Light & Power also ranked Bull Run Fossil Plant No. 3 among the country's steam plants in heat rate, a measure of efficiency. John Sevier Fossil Plant was ranked No. 17 on the list.
- ♦ The Gallatin Fossil Plant generated over 7,000 million kilowatt-hours of electricity, the most generated by the plant since 1988 and the second highest in the last 30 years.
- ♦ In both 1998 and 1999, TVA's combustion turbine units generated more electricity than in any year since 1978.
- ♦ The summer reliability of TVA's fossil units was successfully improved this year to meet the growing peak demand for power in the Valley. The fossil system generated 34 million megawatthours during the 1999 summer season, the most since the summer of 1995. Summer outage rates for the Colbert and Johnsonville Fossil Plants were the lowest since 1990, and for Widows Creek Fossil Plant summer outages have dropped by almost 40 percent in the last two years.
- ♦ The Economizer Transport Piping Team from Cumberland Fossil Plant was selected as a finalist in the government division of the 1999 Rochester Institute of Technology/USA Today Quality Cup competition. Team members Jerry Ball and his son Daryl were honored for developing an innovative redesign of a piping system. The previous system had been plagued by frequent pipe failures. The new system, which reduced the failure rate by 95 percent, is saving more than \$130,000 annually.
- ♦ Construction is under way on TVA's first Selective Catalytic Reduction (SCR) Facility at Paradise Fossil Plant Unit 2. By further reducing nitrogen oxide emissions, the SCR facilities improve air quality and help reduce ozone levels in Valley states. The Paradise SCR is scheduled for completion in the year 2000.
- ♦ TVA continues to reduce nitrogen oxide emissions from its fossil plants to comply with require-

ments of the Clean Air Act. Low nitrogen oxide burners and other nitrogen reduction methods have been installed on 41 coal-fired units. Modifications to three TVA cyclone units currently reduce nitrogen oxide emissions through the use of over-fire air. Results from tests performed at these units are

being used in designing control measures for TVA's remaining cyclone units.

- ♦ The U.S. Department of Agriculture Graduate School awarded TVA University the prestigious W. Edwards Deming Outstanding Training Award (shown at right) in recognition of TVAU's innovative employee development and training initiatives. TVAU was established in 1994 as the umbrella for all education and training at TVA.
- ♦ In the area of Procurement, improvements over the past two years have reduced TVA's

total-ownership costs for materials and services by more than \$100 million, as supply-chain employees have expanded their roles beyond traditional administrative functions to better manage supply contracts, reduce inventory, and lower total costs of procurement. Procurement is consolidating its numerous computer purchasing systems into a single program to further optimize inventory, improve overall efficiency, and save an estimated \$54 million over five years.

- ♦ In September 1999 Information Week magazine ranked TVA No. 1 among the nation's utility companies in using information technology to meet business objectives. It also rated TVA No. 15 among the top 500 business users of technology.
- ♦ TVA continued to work with Valley power distributors in preparation for restructuring of the industry. A significant milestone was reached when TVA and the Tennessee Valley Public Power Association (TVPPA), which represents the distributors, agreed upon and submitted to Congress a position paper on significant issues relating to deregulation and legislation that will likely drive it. TVA is involved in ongoing development of rate products and contract options to help local utilities remain successful as the industry changes.

generating in the VALLEY ...



force, whose knowledge and skills are sharply honed through continuous learning. As winner of the Deming award, TVA University is recognized nationally as a leader in providing the resources and opportunities to make that happen."

-Dr. John Turner, TVA's Senior Vice President of Education, Training and Ďiversity



financial TABLE of

- 21 Management's Discussion and Analysis Management's assessment of the company's financial condition, including the principal factors that affect the results of operations
- Balance Sheets The year-end status of assets, liabilities, and proprietary capital for both the power program and all programs
- **30** Statements of Income—Power Program Revenues, expenses, and net income for the current year and past two years
- 31 Statements of Cash Flows Details of the sources and uses of cash for both the power program and all programs
- 32 Statements of Changes in Proprietary Capital—Power Program Details of the changes in power program proprietary capital and amounts retained at the end of the year
- 32 Statements of Net Expense—Nonpower Programs Expenditures of nonpower programs by budget category
- 32 Statements of Changes in Proprietary Capital—Nonpower Programs Details of the appropriations and net nonpower program expense and amounts retained at the end of the year
- **33** Notes to Financial Statements Additional disclosures relating to the financial statements
- **42** Report of Independent Accountants PricewaterhouseCoopers LLP's opinion on the financial statements
- **42** Report of Management Management's responsibilities for the fair presentation of the financial statements
- **43** Investor Information Selected TVA information for investors
- **44** Statistical and Financial Summaries A table of selected operating and financial information for the current year and past 10 years

Overview

TVA is one of the largest electric power systems in the United States, having produced over 148 billion kilowatt-hours (kWh) of electricity in 1999. TVA is primarily a wholesaler of power. Its customers include three major groups: (1) distributors, consisting of municipal and cooperative systems; (2) industries that have large or unusual loads; and (3) Federal agencies. In addition, TVA sells and buys power through exchange power agreements with most of the surrounding electric systems. TVA's power service area covers 80,000 square miles in the Southeastern United States, including most of Tennessee and parts of Mississippi, Kentucky, Alabama, Georgia, North Carolina, and Virginia. TVA also manages the Tennessee River, the nation's fifth-largest river system.

TVA is a wholly owned corporate agency and instrumentality of the United States, established by Congress in 1933 primarily to develop and manage the resources of the Tennessee Valley region to strengthen the regional and national economy and the national defense.

TVA's electric system operations are required to be self-supporting from power system revenues, which were about \$6.6 billion in 1999. No tax dollars fund TVA's power program.

Unless otherwise indicated, years (1999, 1998, etc.) in this discussion refer to TVA's fiscal years ended September 30. References to "notes" are to the Notes to Financial Statements.

Business Outlook

Progress on Ten-Year Business Plan

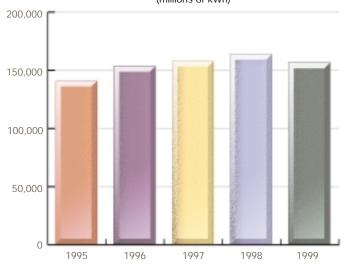
TVA's management has developed and will continue to reevaluate plans and strategies it believes will position TVA to successfully compete in a restructured electricity market. In July 1997, TVA released its Ten-Year Business Plan (the Plan) that set targets for achieving a total cost of power that would be competitive with projected market prices in 2007.

TVA's total cost of delivered power for 1999 was approximately 4.15 cents per kWh. As of September 30, 1999, TVA had reduced its total debt by more than \$1.3 billion since September 30, 1996. These achievements reflect performance in line with the Plan's goal of providing a competitive cost of power in the future. While the Plan was built on assumptions that were reasonable at the time, numerous factors, such as those described in the "Forward-Looking Statements" section of this Annual Report, could cause actual results to differ materially from those projected. TVA continues to project that the Plan will result in a competitive total cost of power in the future, although some of the original assumptions and estimates contained in the Plan have changed. TVA expects to update the Plan in 2000.

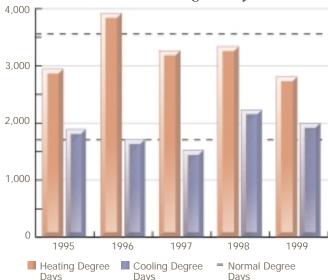
TVA and Competition

In the future, it is likely that the current law that serves to limit competition between TVA and other power systems will change. In the past two years, numerous bills have been introduced in Congress designed to restructure the electric utility industry and mandate or promote competition in the industry. Passage of these types of bills would result in major changes in the electric power industry that would significantly impact both privately

Sales of Electricity (millions of kWh)



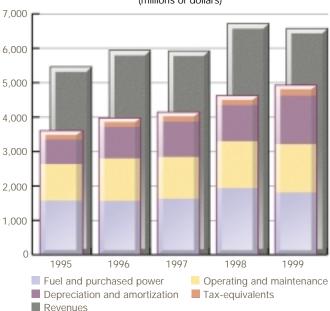
Weather Degree Days



owned utilities and publicly and consumer owned electric power suppliers like TVA and the distributors of TVA power. It is likely that the level of government regulation, particularly for the publicly and consumer owned power suppliers, would increase. Hearings on various topics of competition and electric industry restructuring have been held in the House of Representatives and the Senate. TVA anticipates that in the event any restructuring legislation is enacted, such legislation would enable TVA and the distributors of its power to take part, reciprocally, in competition outside the area for which they can now be a source of electric power supply.

In May 1999, bills containing the Clinton Administration's legislative proposal for restructuring the electric utility industry were introduced in both the House of Representatives and the Senate. TVA endorses the Administration's proposal which includes provisions regarding TVA's power business that are largely based on agreements among TVA, distributors of TVA power, the U.S. Department of Energy and many other TVA

Operating Revenues and Expenses (millions of dollars)



customers and stakeholders. Enactment of this proposal would, among other actions, possibly result in a reduction in the terms of TVA's power contracts with the distributors of its power and in the amount of power the distributors must purchase from TVA under those contracts; possibly result in a loss of customers due to repeal of the Anti-Cherrypicking Amendment of the Energy Policy Act of 1992 under which TVA is not required to deliver power from another utility for consumption within the TVA service area; and permit TVA to sell excess wholesale power outside its current service area at rates set by the TVA Board of Directors.

Results of Operations 1999 Compared to 1998

Operating Revenues

Operating revenues were \$6,595 million in 1999 compared with \$6,729 million in 1998. The \$134 million decrease was primarily due to a reduction in wholesale sales to other utilities related to mild weather and a weaker spot market for power during 1999.

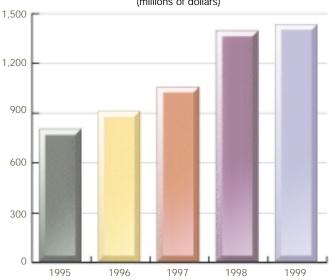
Operating Expenses

Operating expenses increased \$358 million, from \$4,549 million in 1998 to \$4,907 million in 1999. This increase was primarily due to a \$261 million charge for the acceleration of the amortization of regulatory assets (see note 1-Accelerated amortization), coupled with a \$111 million increase in the amortization of regulatory assets attributable to the reclassification of certain nuclear fuel costs (see note 1-Other deferred charges).

Interest Expense

Net interest expense declined \$182 million, from \$1,959 million in 1998 to \$1,777 million in 1999. This reduction largely reflects savings associated with the refinancing of \$3.2 billion of debt issues formerly held by the Federal Financing Bank. Total

Cash Flows from Operations (millions of dollars)



outstanding indebtedness, as of September 30, 1999, was \$26.4 billion, with an average interest rate of 6.83 percent; as of September 30, 1998, this amount outstanding was \$26.7 billion, with an average interest rate of 7.45 percent.

1998 Compared to 1997

Operating Revenues

Operating revenues were \$6,729 million in 1998 compared with \$5,934 million in 1997. The \$795 million increase was primarily due to additional revenues from the 1998 rate increase, coupled with an increase in energy sales to municipalities and cooperatives as a result of the hot summer during 1998. The TVA service area experienced 2.2 percent greater heating degree days and 46.2 percent greater cooling degree days in 1998 versus 1997.

Operating Expenses

Operating expenses increased \$469 million, from \$4,080 million in 1997 to \$4,549 million in 1998. This increase was primarily due to higher fuel and purchased power expense in 1998 as a result of higher system generation and greater purchases of power at higher prices, coupled with an increase in operating and maintenance expense.

Other Income and Expenses

TVA had net other income of \$12 million in 1998 compared with net other income of \$157 million in 1997. The 1997 net other income consisted primarily of investment earnings of the decommissioning trust funds of \$138 million. Subsequent to 1997, TVA modified its accounting methodology such that investment earnings of the decommissioning trust funds are deferred (see note 9-Decommissioning costs).

Interest Expense

Net interest expense declined \$44 million, from \$2,003 million in 1997 to \$1,959 million in 1998. Total outstanding indebted-

Outstanding Debt/Interest Rate (billions of dollars) Interest Rate Debt 9.0 30 8.0 25 7.0 20 6.0 15 5.0 10 4.0 5 3.0 1999 1997 ■ Long-term ■ Average Interest Rate

ness, as of September 30, 1998, was \$26.7 billion, with an average interest rate of 7.45 percent; as of September 30, 1997, this amount outstanding was \$27.4 billion, with an average interest rate of 7.56 percent.

Liquidity and Capital Resources

Capital Structure

During the first 25 years of TVA's existence, the U.S. Government made appropriation investments in TVA power facilities. In 1959, TVA received congressional approval to issue bonds to finance its growing power program. For the last four decades, TVA's power program has been required to be self-supporting. As a result, TVA funds its capital requirements through internal cash generation and through borrowings (subject to a congressionally mandated \$30 billion debt limit).

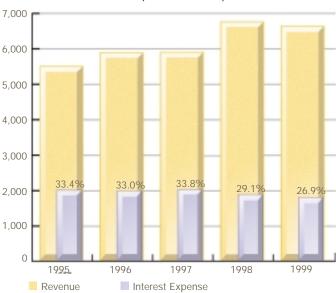
A return on the U.S. Government's initial appropriation investment in TVA power facilities, plus a repayment of the initial investment, is specified by law. The combined payment for 1999 was \$57 million. Total cumulative repayments and return on investment by TVA to the U.S. Treasury exceed \$3 billion.

Cash Flows

Net cash provided by power program operations for 1999, 1998 and 1997 was \$1,431 million, \$1,394 million and \$1,066 million, respectively. This positive trend reflects improvements made in TVA's operating activities during the three-year period coupled with the rate increase in 1998.

Net cash used in investing activities for 1999, 1998 and 1997 was \$956 million, \$742 million, and \$580 million, respectively. The \$214 million increase from 1998 to 1999 was primarily due to an increase in construction expenditures of \$192 million reflecting the construction of natural gas combustion turbines for peaking power. The \$162 million increase from 1997 to 1998 primarily reflects the 1997 sale of certain receivables.

Interest Expense as a Percent of Revenue (millions of dollars)



Net cash used in financing activities for 1999, 1998 and 1997 was \$763 million, \$560 million and \$425 million, respectively. For 1999, the cash used in financing activities reflects the aggregate net repayment of total outstanding debt of \$308 million coupled with borrowing expenses and other financing costs of \$391 million.

Capital Resources

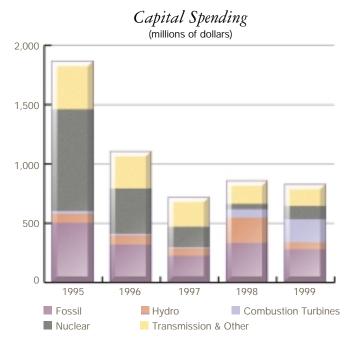
During 1999, 1998 and 1997 TVA accessed the capital markets through cost-effective long-term financing structures and continued to expand its investor base by tapping the global and retail debt markets. The proceeds from the borrowings were used to refinance existing debt.

Market Risk

Risk Policies

TVA is exposed to market risks including changes in interest rates, foreign currency exchange rates, and volatility of certain commodity and equity market prices. To manage the volatility attributable to these exposures, TVA has entered into various non-trading derivative transactions, principally interest rate swap agreements, foreign currency swap contracts, forwards, futures, and option contracts. TVA has established its Risk Management Committee, which maintains responsibility for reviewing and approving controls and procedures for TVA-wide risk management activities including the oversight of models and assumptions used to measure risk, the review of counterparty exposure limits, and the establishment of formal procedures for use of financial hedging instruments.

TVA is exposed to losses in the event of counterparties' nonperformance and accordingly has established controls to determine the creditworthiness of counterparties in order to mitigate exposure to counterparty credit risk. With respect to hedging activities, TVA risk management policies allow the use of derivative financial instruments to manage financial exposures



(millions of kWh) 200,000 150,000 100,000 50,000 1995 1996 1997 1998 1999

Generation by Source

but prohibit the use of these instruments for speculative or trading purposes. TVA currently accounts for such hedging activities using the deferral method, and gains and losses are recognized in the accompanying financial statements when the related hedged transaction occurs.

Interest Rate and Foreign Currency Risk

TVA manages its daily cash needs through issuance of discount notes and other short-term borrowings. These borrowings with maturities of less than one year expose TVA to fluctuations in short-term interest rates. TVA is not exposed to changes in interest rates on most of its long-term debt until such debt matures and may be refinanced at the then applicable rates. An interest rate swap is used to hedge TVA's exposure related to its inflation-indexed accreting principal bonds, and currency swap contracts are used as hedges for foreign currency denominated debt issues (see note 5-Foreign currency transactions and interest rate swap). Based on TVA's overall interest rate exposure at September 30, 1999, including derivative and other interest rate sensitive instruments, a near-term 1 percentage point change in interest rates would not have a material impact on TVA's financial position or results of operations for 1999.

Commodity Price Risk

TVA is exposed to the impact of market fluctuations in the price and transportation costs of certain commodities and fuels including, but not limited to, coal, natural gas and electricity. TVA employs established policies and procedures to manage risks associated with these market fluctuations by using various commodity-based derivative instruments, including futures, forwards and option contracts. To monitor the risk of commodity trading activities, TVA employs a daily Value at Risk (VaR) methodology which utilizes a statistical-based approach to determine adjusted historical changes in the value of a market risk sensitive commodity-based financial instrument to estimate the amount of change in the current value of the instrument that could occur at

a specified confidence level over a specified interval. Based on TVA's VaR analysis of its overall commodity price risk exposure at September 30, 1999, management does not anticipate a materially adverse effect on TVA's financial position or results of operations as a result of market fluctuations.

Combustion Turbine

Nuclear

Equity Price Risk

Hydro

Fossil

TVA maintains trust funds, as required by the Nuclear Regulatory Commission, to fund certain costs of decommissioning its nuclear generating units. These funds are managed by various money managers and are primarily invested in marketable equity securities, which are exposed to price fluctuations in equity markets. TVA actively monitors the trust funds' portfolios by benchmarking the performance of their investments against certain price indices. The accounting for nuclear decommissioning recognizes that sufficient funds have been set aside to fully fund expected decommissioning obligations, and, therefore, fluctuations in trust fund marketable security returns do not affect the earnings of TVA (see note 1–Decommissioning costs).

Other Issues

Year 2000 Readiness

The "Year 2000" issue concerns the inability of information technology systems to properly recognize and process date-sensitive information related to the year 2000 and beyond. TVA's Year 2000 efforts have generally focused on (1) developing a Year 2000 remediation strategy, (2) inventorying and assessing the priority of items that may be affected by the Year 2000 issue, (3) replacing, repairing or converting items that are not Year 2000 ready, (4) testing and validating the Year 2000 readiness of replaced, repaired and converted items and (5) implementing the use of replaced, repaired and converted items. As of September 30, 1999, TVA had completed this five-step process with respect to 100 percent of the over 20,000 mission-critical Year 2000 items that TVA has been tracking in its Year 2000 program.

The Nuclear Regulatory Commission (NRC) has notified all utilities operating nuclear power plants that they are required to inform the NRC of steps they are taking to ensure that their computer systems will function properly by the year 2000. In a June 29, 1999, letter to the NRC, TVA confirmed that those plant systems required for the safe and reliable operation of TVA's Browns Ferry, Sequoyah and Watts Bar nuclear plants were Year 2000 ready. TVA also noted that there still were actions to be completed involving three computer programs that did not impact the continued safe and reliable operation of the nuclear units. These three computer programs have since been made Year 2000 ready. Onsite reviews by the NRC at all three of TVA's nuclear plants have indicated that Year 2000 computer issues should not affect the ability of TVA's nuclear plants to generate electricity safely and reliably as the year 2000 begins.

In a July 7, 1999, letter to the North American Electric Reliability Council, TVA said that it believed its mission-critical systems used to produce and deliver electricity were ready for date changes associated with the year 2000, with one exception. This exception was a clean-air reporting module, and the Year 2000 changes to this module have since been implemented in production.

TVA has been working with business partners to minimize the possibility of a Year 2000 problem impacting TVA's business. As of September 30, 1999, 100 percent of all TVA's mission-critical suppliers had declared their Year 2000 readiness. In addition, all 159 distributors of TVA power have declared that they intend to be Year 2000 ready on or before December 31, 1999.

COSTS. TVA estimates the direct and indirect costs of its Year 2000 work to be approximately \$40 million. As of September 30, 1999, TVA had expended approximately \$37 million of this amount. TVA believes that it has allocated sufficient resources to address the Year 2000 issue and does not expect additional costs to be material to its financial position and results of operations.

RISKS. Some of TVA's operations are extensively computerized and are also dependent on the information technology systems of others with whom it interfaces. Thus, the failure by TVA or others with whom it interfaces to become Year 2000 ready on a timely basis could have a material adverse effect on, among other things, TVA's results of operations, liquidity and financial condition and its generation and transmission operations. Specific risks to TVA associated with the Year 2000 issue include, among other things, power production and delivery interruptions and administration, billing and accounting system malfunctions.

CONTINGENCY PLANS. While TVA expects to continue to provide a reliable power supply as the Year 2000 begins, TVA is preparing contingency plans to mitigate any Year 2000 problems that may arise. Particular elements of TVA's contingency plans include scheduling key personnel to be on duty during the Year 2000 transition, carrying additional power generation reserves, and implementing back-up communication systems. As of September 30, 1999, TVA had developed contingency plans for approximately 89 percent of TVA's enterprise-wide risks.

Labor Agreements

On September 30, 1999, TVA had 13,322 employees, of which 5,068 were trades and labor employees. Neither the Federal

labor relations laws covering most private sector employees nor those covering most Federal agencies are applicable to TVA. However, the Board has a longstanding policy of acknowledging and dealing with recognized representatives of its employees, which policy is reflected in long-term agreements to recognize trades and labor unions (or their successors) through 2007 and salary policy unions (or their successors) through 2012. Federal law prohibits TVA employees from engaging in strikes against TVA.

Litigation

TVA is party to various civil lawsuits and claims that have arisen in the ordinary course of business. Although the outcome of pending litigation cannot be predicted with any certainty, it is the opinion of TVA counsel that the ultimate outcome should not have a material adverse effect on TVA's financial position or results of operations.

Environmental Matters

TVA's operations are subject to various Federal, state and local environmental statutes and regulations. Major areas of regulation affecting TVA's operations include air pollution control, water pollution control, and management and disposal of solid and hazardous wastes. Because TVA is a Federal agency, it is subject only to those state and local environmental requirements where Congress has clearly waived Federal immunity. In the major environmental areas, limited waivers have been enacted by Congress. TVA's activities may also be subject to other narrower environmental requirements or to environmental requirements that affect only Federal activities.

TVA has incurred and continues to incur substantial capital expenditures and operating expenses to comply with environmental requirements. Because these requirements change frequently, the total amount of these costs in the future is not presently determinable. It is anticipated that environmental requirements will become more stringent and that compliance costs will increase, perhaps by substantial amounts.

Under the Clean Air Act, the Environmental Protection Agency (EPA) has promulgated national ambient air quality standards for certain air pollutants, including sulfur dioxide, particulate matter and nitrogen oxide. Coal-fired generating units such as TVA's are major sources of these pollutants. The 1990 Amendments to the Clean Air Act establish a number of new requirements relating to acid rain control, including additional requirements relating to sulfur dioxide and nitrogen oxide emissions. Through 1999, TVA had invested approximately \$935 million in capital for Phase I and Phase II compliance. TVA estimates it will spend an additional \$160 million in capital through 2005 to finalize the Phase II compliance measures.

During 1998, TVA adopted a new clean air strategy that is designed to reduce nitrogen oxide (NOx) emissions from its coal fired plants by approximately 170,000 tons per year. Under this strategy, TVA expects to install NOx control equipment at five of its fossil plants no later than 2005. The cost of implementing this strategy is expected to be between \$500 million and \$600 million, in addition to amounts TVA has already spent to comply with the 1990 Clean Air Act Amendments. Although TVA's

new strategy will not by itself bring TVA into compliance with EPA's ozone-related regulations, recent court decisions have overturned or delayed these regulations. While these court decisions may have some effect on TVA's plans, TVA is committed to improving the air quality of the region, and our NOx strategy was developed in part to help our region continue to improve its air quality.

Although TVA cannot with certainty project the costs for additional reductions of NOx, sulfur dioxide and particulate matter emissions beyond those required by the acid rain provisions of the 1990 Clean Air Act Amendments, the costs for these additional reductions could exceed \$2.5 billion.

The EPA is investigating whether coal-fired utilities in the eastern U.S., including TVA, may have modified their coal-fired power plants without complying with EPA's new source program requirements. TVA provided EPA with the information that it requested regarding modifications to TVA's coal-fired plants during the period from 1978 to 1998. As a result of this investigation, EPA filed an administrative order against TVA, along with lawsuits against seven other Midwest and Southeast utilities, alleging the utilities made illegal modifications to certain of their coal-fired plants. Maintenance projects performed at coal-fired plants to maintain them in good working order, which utilities have always considered routine, are now being considered major modifications by EPA. EPA is claiming that these projects have triggered requirements for installation of new emission control technology. The administrative order requires TVA to review and determine, along with EPA, what must be done to meet the new requirements. TVA will likely contest the order. While the ultimate outcome of this review is uncertain, it could require TVA to accelerate more than \$1 billion of the emission reduction activities discussed in the preceding paragraph.

Nonpower Roles and Responsibilities

TVA's responsibilities for managing public resources began with its creation in 1933. Today, these resource management activities help sustain the interconnected tributaries and the main stem of the Tennessee River-the nation's fifth largest river system. Multiple objectives are balanced to provide flood control, navigation, electric power production, recreation, and environmental protection. Funding for these programs historically has included Federal appropriations, power revenues, and nonpower revenues such as user fees.

During 1999, TVA received total Federal appropriations of approximately \$50 million, of which \$43 million was for essential stewardship activities and \$7 million was for TVA's Land Between The Lakes National Recreation Area (LBL). During 1998, TVA received total Federal appropriations of approximately \$70 million, of which \$60 million was for essential stewardship activities, \$7 million was for LBL, and \$3 million was for TVA's Environmental Research Center.

In October 1997, Congress directed TVA to fund essential stewardship activities related to its management of the Tennessee River system and TVA properties with power funds in the event that there were insufficient appropriations or other

available funds to pay for such activities in any fiscal year. Congress did not provide any appropriations to TVA to fund such activities in 2000. Consequently, during 2000, TVA will pay for essential stewardship activities primarily with power revenues, with the remainder funded with user fees and other forms of revenues derived in connection with those activities. TVA expects to spend approximately \$43 million from power revenues for these activities during 2000.

In addition, administrative jurisdiction over LBL was transferred to the Secretary of Agriculture effective October 1, 1999. TVA is responsible for certain transition costs associated with the transfer of LBL, which are estimated to be approximately \$10 million. This liability was recorded against available nonpower fund balances at September 30, 1999.

TVA retains responsibility for management of the remaining nonpower assets and settlement of nonpower obligations. TVA remains committed to carrying out those essential stewardship activities related to its management of the Tennessee River system and TVA properties, and to the protection and equitable distribution of public benefits that are central to TVA's management of its integrated system.

Accounting Standards

TVA accounts for the financial effects of regulation in accordance with Statement of Financial Accounting Standards (SFAS) No. 71, Accounting for the Effects of Certain Types of Regulation. As a result, TVA records certain regulatory assets and liabilities that would not be recorded on the balance sheet under generally accepted accounting principles for non-regulated entities.

TVA has approximately \$1.6 billion of regulatory assets (see note 1-Other deferred charges and Debt issue and reacquisition costs) along with approximately \$6.3 billion of deferred nuclear plants as of September 30, 1999. In the event that restructuring of the utility industry changes the application of SFAS No. 71, TVA would be required to evaluate such regulatory assets and deferred nuclear plants under the provisions of SFAS No. 121, Accounting for the Impairment of Long-Lived Assets and Long-Lived Assets to Be Disposed Of. Statement 121 establishes criteria for evaluating and measuring asset impairments, and states that regulatory assets that are no longer probable of recovery through future revenues be charged to earnings. Such an event may have a material adverse effect on future results of operations from the write-off of regulatory assets. However, TVA intends to fully recover any regulatory and other deferred assets that may result from TVA's transition to a competitive market.

New Accounting Pronouncements

In June 1998, the Financial Accounting Standards Board (FASB) issued SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, which requires that every derivative instrument (including certain derivative instruments embedded in other contracts) be recorded on the balance sheet as either an asset or liability measured at its fair value. The statement requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met. TVA may engage in hedging activities using futures,

forward contracts, options and swaps to hedge the impact of market fluctuations on energy commodity prices, interest rates and foreign currencies. In July 1999, the FASB deferred the effective date of SFAS No. 133 to fiscal years beginning after June 15, 2000. TVA is currently assessing the effect, if any, on its financial statements of implementing SFAS No. 133.

In March 1998, the Accounting Standards Executive Committee of the American Institute of Certified Public Accountants issued Statement of Position (SOP) 98-1, Accounting for the Costs of Computer Software Developed or Obtained for Internal Use, which provides guidance on accounting for the costs of computer software developed or obtained for internal use. Under SOP 98-1, certain costs which are currently expensed may now be capitalized and amortized over some future period. SOP 98-1, which is effective for TVA in 2000, is not expected to have a material impact on TVA's financial position or results of operations.

In December 1998, the Emerging Issues Task Force of the FASB issued EITF 98-10, Accounting for Contracts Involved in Energy Trading and Risk Management Activities. Some energy-related companies have been entering into contracts for the purchase and sale of energy commodities and netting those activities in the income statement (settlement basis). In EITF 98-10, the Task Force stated that energy trading contracts are to be recorded at fair value on the balance sheet, with related gains and loses included in earnings. EITF 98-10, which is effective for TVA in 2000, is not expected to have a material impact on TVA's financial position or results of operations.

Nuclear Decommissioning Costs

The FASB has undertaken a project regarding the accounting for closure and removal of long-lived assets, including the decommissioning of nuclear generating units. The FASB has reached several tentative conclusions with respect to the project and expects to issue an exposure draft in the first quarter of 2000; however, it is uncertain when a final statement will be issued and what impact it may ultimately have on TVA's financial position or results of operations.

Effective for 1998, TVA changed its method of accounting for decommissioning costs and related liabilities in order to comply with certain of the FASB's tentative conclusions, as well as

certain rate-setting actions. TVA's current accounting policy recognizes all obligations related to closure and removal of its nuclear units as incurred (see note 1–Decommissioning costs). The liability for closure is measured at the present value of the estimated cash flows required to satisfy the related obligation and discounted at a determined risk free rate of interest. The corresponding charge to recognize the additional obligation is effected through the creation of a regulatory asset. TVA further modified its method of accounting for decommissioning costs such that earnings from decommissioning fund investments, amortization expense of the decommissioning regulatory asset, and interest expense on the decommissioning liability are deferred in accordance with SFAS No. 71.

Forward-Looking Information

TVA's 1999 Annual Report contains forward-looking statements relating to future events and future performance. Any statements regarding expectations, beliefs, plans, projections, estimates, objectives, intentions or assumptions or otherwise relating to future events or performance may be forward-looking.

Some examples include statements regarding TVA's projections of future power and energy requirements, future costs related to environmental compliance, targets for TVA's future competitive position and the potential effect of the Year 2000 issue on TVA's operations. Although TVA believes that the assumptions underlying the forward-looking statements are reasonable, TVA does not guarantee the accuracy of these statements.

Numerous factors could cause actual results to differ materially from those in forward-looking statements. Such factors include, among other things, new laws and regulations, especially those related to the restructuring of the electric power industry and various environmental matters; increased competition among electric utilities; legal and administrative proceedings affecting TVA; the financial environment; performance of TVA's generating facilities; fuel prices; the demand for electricity; weather conditions; changes in accounting standards; the efficacy of TVA's Year 2000 remediation efforts and the efforts of those entities with which TVA interfaces; and unforeseeable events.

Balance Sheets

At September 30 (in millions)	Power Program			All Programs			
Assets	1999		1998		1999		1998
Current assets							
Cash and cash equivalents	\$ 103		\$ 391		\$ 160		\$ 451
Accounts receivable	730		796		730		796
Inventories at average cost and other			•				ŕ
Fuel	178		153		178		153
Other	307		316		307		316
Total current assets	1,318		1,656		1,375		1,716
Property, plant, and equipment							
Completed plant	29,569		29,055		30,685		30,166
Less accumulated depreciation	(8,762)		(7,945)		(9,074)		(8,243)
Net completed plant	20,807		21,110		21,611		21,923
Construction in progress	730		548		730		558
Deferred nuclear generating units	6,320		6,311		6,320		6,311
Nuclear fuel and capital leases	560		922		560		922
Total property, plant, and equipment	28,417		28,891		29,221		29,714
Investment funds	731		578		731		578
Deferred charges and other assets							
Loans and other long-term receivables	122		104		153		151
Debt issue and reacquisition costs	1,188		861		1,188		861
Other deferred charges	1,610		1,525		1,610		1,525
Total deferred charges and other assets	2,920		2,490		2,951		2,537
Total assets	\$ 33,386		\$ 33,615		\$ 34,278		\$ 34,545

	Power Program			All Programs			
Liabilities and proprietary capital	1999		1998		1999		1998
Current liabilities							
Accounts payable	\$ 493		\$ 521		\$ 521		\$ 538
Accrued liabilities	178		175		182		180
Accrued interest	464		487		464		487
Discount notes	982		1,757		982		1,757
Current maturities of long-term debt	1,000		1,500		1,000		1,500
Total current liabilities	3,117		4,440		3,149		4,462
Other liabilities	2,156		2,007		2,156		2,007
Long-term debt							
Public bonds—senior	23,294		19,127		23,294		19,127
Federal Financing Bank—senior	_		3,200		_		3,200
Public bonds—subordinated	1,100		1,100		1,100		1,100
Unamortized discount and other adjustments	(491)		(407)		(491)		(407)
Total long-term debt	23,903		23,020		23,903		23,020
December 1997							
Proprietary capital	540		5/0		4.064		4.026
Appropriation investment	548		568		4,964		4,936
Retained earnings reinvested in power program	3,662		3,580		3,662		3,580
Accumulated net expense of nonpower programs		<u> </u>	-		(3,556)		(3,460)
Total proprietary capital	4,210		4,148		5,070		5,056
Total liabilities and proprietary capital	\$ 33,386		\$ 33,615		\$ 34,278		\$ 34,545

Statements of Income—Power Program

For the years ended September 30 (in millions)	1999	1998	1997
Operating revenues			
Sales of electricity			
Municipalities and cooperatives	\$ 5,510	\$ 5,554	\$ 4,811
Industries directly served	642	523	464
Federal agencies and other	357	556	561
Other revenue	86	96	98
Total operating revenues	6,595	6,729	5,934
Operating expenses			
Fuel and purchased power	1,777	1,900	1,593
Operating and maintenance	1,384	1,347	1,201
Depreciation and amortization	1,181	1,038	1,014
Tax-equivalents	304	264	272
Accelerated amortization (notes 1 and 7)	261	-	_
Total operating expenses	4,907	4,549	4,080
Operating income	1,688	2,180	1,854
Other (expense) income, net	(9)	12	157
Income before interest expense and cumulative			
effect of change in accounting principle	1,679	2,192	2,011
Interest expense			
Interest on debt	1,753	1,930	1,993
Amortization of debt discount, issue, and reacquisition costs, net	60	84	91
Allowance for funds used during construction	(36)	(55)	(81)
Net interest expense	1,777	1,959	2,003
Cumulative effect of change in accounting principle (notes 1 and 7	217	_	_
Net income	\$ 119	\$ 233	\$ 8

Statements of Cash Flows

	Power Program				All Programs				
For the years ended September 30 (in millions)	1999		1998	1997	1:	999		1998	1997
Cash flows from operating activities									
Net power income	\$ 119		\$ 233	\$ 8	\$	119		\$ 233	\$ 8
Net expense of nonpower programs	_		_	_		(96)		(91)	(121)
Items not requiring (providing) cash									
Depreciation and amortization	1,250		1,090	1,066	1	,263		1,103	1,080
Accelerated amortization	261		_	_		261		· _	_
Allowance for funds used during construction	(36)		(55)	(81)		(36)		(55)	(81)
Nuclear fuel amortization	177		264	196		177		264	196
Cumulative effect of change									
in accounting principle	(217)		_	_		(217)		_	_
Other, net	(26)		(2)	(151)		_		9	(151)
Changes in current assets and liabilities									
Accounts receivable	65		(95)	(24)		65		(89)	(21)
Inventories and other	(35)		(72)	(19)		(35)		(72)	(19)
Accounts payable and accrued liabilities	(19)		72	56		(21)		59	52
Accrued interest	(23)		(11)	1		(23)		(11)	1
Other	(85)		(30)	14		(85)		(36)	14
Net cash provided by operating activities	1,431		1,394	1,066	1	,372		1,314	958
Cash flows from investing activities									
Construction expenditures	(829)		(637)	(722)		(830)		(642)	(733)
Allowance for funds used during construction	36		55	81		36		55	81
Nuclear fuel	(135)		(151)	(159)		(135)		(151)	(159)
Proceeds from sale of investments	_		_	513		_		_	513
Purchases of investments	_		_	(483)		_		_	(483)
Proceeds from sale of loans receivable	_		_	211		_		_	211
Other, net	(28)		(9)	(21)		(21)		(8)	(13)
Net cash used in investing activities	(956)		(742)	(580)		(950)		(746)	(583)
Cash flows from financing activities									
Long-term debt									
Issues	4,506		4,625	3,100	4	,506		4,625	3,100
Redemptions	(4,046)		(4,930)	(3,829)	(4	,046)		(4,930)	(3,829)
Short-term borrowings, net	(775)		(394)	377	1	(775)		(394)	377
Financing costs, net	(391)		199	(12)	1	(391)		199	(12)
Congressional appropriations	_		_	_		50		69	106
Payments to U.S. Treasury	(57)		(60)	(61)		(57)		(60)	(61)
Net cash used in financing activities	(763)		(560)	(425)		(713)		(491)	(319)
Net change in cash and cash equivalents	(288)		92	61		(291)		77	56
Cash and cash equivalents at beginning of period	391		299	238		451		374	318
Cash and cash equivalents at end of period	\$ 103		\$ 391	\$ 299	S	160		\$ 451	\$ 374

Statements of Changes in Proprietary Capital—Power Program

For the years ended September 30 (in millions)	1999	1998	1997
Retained earnings reinvested at beginning of period	\$ 3,580	\$ 3,387	\$ 3,420
Net income	119	233	8
Return on appropriation investment	(37)	(40)	(41)
Retained earnings reinvested at end of period	3,662	3,580	3,387
Appropriation investment at beginning of period	568	588	608
Return of appropriation investment	(20)	(20)	(20)
Appropriation investment at end of period	548	568	588
Proprietary capital at end of period	\$ 4,210	\$ 4,148	\$ 3,975

Statements of Net Expense—Nonpower Programs

For the years ended September 30 (in millions)	1999	1998	1997
W/ . IT IC. II.	å 7 0	A (5	å 70
Water and Land Stewardship	\$ 72	\$ 65	\$ 78
Land Between The Lakes (note 10)	19	8	7
Economic Development	5	8	22
Environmental Research Center	_	10	14
Net expense	\$ 96	\$ 91	\$ 121

Statements of Changes in Proprietary Capital—Nonpower Programs

For the years ended September 30 (in millions)	1999	1998	1997
Proprietary capital at beginning of period	\$ 908	\$ 930	\$ 944
Congressional appropriations	50	69	106
Net expense Other, net	(96) (2)	(91)	(121)
Proprietary capital at end of period	\$ 860	\$ 908	\$ 930

1. Summary of significant accounting policies

General

TVA is a wholly owned corporate agency and instrumentality of the United States. It was established by the TVA Act with the objective of developing the resources of the Tennessee Valley region in order to strengthen the regional and national economy and the national defense by providing: (1) an ample supply of power within the region, (2) navigable channels and flood control for the Tennessee River System, and (3) agricultural and industrial development and improved forestry in the region. TVA carries out these regional and national responsibilities in a service area that centers on Tennessee and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina and Virginia.

TVA's programs are divided into two types of activities - the power program and the nonpower programs. Substantially all TVA revenues and assets are attributable to the power program. The power program has historically been separate and distinct from the nonpower programs and is required to be self-supporting from power revenues and proceeds from the issuance of debt. The power program receives no congressional appropriations and is required to make annual payments to the U.S. Treasury in repayment of, and as a return on, the government's appropriation investment in TVA power facilities. Most of the funding for TVA's nonpower programs has historically been provided by congressional appropriations. Certain nonpower activities are also funded by various revenues and user fees. Financial accounts for the power and nonpower programs are kept separately. See note 10 for a discussion related to future funding of TVA's nonpower programs.

Power rates are established by the TVA Board of Directors as authorized by the TVA Act. The TVA Act requires TVA to charge rates for power that, among other things, will produce gross revenues sufficient to provide funds for operation, maintenance, and administration of its power system; payments to states in lieu of taxes; and debt service on outstanding indebtedness.

Unless otherwise indicated, years (1999, 1998, etc.) refer to TVA's fiscal years ended September 30.

Revenue

Revenues from power sales are recorded as power is delivered to customers. TVA accrues estimated unbilled revenues for power sales provided to customers for the period of time from the end of the billing cycle to month-end.

Off-system sales are presented in the accompanying statements of operations as a component of Sales of electricity-Federal agencies and other. Prior to 1998, off-system sales and purchases under exchange power agreements were reflected on a net basis in fuel and purchased power expense. Off-system sales for 1997 have been reclassified to conform with the 1999 and 1998 presentation.

Property, plant, and equipment and depreciation

Additions to plant are recorded at cost, which includes direct and indirect costs and an allowance for funds used during con-

struction. The cost of current repairs and minor replacements is charged to operating expense. Nuclear fuel is valued at the lower of cost or market using the average cost method for raw materials and the specific identification method for nuclear fuel in reactor. Amortization of nuclear fuel is calculated on a units of production basis and is included in fuel expense. The TVA Act requires TVA's Board of Directors to allocate the cost of completed multi-purpose projects between the power and nonpower programs, subject to the approval of the President of the United States. The original cost of property retired, together with removal costs less salvage value, is charged to accumulated depreciation. Depreciation is generally computed on a straightline basis over the estimated service lives of the various classes of assets. Depreciation expense expressed as a percentage of the average annual depreciable completed plant was 3.28 percent for 1999, 3.23 percent for 1998 and 3.21 percent for 1997.

Decommissioning costs

Effective for 1998, TVA changed its method of accounting for decommissioning costs and related liabilities. TVA's current accounting policy recognizes as incurred all obligations related to closure and removal of its nuclear units. The charge to recognize the additional obligation in 1998 was effected through the creation of a regulatory asset. TVA further modified its accounting methodology such that earnings from decommissioning investments, amortization of the decommissioning regulatory asset, and interest expense on the decommissioning liability are deferred (see note 9-Decommissioning costs). The effect of the change was to decrease 1998 depreciation expense approximately \$38 million – primarily due to the deferral of the decommissioning components of earnings, amortization and interest.

During 1997, the excess of decommissioning investment earnings over the annual decommissioning provision was recorded as other income. TVA's total investment earnings were \$151 million. Of this amount, \$13 million was recorded as an offset to the decommissioning provision, and \$138 million was recorded as other income.

Allowance for funds used during construction

TVA capitalizes an allowance for funds used during construction. The allowance is applicable to construction in progress, excluding deferred nuclear generating units.

Loans and other long-term receivables

In June 1997, TVA entered into a five-year agreement with a bank pursuant to which TVA agreed to sell certain receivables relating to TVA's consumer energy-conservation programs. As of September 30, 1999, approximately \$218 million of the receivables have been sold for proceeds equal to their carrying amount. Under the terms of the agreement, TVA has retained substantially the same risk of credit loss as if the receivables had not been sold and, accordingly, an appropriate liability account has been established.

Other deferred charges

Other deferred charges primarily include prepaid pension costs and regulatory assets capitalized under the provisions of Statement of Financial Accounting Standards (SFAS) No. 71, Accounting for the Effects of Certain Types of Regulation. At September 30, 1999, other deferred charges included total unamortized regulatory assets of \$968 million—of which \$343 million represents a transition obligation for certain postemployment benefits; \$393 million represents an additional obligation related to the closure and removal of nuclear units (see note 1-Decommissioning costs); \$221 million represents an overmarket portion of nuclear fuel; and \$11 million represents TVA's portion of the costs for decommissioning the Department of Energy's (DOE) uranium enrichment facilities. At September 30, 1998, the unamortized balances of regulatory assets of \$1,260 million included \$342 million representing a capitalized interest component of nuclear fuel; \$377 million representing a transition obligation for certain postemployment benefits; \$478 million representing an additional obligation related to the closure and removal of nuclear units (see note 1-Decommissioning costs); and \$63 million representing TVA's portion of the costs for decommissioning the DOE's uranium enrichment facilities.

Effective for 1999, TVA reclassified an additional \$332 million from nuclear fuel inventory to deferred charges. This regulatory asset will be amortized on a straight-line basis over an estimated three-year period. The effect of this change was to increase 1999 expense approximately \$111 million.

Also effective for 1999, TVA changed its method of accounting for nuclear refueling outage maintenance costs whereby such costs will be deferred and amortized on a straight-line basis over the estimated period until the next refueling outage, rather than expensed as incurred. The effect of the change was to decrease 1999 expense approximately \$63 million.

Investment funds

Investment funds consist primarily of trust funds designated to fund nuclear decommissioning requirements (see note 9-Decommissioning costs). These funds are invested in portfolios of securities generally designed to earn returns in line with overall equity market performance.

Debt issue and reacquisition costs

Effective for 1999, TVA changed its method of amortizing debt issue and reacquisition costs. Under the current policy, issue and reacquisition expenses, call premiums, and other related costs are deferred and amortized (accreted), on a pooled straight-line basis over the weighted average life of TVA's public debt portfolio. During 1998 and 1997, debt issue and reacquisition costs were separately amortized on a straight-line basis over the term of the related outstanding securities. The effect of the change was to decrease 1999 expense approximately \$20 million.

TVA has incurred premiums related to certain advanced refundings, and also received and paid premiums in connection with the monetization of certain call provisions. In accordance with regulatory practices, TVA has deferred these premiums and is amortizing such premiums on a pooled straight-line basis over the weighted average life of TVA's public debt portfolio. The unamortized bal-

ances of such regulatory assets at September 30, 1999 and 1998, were \$641 million and \$674 million, respectively.

Tax-equivalents

The TVA Act requires TVA to make payments to states and local governments where the power operations of the corporation are conducted. The amount is 5 percent of gross revenues from the prior year's sale of power, excluding sales to other Federal agencies and interchange sales with other utilities, with a provision for minimum payments under certain circumstances.

Accelerated amortization

Effective for 1999, TVA adopted a new accounting policy whereby annual provisions for amortization of deferred charges will be adjusted as necessary in order to achieve certain earnings levels as set forth in resolutions adopted annually by the TVA Board of Directors in connection with the rate review process. The targeted earnings levels will be based on the earnings requirements of the TVA Act and the Basic TVA Power Bond Resolution (see note 5-Borrowing authority). Such adjustments may result in either contracting or extending the estimated amortization periods. The amortization of such assets is principally computed on a straightline basis, over periods ranging from three to 15 years. As a result of surplus earnings levels in 1999, due in part to a change in accounting for pension costs (see note 7-Pension plan), TVA accelerated amortization of certain regulatory assets by \$261 million under the new policy in 1999.

Interest and capital costs

During 1999, 1998, and 1997, cash paid for interest on outstanding indebtedness (net of amount capitalized) was \$1,740 million, \$1,886 million, and \$1,911 million, respectively. In addition to paying interest on outstanding indebtedness, the TVA Act requires TVA to make annual payments to the U.S. Treasury. The annual Treasury payments represent a repayment of the original appropriation investment, along with a return on the appropriation investment (see note 4). TVA paid \$20 million each year for 1999, 1998, and 1997 as a repayment of the appropriation investment. TVA paid \$37 million to the U.S. Treasury in 1999 as a return on the appropriation investment, while paying \$40 million in 1998 and \$41 million in 1997.

Risk-management activities

TVA is exposed to market risk from changes in interest rates and currency exchange rates. To manage volatility relating to these exposures, TVA has entered into various derivative transactions, principally an interest rate swap agreement and foreign currency swap agreements. TVA is exposed to credit losses in the event of nonperformance by counterparties on the risk-management instruments. TVA monitors such risk and does not believe that there is a significant risk of nonperformance by any of the parties to these instruments.

TVA may engage in hedging activities using forwards, futures or options to hedge the impact of market fluctuations on energy commodity prices. TVA currently accounts for these transactions using the deferral method, and gains and losses are recognized in the accompanying financial statements when the related hedged

transaction occurs. TVA's risk management policies allow the use of derivative financial instruments to manage financial exposures but prohibit the use of these instruments for speculative or trading purposes.

Cash and cash equivalents

Cash and cash equivalents include the cash available in commercial bank accounts and U.S. Treasury accounts, as well as shortterm securities held for the primary purpose of general liquidity. Such securities mature within three months from the date of acquisition.

Insurance

TVA is primarily self-insured for property loss, workers' compensation, general liability, and automotive liability. TVA is also selfinsured for health care claims for eligible active and retired employees. Consulting actuaries assist TVA in determining certain liabilities for self-insured claims. TVA maintains nuclear liability insurance and nuclear property, decommissioning and decontamination insurance with an outside party (see note 9-Nuclear insurance).

Management estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the related amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

2. Nuclear power program

The nuclear power program at September 30, 1999, consisted of nine units—five operating, three deferred, and one inoperative—at four locations, with investments in property, plant and equipment as follows and in the status indicated:

(dollars in millions)	Operating units	Installed capacity (megawatts)	Completed plant, net	Construction in progress	Deferred	Fuel investment
Browns Ferry*	2	2,304	\$ 3,167	\$ 45	\$ -	\$ 185
Sequoyah	2	2,442	1,989	35	-	102
Watts Bar	1	1,270	6,407	4	1,718	56
Bellefonte	-	-	-	_	4,602	-
Raw materials			_	_	-	29
Total	5	6,016	\$ 11,563	\$ 84	\$ 6,320	\$ 372

^{*} Browns Ferry 1, an inoperative unit, is discussed below.

Browns Ferry 1 was taken off-line in 1985 for modifications and improvements and will continue to remain in an inoperative status until its ultimate disposition is determined. The undepreciated cost of Browns Ferry 1 of \$66 million is included in net completed plant and is being depreciated as part of the recoverable cost of the plant over the remaining license period.

TVA has three units in deferred status. In 1988, TVA suspended construction activities on Watts Bar 2, and the unit is currently in lay-up. Bellefonte 1 and 2 were deferred in 1988 and 1985, respectively. Estimated 2000 expenditures for the three deferred units are limited to lay-up, maintenance and ensuring that options remain viable.

In December 1994, TVA determined it will not, by itself, complete Bellefonte 1 and 2 and Watts Bar 2 as nuclear units. TVA's integrated resource planning process identified as a viable option the conversion of the Bellefonte facility to a combinedcycle plant utilizing natural gas or gasified coal. In 1997, an independent team of technical and financial experts completed a feasibility study to evaluate options for the conversion of the Bellefonte Nuclear Plant to a fossil fuel-fired plant. The feasibility study concluded that one of the most economical fossil conversion strategies is to complete Bellefonte as a natural gas-fired combined-cycle plant. TVA also issued an Environmental Impact Statement (EIS) assessing the environmental impacts of various fossil conversion options. The EIS identified the natural gas-fired combined-cycle plant alternative as the preferred option. Bellefonte remains in a deferred status.

While the future decisions on TVA's deferred units will ultimately impact the method of cost recovery, the TVA Board has determined that it will establish rate adjustments and operating policies to ensure full recovery of the cost of these units and compliance with the requirements of the TVA Act.

3. Completed plant—power program

Completed plant of the power program consisted of the following at September 30:

		1999			1998	
(in millions)	Cost	Accumulated depreciation	Net	Cost	Accumulated depreciation	Net
Fossil plants	\$ 7,983	\$ 3,407	\$ 4,576	\$ 7,780	\$ 3,181	\$ 4,599
Nuclear plants	14,705	3,142	11,563	14,613	2,697	11,916
Transmission	3,384	1,091	2,293	3,265	1,038	2,227
Hydro plants	1,486	514	972	1,424	491	933
Other	2,011	608	1,403	1,973	538	1,435
Total	\$ 29,569	\$ 8,762	\$ 20,807	\$ 29,055	\$ 7,945	\$ 21,110

4. Appropriation investment—power program

The TVA Act requires TVA to make annual payments to the U.S. Treasury from net power proceeds as a return on the appropriation investment in the power system and as a repayment of that investment. The payments required by the TVA Act may be deferred under certain circumstances for not more than two

years. The annual repayment amount is \$20 million. The return is based on the appropriation investment as of the beginning of the year and the computed average interest rate payable by the U.S. Treasury on its total marketable public obligations as of the same date (6.56 percent at September 30, 1998).

5. Debt

Borrowing authority

The TVA Act authorizes TVA to issue bonds, notes, and other evidences of indebtedness up to a total of \$30 billion outstanding at any one time. TVA must meet certain cash flow and earnings tests that are contained in the TVA Act and the Basic TVA Power Bond Resolution. Debt service on these obligations, which is payable solely from TVA's net power proceeds, has

precedence over the payment to the U.S. Treasury described in note 4.

Debt outstanding

Debt outstanding at September 30, 1999 and 1998 consisted of the following:

(in millions)	1999	1998
Short-term debt		
Held by the public		
Discount notes (net of discount)	\$ 982	\$ 1,757
Current maturities of long-term debt - 8.375%	1,000	1,500
Total short-term debt	1,982	3,257
Long-term debt		
Held by the public - senior		
Maturing in 2000	-	1,250
Maturing in 2001 - 5.00% to 6.50%	2,350	2,100
Maturing in 2002 - 6.00%	1,000	_
Maturing in 2003 - 6.125%	1,250	1,250
Maturing in 2004 - 5.00%	400	_
Maturing in years 2005 through 2044 - 5.375% to 8.625%	18,294	14,527
Held by Federal Financing Bank—senior	_	3,200
Held by the public—subordinated		
Maturing in 2045 and 2046 - 7.50% to 8.00%	1,100	1,100
Total long-term debt	24,394	23,427
Unamortized discount and other adjustments	(491)	(407)
Net long-term debt	23,903	23,020
Total debt	\$ 25,885	\$ 26,277

Short-term debt

The weighted average rates applicable to short-term debt outstanding in the public market as of September 30, 1999 and 1998, were 5.30 percent and 5.54 percent, respectively. During 1999, 1998, and 1997, the maximum outstanding balance of short-term borrowings held by the public was (in millions) \$4,701, \$2,914, and \$3,962, respectively, and the average amounts (and weighted average interest rates) of such borrowings were approximately (in millions), \$1,945 (5.01 percent), \$2,234 (5.58 percent), and \$2,743 (5.47 percent), respectively.

Put and call options

Bond issues of \$9.0 billion held by the public are redeemable in whole or in part, at TVA's option, on call dates ranging from the present to July 2020 at call prices ranging from 100 percent to 106.7 percent of the principal amount. Additionally, TVA has bond issues of \$2.1 billion held by the public that are redeemable in whole or in part at the option of the respective bondholders. One bond issue totaling \$500 million, which matures in July 2045, is redeemable in 2001 by the bondholders. A second issue totaling \$121 million, which matures in April 2036, is redeemable in 2006 at the option of the bondholders, and a third issue totaling \$1.5 billion, which matures in April 2036, is redeemable in 2006 at the option of the bondholders. Each of these three issues is reported in the debt schedule with maturity dates corresponding to the earliest redeemable dates. A fourth issue totaling \$250 million, which matures in January 2018, includes a provision for a right of redemption upon the death of a beneficial owner in certain specified circumstances.

Additionally, TVA has two issues of Putable Automatic Rate Reset Securities (PARRS) outstanding. The bonds permit TVA,

6. Fair value of financial instruments

TVA uses the methods and assumptions described below to estimate the fair values of each significant class of financial instrument.

Cash and cash equivalents and short-term debt

The carrying amount approximates fair value because of the short-term maturity of these instruments.

Investment funds

At September 30, 1999, these investments were classified as trading securities and carried at their fair value.

after a fixed-rate period of five years, to reset the coupon rate downward under certain market conditions. Investors have the option to redeem the bonds at par if and when the interest rate is reset. One PARRS issue totals \$575 million, matures in June 2028 and has its first potential reset date in June 2003. The second issue of PARRS totals \$525 million, matures in May 2029 and has its first potential reset date in May 2004.

Foreign currency transactions and interest rate swap

During 1996, TVA entered into a currency swap contract as a hedge for a foreign currency denominated debt transaction. TVA issued DM1.5 billion of bonds and swapped the cash flows for those of a U.S. dollar obligation of \$1 billion. TVA also entered into a currency swap contract during 1999 as a hedge for a Sterling denominated debt transaction and issued £200 million of bonds in that transaction. Any gains or losses on the debt instruments due to the foreign currency transactions are offset by losses or gains on the swap contracts. At September 30, 1999 and 1998 the currency transactions resulted in net deferred gains of \$182 million and \$102 million, respectively, which are included in the account "unamortized discount and other adjustments." The offsetting losses on the swap contracts are recorded as a deferred liability. If any loss/(gain) were to be incurred as a result of the early termination of a swap contract, any resulting charge/(income) would be amortized over the remaining life of the bond as a component of interest expense.

Additionally, in 1997, TVA issued \$300 million of inflationindexed accreting principle bonds. The 10-year bonds have a fixed coupon rate that is paid on the inflation-adjusted principal amount. TVA hedged its inflation exposure under the securities through a 10-year fixed interest rate swap agreement.

Loans and other long-term receivables

Fair values for these homogeneous categories of loans and receivables are estimated by determining the present value of future cash flows using a discount rate equal to lending rates for similar loans made to borrowers with similar credit ratings and for the same remaining maturities.

Bonds

Fair value of long-term debt traded in the public market is determined by multiplying the par value of the bonds by the quoted market price (asked price) nearest the balance sheet date.

The estimated values of TVA's financial instruments at September 30 are as follows:

(in millions)	1999 Carrying amount	Fair amount	1998 Carrying amount	Fair amount
Cash and cash equivalents	\$ 160	\$ 160	\$ 451	\$ 451
Investment funds	731	731	578	578
Loans and other long-term receivables	153	153	151	151
Short-term debt	982	982	1,757	1,757
Long-term debt, including current maturitie	es 25,394	24,598	24,927	26,732

The fair market value of the financial instruments held at September 30, 1999, may not be representative of the actual gains or losses that will be recorded when these instruments mature or if they are called or presented for early redemption.

7. Benefit plans

Pension plan

TVA has a defined benefit plan for most full-time employees that provides two benefit structures: the Original Benefit Structure and the Cash Balance Benefit Structure. The plan is controlled and administered by a legal entity separate from TVA, the TVA Retirement System (TVARS), which is governed by its own independent board of directors. The plan assets are primarily stocks and bonds. TVA contributes to the plan such amounts as are agreed upon between the TVA and the TVARS boards of directors, which in no event is less than the amount necessary on an actuarial basis to provide assets sufficient to meet obligations for benefits. No TVA contribution is legally required when the plan's assets are sufficient to meet its accrued liabilities, as determined by an independent outside actuary. This situation has existed for several years.

The pension benefit for a member participating in the Original Benefit Structure is based on the member's years of creditable service, average base pay for the highest three consecutive years and the pension rate for the member's age and years of service, less a Social Security offset.

The pension benefit for a member participating in the Cash Balance Benefit Structure is based on credits accumulated in the member's account and member's age. A member's account receives credits each pay period equal to 6.0 percent of his or her straight-time earnings. The account also increases at an interest rate equal to the change in the Consumer Price Index (CPI) plus 3.0 percent, which amounted to 5.8 percent in 1998. During 1999, plan amendments were effected such that the rate may not be less than 6.0 percent nor more than 10.0 percent. The actual change in the CPI for 1999 was 1.6 percent, resulting in the minimum of 6.0 percent for 1999.

During 1998, plan amendments were effected such that certain pension benefits were enhanced, resulting in approximately \$590 million in additional pension plan benefit obligations.

During 1999, TVA changed its accounting policy for the method of determining the market-related value of pension assets, resulting in a one-time gain of approximately \$217 million. This gain is presented on the Statement of Income under the caption "Cumulative effect of change in accounting principle." This accounting change also had the effect of increasing 1999 pension income approximately \$64 million.

The discount rate used to determine the actuarial present value of the projected benefit obligation was 7.5 percent in 1999, 7.0 percent in 1998 and 8.0 percent in 1997. The assumed annual rates of increase in future compensation levels for 1999, 1998 and 1997 ranged from 3.3 to 8.3 percent. The expected long-term rate of return on plan assets was 11.0 percent for 1999, 1998, and 1997.

In 1998, the FASB issued SFAS No. 132, Employers' Disclosures About Pensions and Other Postretirement Benefits. This statement modifies current financial statement disclosure requirements from those required under SFAS Nos. 87, 88 and 106. SFAS No. 132 requires additional information be disclosed regarding changes in the benefit obligation and fair value of plan assets, but does not change the existing measurement or recognition provisions under the aforementioned standards. SFAS No. 132

was effective for fiscal years beginning after December 15, 1997.

Other postretirement benefits

TVA has sponsored an unfunded postretirement plan that provides for non-vested contributions toward the cost of certain retirees' medical coverage. The plan generally has covered employees who, at retirement, are age 60 and older (or who are age 50 and have at least five years of service). TVA's contributions are a flat dollar amount based upon the participants' age and years of service and certain payments toward the plan costs.

In connection with the pension plan benefit amendments, TVA also effected other postretirement benefit plan amendments during 1998 such that certain TVA contributions to retiree health benefits were discontinued, resulting in approximately \$120 million in reduced other postretirement benefit obligations.

The annual assumed cost trend for covered benefits is 9.5 percent in 1999, decreasing by one-half percent per year until reaching 5.0 percent in 2008 and held constant thereafter. For 1998 and 1997, an annual trend rate of 10.0 percent and 10.5 percent, respectively, was assumed. The effect of the change in assumptions of the cost basis was not significant. Increasing/(reducing) the assumed health-care cost trend rates by one percent would increase/(reduce) the accumulated postretirement benefit obligation (APBO) as of September 30, 1999, by \$12 million/(\$11 million) and the aggregated service and interest cost components of net periodic postretirement benefit cost for 1999 by \$1 million/(\$1 million).

The weighted average discount rate used in determining the APBO was 7.5 percent for 1999, 7.0 percent for 1998 and 8.0 percent for 1997. Any net unrecognized gain or loss resulting from experience different from that assumed or from changes in assumptions, and which is in excess of 10 percent of the APBO, is amortized over the average remaining service period of active plan participants.

Other postemployment benefits

Other postemployment benefits include workers' compensation provided to former or inactive employees, their beneficiaries and covered dependents for the period after employment but before retirement. Adoption of Statement of Financial Accounting Standards No. 112, Employers' Accounting for Postemployment Benefits (SFAS No. 112) in 1995 changed TVA's method of accounting practice from recognizing costs as benefits are paid to accruing the expected costs of providing these benefits. This resulted in recognition of an original transition obligation of approximately \$280 million. During 1996, TVA made adjustments to certain assumptions utilized in the determination of the obligation at September 30, 1996, which resulted in an increase in the original transition obligation of approximately \$194 million. In connection with the adoption of SFAS No. 112, and related approval by its Board of Directors, TVA recorded the transition obligation as a regulatory asset. The regulatory asset is being amortized over approximately 15 years, whereby the annual expense approximates the expense that would have been recorded on an as-paid basis.

The components of pension expense and other postretirement benefits expense for the years ended September 30 were:

	Pension Benefits			Other Postretirement Benefi		
(in millions)	1999		1998	1999	1998	
Change in benefit obligation						
Benefit obligation at beginning of year	\$ 5,645		\$ 4,209	\$ 206	\$ 348	
Service cost	94		67	5	8	
Interest cost	374		328	14	26	
Plan participants' contributions	34		33	_	-	
Amendments, including other events	-		587	(48)	(145)	
Actuarial (gain)/loss	(853)		695	(3)	3	
Net transfers to variable fund/401(k) plan	(1)		(26)	_	-	
Expenses paid	(3)		(3)	-	_	
Benefits paid	(259)		(245)	(23)	(34)	
Benefit obligation at end of year	\$ 5,031		\$ 5,645	\$ 151	\$ 206	
Change in plan assets						
Fair value of plan assets at beginning of year	\$ 5,968		\$ 5,958	\$ -	\$ -	
Adjustment to reconcile to system asset value	5		_	_	-	
Actual return on plan assets	1,098		223	_	-	
Plan participants' contributions	34		33	_	-	
Net transfers to variable fund/401(k) plan	(1)		(26)	_	_	
Employer contributions	_		27	23	34	
Expenses paid	(3)		(3)	_	_	
Benefits paid	(259)		(244)	(23)	(34)	
Fair value of plan assets at end of year	\$ 6,842		\$ 5,968	\$ -	\$ -	
Funded status	\$ 1,811		\$ 323	\$ (151)	\$ (206)	
Unrecognized net actuarial (gain)/loss Unrecognized prior service cost	(1,540) 266		(572) 470	1 (70)	5 (25)	
Prepaid (accrued) benefit cost	\$ 537		\$ 221	\$ (220)	\$ (226)	

	F	Pension Ber	efits	Other I	Other Postretirement Benefits		
(in millions)	1999	1998	1997	1999	1998	1997	
Components of net periodic benefit cost							
Service cost	\$ 94	\$ 67	\$ 70	\$ 5	\$ 8	\$ 13	
Interest cost	374	328	308	14	26	32	
Expected return on plan assets	(591)	(479)	(437)	n/a	n/a	n/a	
Amortization of prior service cost	24	_	1	(2)	_	_	
Amortization of transition obligation	_	_	1	_	_	_	
Recognized net actuarial loss	_	_	_	_	_	4	
Net periodic benefit cost	(99)	(84)	(57)	17	34	49	
Other events	(217)	111	(28)	_	(121)	_	
Total benefits cost/(income)	\$ (316)	\$ 27	\$ (85)	\$ 17	\$ (87)	\$ 49	

8. Major customers

One municipal customer accounts for approximately 9.1 percent of total power sales, and four other municipal customers account for an additional aggregate 17.7 percent of total power sales.

These five municipal customers purchase power from TVA under long-term contracts, which require 10 years' notice to terminate.

9. Commitments and contingencies

Leases

Certain property, plant and equipment are leased under agreements with terms ranging from one to 30 years. Most of the agreements include purchase options or renewal options that cover substantially all the economic lives of the properties. Obligations under capital lease agreements in effect at September 30, 1999, total \$36 million annually through 2004, and an aggregate of \$228 million thereafter, for a total commitment of \$408 million. Of this amount, \$220 million is interest.

Fuel purchase commitments

TVA has entered into approximately \$2.4 billion in long-term commitments ranging in terms of up to six years for the purchase of coal, and approximately \$195 million in long-term commitments ranging in terms of up to five years for the purchase of uranium.

Contingencies

NUCLEAR INSURANCE. The Price-Anderson Act sets forth an indemnification and limitation of liability plan for the U.S. nuclear industry. All Nuclear Regulatory Commission (NRC) licensees, including TVA, maintain nuclear liability insurance in the amount of \$200 million for each plant with an operating license. The second level of financial protection required is the industry's retrospective assessment plan, using deferred premium charges. The maximum amount of the deferred premium for each nuclear incident is approximately \$88 million per reactor, but not more than \$10 million per reactor may be charged in any one year for each incident. TVA could be required to pay a maximum of \$528 million per nuclear incident on the basis of its six licensed units, but it would have to pay no more than \$60 million per incident in any one year.

In accordance with NRC regulations, TVA carries property and decontamination insurance of \$1.06 billion at each licensed nuclear plant for the cost of stabilizing or shutting down a reactor after an accident. Some of this insurance may require the payment of retrospective premiums of up to a maximum of approximately \$21 million.

CLEAN AIR LEGISLATION. The Clean Air Act Amendments of 1990 require coal-fired generation units to reduce their sulfur dioxide and nitrogen oxide emissions in two phases in order to control acid rain. The Phase I compliance period commenced January 1, 1995, for sulfur dioxide and January 1, 1996, for nitrogen oxide, while the Phase II compliance period commences January 1, 2000. Based on the level of emissions, 26 of TVA's 59 operating coal-fired units are classified as Phase I units, with the remaining units being Phase II units. Compliance with these requirements has resulted in substantial expenditures for the reduction of emissions at TVA's coal-fired generating plants.

TVA's strategy for complying with the 1990 Amendments includes the use of scrubbers at two fossil units and the use of lower-sulfur coal at other fossil units to reduce sulfur dioxide. TVA has completed all planned scrubbers and is on schedule to complete the change-over to lower-sulfur coal.

Nitrogen oxide reductions are required for 19 of TVA's Phase

I units. These reductions were achieved through the installation of low-nitrogen-oxide burners at 13 units. TVA is in compliance with all Phase I requirements and is currently installing nitrogen oxide reduction equipment on remaining units to bring TVA into compliance with Phase II nitrogen oxide emission require-

Expenditures related to the Clean Air projects during 1999 and 1998 were approximately \$77 million and \$64 million, respectively. TVA has already completed the actions necessary to achieve Phase I compliance for both sulfur dioxide and nitrogen oxide emissions, and TVA is proceeding to take actions to comply with Phase II requirements that become effective in the year 2000 or after.

The total cost of compliance cannot reasonably be determined at this time because of the uncertainties surrounding emerging Environmental Protection Agency regulations, resultant compliance strategies, potential for development of new emission control technologies and future amendments to the legislation.

HAZARDOUS SUBSTANCES. The release and cleanup of hazardous substances are regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). In a manner similar to many other industries and power systems, TVA has generated or used hazardous substances over the years. TVA has been identified as a potentially responsible party with respect to five off-site disposal areas. TVA's liability at these sites has not yet been determined. In addition, TVA is currently investigating one other TVA-owned site under a state statute similar to CERCLA. TVA may have cleanup responsibilities at this site by virtue of its control of the property. TVA's potential liabilities for its share of cleanup costs at all of these sites are uncertain but are not expected to have a significant impact on TVA's financial position or results of operations.

PENDING LITIGATION. TVA is a party to various civil lawsuits and claims that have arisen in the ordinary course of its business. Although the outcome of pending litigation cannot be predicted with any certainty, it is the opinion of TVA counsel that the ultimate outcome should not have a material adverse effect on TVA's financial position or results of operations.

DECOMMISSIONING COSTS. Provision for decommissioning costs of nuclear generating units is based on the estimated cost to dismantle and decontaminate the facilities to meet NRC criteria for license termination. The Financial Accounting Standards Board (FASB) has reached several tentative conclusions with respect to its project regarding the accounting for closure and removal of long-lived assets, including the decommissioning of nuclear generating units. Effective for 1998, TVA changed its method of accounting for decommissioning costs and related liabilities in order to comply with certain of the FASB's tentative conclusions, as well as certain rate-setting actions. The FASB expects to issue an exposure draft in the first quarter of 2000; however, it is uncertain when a final statement will be issued and what impact it may ultimately have on TVA's financial position or results of operations.

TVA's current accounting policy recognizes as incurred all obligations related to closure and removal of its nuclear units. The liability for closure is measured as the present value of the estimated cash flows required to satisfy the related obligation and discounted at a determined risk-free rate of interest. The corresponding charge to recognize the additional obligation is effected through the creation of a regulatory asset. TVA further modified its method of accounting for decommissioning costs such that earnings from decommissioning fund investments, amortization expense of the decommissioning regulatory asset, and interest expense on the decommissioning liability are deferred in accordance with SFAS No. 71, Accounting for the Effects of Certain Types of Regulation. At September 30, 1999, the present value of the estimated future decommissioning cost of \$882 million was included in other liabilities. The decommissioning cost estimates from a 1995 study are based on prompt dismantlement and removal of the plant from service. The actual decommissioning costs may vary from the estimates because of changes in the assumed dates of decommissioning, changes in regulatory requirements, changes in technology and changes in cost of labor, materials and equipment.

TVA maintains an investment trust fund to provide funding for the decommissioning of nuclear power plants. In May 1997, TVA sold the entire \$402 million equity index fund portfolio and transferred the proceeds to trust portfolios managed by independent money managers. During 1997, TVA recognized \$151 million of income related to the fund, which included an \$81 million gain on the sale of fund investments and \$70 million in net appreciation and interest income. As of September 30, 1999,

10. Nonpower programs

TVA's nonpower programs provide various public services, including managing navigable river channels, providing flood control and overseeing certain recreation facilities. The nonpower programs encompass general stewardship of land, water and wildlife resources. TVA's nonpower programs also conduct certain research and development activities in pollution prevention and remediation.

Funding for the nonpower programs has historically been primarily provided through Federal appropriations. Certain nonpower program activities have also been funded by user fees and outside services revenues. During 1999, TVA received total Federal appropriations of approximately \$50 million, of which \$43 million was for essential stewardship activities and \$7 million was for TVA's Land Between The Lakes National Recreation Area (LBL). During 1998, TVA received total Federal appropriations of approximately \$70 million, of which \$60 million was for essential stewardship activities, \$7 million was for LBL, and \$3 million was for TVA's Environmental Research Center. As discussed below, TVA will receive no Federal appropriations in 2000.

In October 1997, Congress passed legislation that directed TVA to fund essential stewardship activities related to its management of the Tennessee River system and TVA properties with the decommissioning trust fund investments totaled \$724 million and were invested in securities designed to achieve a return in line with overall equity market performance.

Effective November 23, 1998 the NRC amended its regulations regarding decommissioning funding. The regulations required TVA to provide financial assurance for decommissioning funding through the use of certain prescribed mechanisms such as the trust agreements entered into by TVA in May 1997. These new regulations did not have a material impact on TVA's financial position or results of operations.

COST-BASED REGULATION. As a regulated entity, TVA is subject to the provisions of SFAS No. 71, Accounting for the Effects of Certain Types of Regulation. Accordingly, TVA records certain assets and liabilities that result from the effects of the ratemaking process that would not be recorded under generally accepted accounting principles for non-regulated entities. Currently, the electric utility industry is predominantly regulated on a basis designed to recover the cost of providing electric power to its customers. If cost-based regulation were to be discontinued in the industry for any reason, profits could be reduced and utilities might be required to reduce their asset balances to reflect a market basis less than cost. Discontinuance of cost-based regulation would also require affected utilities to write off their associated regulatory assets. Such regulatory assets for TVA total approximately \$1.6 billion at September 30, 1999, along with approximately \$6.3 billion of deferred nuclear plants. Management cannot predict the potential impact, if any, of the change in the regulatory environment on TVA's future financial position and results of operations.

power funds in the event that there were insufficient appropriations or other available funds to pay for such activities in any year. Congress did not provide any appropriations to TVA to fund such activities in 2000. Consequently, during 2000, TVA will pay for essential stewardship activities primarily with power revenues, with the remainder funded with user fees and other forms of revenues derived in connection with those activities. In addition, administrative jurisdiction over LBL was transferred to the Secretary of Agriculture effective October 1, 1999. TVA is responsible for certain transition costs associated with the transfer of LBL, estimated to be approximately \$10 million. This liability was recorded against available nonpower fund balances at September 30, 1999. TVA retains responsibility for management of the remaining nonpower assets and settlement of nonpower obligations.

The completed plant of the nonpower programs consists of multipurpose dams and other plant. At September 30, 1999, the net completed plant balances for multipurpose dams and other plant were \$692 million and \$112 million, respectively. At September 30, 1998, the net completed plant balances for multipurpose dams and other plant were \$698 million and \$115 million, respectively.

Report of Independent Accountants

To the Board of Directors of the Tennessee Valley Authority

In our opinion, the accompanying balance sheets (power program and all programs) and the related statements of income (power program), changes in proprietary capital (power program and nonpower programs), net expense (nonpower programs) and of cash flows (power program and all programs) present fairly, in all material respects, the financial position of the power program and all programs of the Tennessee Valley Authority as of September 30, 1999 and 1998, the results of operations of the power program and nonpower programs and cash flows of the power program and all programs for each of the three years in the period ended September 30, 1999, in conformity with generally accepted accounting principles. These financial statements are the responsibility of the Tennessee Valley Authority's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with generally accepted auditing standards and Government Auditing Standards issued by the Comptroller General of the United States which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

In accordance with Government Auditing Standards, we have also issued a report, dated October 22, 1999, on our consideration of the Tennessee Valley Authority's internal controls over financial reporting and our tests of compliance with certain provisions of laws, regulations, contracts and grants.

As discussed in note 7 to the financial statements, TVA changed its method for determining the market-related value of pension assets in 1999.

Pricewaterhouse Copers LLP

PricewaterhouseCoopers LLP Knoxville, Tennessee October 22, 1999

Report of Management

Management is responsible for the preparation, integrity and objectivity of the financial statements of the Tennessee Valley Authority as well as all other information contained in the annual report. The financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis and, in some cases, reflect amounts based on the best estimates and judgments of management, giving due consideration to materiality. Financial information contained in the annual report is consistent with that in the financial statements.

The Tennessee Valley Authority maintains an adequate system of internal controls to provide reasonable assurance that transactions are executed in accordance with management's authorization, that financial statements are prepared in accordance with generally accepted accounting principles, and that the assets of the corporation are properly safeguarded. The system of internal controls is documented, evaluated, and tested on a continuing basis. No internal control system can provide absolute assurance that errors and irregularities will not occur due to the inherent limitations of the effectiveness of internal controls; however, management strives to maintain a balance,

recognizing that the cost of such a system should not exceed the benefits derived. No material internal control weaknesses have been reported to management.

PricewaterhouseCoopers LLP was engaged to audit the financial statements of the Tennessee Valley Authority and issue reports thereon. Its audits were conducted in accordance with generally accepted auditing standards. Such standards require a review of internal controls and an examination of selected transactions and other procedures sufficient to provide reasonable assurance that the financial statements neither are misleading nor contain material errors. The Report of Independent Accountants does not limit the responsibility of management for information contained in the financial statements and elsewhere in the annual report.

David N. Smith

Chief Financial Officer

Dant Whit

and Executive Vice President of Financial Services

"People are buying more than bonds when they invest in TVA. They're investing in a small piece of one of the most innovative and reliable power companies in the world."

—Craven Crowell, Chairman

Earnings Objective

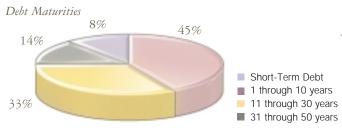
TVA is a corporation wholly owned by the United States government that funds its internal cash and capital requirements with operating cash flows and debt. TVA operates much like a nonprofit corporation, so it does not accumulate a large amount of retained earnings. TVA is not authorized by the TVA Act to issue equity securities.

Consistent with its federal charter, TVA's objective is to deliver a reliable supply of power to its customers "at rates as low as are feasible." Also, TVA is required by the TVA Act to charge rates sufficient to cover the principal and interest on its debt.

Financing Goal

TVA's financing goal is to offer unique investment opportunities that provide exceptional value for both the investor and TVA.

Diversification of TVA's Debt Portfolio



TVA issues a variety of debt securities in U.S. dollars and other currencies targeted to institutional and individual investors around the world. TVA's 370,000 individual and institutional investors reside in all 50 states and in 35 countries.

Investment Opportunities

TVA designs and markets debt in a variety of innovative structures, including Quarterly Income Debt Securities (QIDS), estate bonds, Putable Automatic Rate Reset Securities (PARRS), discount notes, and an assortment of other bonds. TVA's rated bonds have a Triple-A rating, and interest on TVA's securities is generally exempt from state and local income taxes. As of September 30, 1999, TVA had 31 long-term public debt issues outstanding, totaling \$26.4 billion.

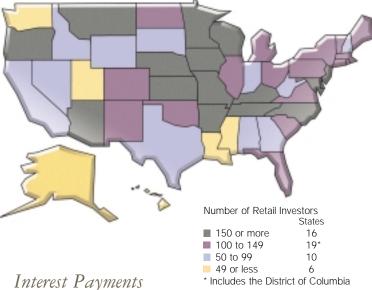
Investor Relations Online

Visit TVA Investor Relations on the World Wide Web at http://www.tva.com/finance to view and download financial and investment information, including annual reports, quarterly reports, TVA's information statement, and offering circulars (prospectuses).

Securities Listings

TVA's listed power bonds are traded on the bond market of the New York Stock Exchange, and its QIDS and PARRS are traded on the New York Stock Exchange under the symbols TVA, TVB, TVC, and TVE. All of TVA's bonds are publicly held.

Concentration of TVA's 340,000 U.S. Individual Investors



Investors receive semi-annual interest payments for power bonds, except for estate bonds, PARRS, and the 1996 Series C global bonds. Investors who own QIDS, estate bonds, and PARRS receive quarterly interest payments, and investors who own TVA's 1996 Series C global bonds receive annual interest payments.

Form and Denomination

Security	Book Entry Form	Denomination*	
QIDS	The Depository Trust Corporation	\$25	
PARRS	The Depository Trust Corporation	\$25	
1998 Series H Global	The Depository Trust Corporation	£1,000	
1996 Series C Global	The Depository Trust Corporation	DM1,000	
Power Bonds	Federal Reserve Bank System	\$1,000	

*Market prices and broker policies may require that investors pay more or less than par value for the security.

For More Information

SYLVIA H. (SISSY) CALDWELL, Senior Manager, Investor Relations Tennessee Valley Authority

400 West Summit Hill Drive Knoxville, Tennessee 37902

Phone: 888-882-4975 (toll-free in the U.S.)

Phone: 888-882-4967 (toll-free outside the U.S.) Fax: 865-632-3225 E-mail: investor@tva.com

Statistical and Financial Summaries

For the years ended September 30	1999	1998	1997	1996
Sales (millions of kilowatt-hours) ^a				
Municipalities and cooperatives	122,880	123,330	114,771	117,035
Industries directly served	22,885	18,514	17,359	16,599
Federal agencies and other	10,190	21,293	27,198	19,964
Total sales	155,955	163,137	159,328	153,598
Operating revenues (millions of dollars) ^a				
Electric				
Municipalities and cooperatives	\$ 5,510	\$ 5,554	\$ 4,811	\$4,980
Industries directly served	642	523	464	452
Federal agencies and other	357	556	561	430
Other	86	96	98	89
Total revenues	\$ 6,595	\$6,729	\$5,934	\$5,951
Electric revenue per kilowatt-hour (cents) ^b	4.17	4.07	3.66	3.82
Winter net dependable generating capacity (megawatts)				
Hydro ^C	5,492	5,491	5,384	5,298
Fossil	15,049	15,003	15,014	15,012
Nuclear units in service	5,729	5,620	5,625	5,545
Combustion turbine	2,232	2,384	2,394	2,268
Total capacity	28,502	28,498	28,417	28,123
System peak load (megawatts) — summer	28,295	27,253	26,661	25,376
	26,388		26,670	
System peak load (megawatts)—winter	20,300	23,204	20,070	25,995
Percent gross generation by fuel source Fossil	63%	62%	61%	65%
Hydro	7%	10%	11%	11%
Nuclear	30%	28%	28%	24%
Tructum	3070	2070	20,0	2170
Fuel cost per kilowatt-hour (cents)				
Fossil	1.28	1.25	1.23	1.23
Nuclear ^e	.51	.71	.58	.56
Aggregate fuel cost per kWh net thermal generation	1.05	1.10	1.04	1.06
Fuel data				
Net thermal generation (millions of kilowatt-hours)	137,169	139,727	135,735	131,898
Billion Btu	1,403,110	1,426,151	1,381,837	1,338,157
Fuel expense (millions of dollars)	1,434	1,538	1,406	1,395
Cost per million Btu (cents)	102.21	107.81	101.73	104.22
Net heat rate, fossil only	10,229	10,207	10,180	10,145

a Sales and revenues have been adjusted to include sales to other utilities.

b Excludes settlement payment from Department of Energy of \$465 million for 1989, \$311 million for 1990 and \$160 million for the years 1991-1994.

c Includes 405 megawatts of dependable capacity from the Corps of Engineers projects on the Cumberland River System.

d Reflects expiration of TAPOCO exchange agreement in 1990 – renewed in 1994.

e TVA changed its method of expensing the interest component of nuclear fuel expense in 1995.

1995	1994	1993	1992	1991	1990	1989
110,245	108,073	105,566	98,505	97,299	96,748	92,538
16,684	15,792	16,196	16,576	17,422	17,134	16,260
12,356	13,599	10,952	8,970	5,720	6,300	6,777
139,285	137,464	132,714	124,051	120,441	120,182	115,575
\$4, 654	\$ 4,582	\$4,479	\$4,266	\$4,272	\$4,292	\$4,109
460	452	472	472	531	548	526
277	441	414	342	286	455	624
82	71	71	71	68	69	62
\$5,473	\$5,546	\$5,436	\$5,151	\$5,157	\$5,364	\$5,321
3.87	3.87	3.92	3.97	4.09	4.15	4.15
5,225	5,242	4,885 ^d	4,885 ^d	4,885 ^d	4,885 ^d	5,201
15,032	15,032	15,088	15,088	15,249	15,249	15,249
3,342	3,342	3,365	3,361	3,361	2,296	2,296
2,232	2,264	2,284	2,284	2,284	2,284	2,284
25,831	25,880	25,622	25,618	25,779	24,714	25,030
25 40/	22.200	22.070	21,000	22,081	21,749	20,638
25,496 24,676	23,398	23,878	21,980			
24,070	24,723	21,666	21,974	20,752	24,627	20,369
71%	72%	77%	69%	68%	68%	71%
12%	14%	13%	14%	16%	19%	18%
17%	14%	10%	17%	16%	13%	11%
1.26	1.34	1.27	1.33	1.35	1.37	1.41
.61	1.10	1.09	1.10	1.02	1.00	1.08
1.14	1.31	1.25	1.29	1.29	1.32	1.37
110.007	110 (42	100.060	105 577	00.152	02 505	02.106
118,097 1,197,295	110,643	109,968	105,577	98,153	93,595	92,106
1,197,295	1,120,868 1,450	1,105,395 1,375	1,069,725 1,360	998,934 1,263	946,113 1,233	925,455 1,261
112.61	129.40	1,3/3	1,360	1,263	130.36	136.26
10,138	10,131	10,052	10,132	10,177	10,109	10,048
10,138	10,151	10,072	10,132	10,1//	10,109	10,048

CRAVEN CROWELL, Chairman

In seventh year of a nine-year term as Chairman of TVA's Board ... appointed by President Clinton in 1993 to be TVA's 11th Chairman . . . 15 years of service at TVA, including tenure as an officer and member of the corporation's top management team . . . has promoted a return to TVA's history of operational excellence and a program of financial strength and debt reduction . . .

serves as Vice Chairman of the Board and Chairman of the Membership & Strategic Issues Committee of the Electric Power Research Institute . . . serves on the board and executive committee of the Nuclear Energy Institute . . . B.A. from Lipscomb University in 1965 . . . Lipscomb Alumnus of the Year in 1995 . . . served in the Marine Corps Reserve and Naval Reserve.

THE **executive** committee



IKE ZERINGUE

President & Chief Operating Officer More than 24 years in the nuclear industry . . . directed start-up and licensing of TVA's Watts Bar Nuclear Plant and recovery and restart of Browns Ferry Nuclear Plant . . . directed start-up, maintenance, and

operation of Arizona Public Service Co.'s Palo Verde Unit 3 . . . became TVA's Senior VP of Nuclear Operations in 1993 . . . was named TVA's Chief Nuclear Officer and Executive VP of TVA Nuclear in 1997 . . . appointed in 1998 to current position, overseeing TVA's power production, transmission, marketing, economic development, and resource-management programs . . . nuclear engineering degree from North Carolina State University . . . graduated from Advanced Management Program at Harvard Business School.



Norm Zigrossi

Chief Administrative Officer & Executive Vice President, Business Services Joined TVA in 1986 . . . served as TVA's first Inspector General until 1992 . . . was President of TVA's Resource Group from 1992-94 . . . was named Chief Administrative

Officer in 1994 and Executive VP of Business Services in 1996 . . . before joining TVA, held a number of management and executive positions with the FBI, including the position of Special Agent in charge of Washington, D.C., field office . . . attended Loyola School of Law in New Orleans . . . holds a B.A. from Ohio Wesleyan University and an M.S. from the University of Maryland.



DAVID N. SMITH

Chief Financial Officer & Executive Vice President, Financial Services Joined TVA as Chief Financial Officer in 1995 . . . was named Executive VP of Financial Services in 1996 . . . has led refinancing of \$20 billion of debt with a variety of global and retail

bond offerings since 1995 . . . previously co-founded and served as Executive Director of Odyssey Financial, a corporate consulting firm . . . played key role in the reorganization of LTV Corp., enabling it to successfully emerge from one of the largest, most complex bankruptcies in U.S. history . . . VP of Corporate Development for 10 years at Cyclops Corp. . . . CPA certification in 1969 . . . graduate of Northwestern University . . . M.B.A. in finance from Northwestern's Kellogg School of Business.



TERRY BOSTON

Executive Vice President. Transmission/Power Supply More than 25 years experience with TVA . . . served as Manager of Pricing in Customer Service & Marketing . . . named to current position in 1999 . . . oversees modifications and additions to

and maintenance of some 17,000 miles of transmission lines, 675 substations in the TVA transmission system, and the provision of transmission and related services to neighboring utilities . . . registered professional engineer's license in Tennessee . . . B.S. in engineering from Tennessee Technological University and M.S. in engineering administration from University of Tennessee.



JOSEPH R. BYNUM

Executive Vice President, Fossil Power

Worked in TVA engineering and plant operations positions from 1972-82 . . . Plant Manager of Palo Verde Nuclear Generating Station for Arizona Public Service from 1982-87 . . . named to

senior position in TVA's Nuclear Power Operations in 1987 . . . appointed VP of Nuclear Operations in 1989 . . . served as VP of several TVA Fossil & Hydro organizations from 1993-98, including Maintenance & Testing Services, Fuel Supply & Engineering, and Fossil Operations . . . named to current position in 1998 . . . B.S. in electrical engineering and M.S. in nuclear engineering from Georgia Institute of Technology.



EDWARD S. CHRISTENBURY

Senior Vice President and General Counsel TVA's General Counsel since 1987 . . . advises the Board on legal matters and serves as Secretary to the corporation . . . oversees and coordinates all legal work for TVA . . . worked at the Nuclear Regulatory Commission for

seven years before joining TVA . . . while there, served as an Assistant General Counsel and supervised NRC attorneys representing the agency staff in nuclear-licensing proceedings . . . was a trial attorney and supervisor at the U.S. Department of Justice for 11 years . . . licensed to practice before the Supreme Court of the United States . . . undergraduate degree in business administration and law degree from the University of Tennessee.



PEYTON T. HAIRSTON JR.

Senior Vice President, Strategic Initiatives Joined TVA in 1993 as Manager of Strategic Planning & Negotiation Support . . . previously served as Senior Labor Counsel at Chiquita Brands International . . . has 13 years of experience in labor relations . . .

named Senior Vice President of Labor Relations at TVA in 1994 . . . also named TVA's Designated Agency Safety & Health Official in 1994 . . . appointed to current position in 1998 . . . coordinates the development and implementation of TVA's strategic efforts to prepare for industry restructuring . . . oversees Stakeholder Relations, a cross-organizational effort designed to provide first-rate communications with TVA's constituents . . . bachelor's degree from North Carolina State University and law degree from Wake Forest University's School of Law.



KATHRYN J. JACKSON

Executive Vice President, River System Operations & Environment Joined TVA in 1991 . . . appointed to current position in 1999 . . . is TVA's Environmental Executive . . . served as Executive VP of Resource Group from 1996-99 . . . oversees and coordinates

river operations, resource stewardship, energy research and technology applications . . . responsible for environmental policy and strategy as well as research and development for the agency . . . Director of the Joint Institute for Energy & Environment . .

. Presidential Appointee, the National Recreation Lake System Study Commission in 1998, 1999 . . . Distinguished Lecturer at Princeton University in 1997 . . . Advisor on the Carnegie Mellon College of Engineering Advisory Council in 1998, 1999 . . . Member of the Advisory Board for Vanderbilt University ... B.S. in physics from Grove City College ... M.S. in industrial engineering management from the University of Pittsburgh . . . M.S. and Ph.D. in engineering and public policy from Carnegie Mellon University . . . postdoctoral fellowship at the National Academy of Sciences/Engineering at the National Research Council in Washington, D.C.



MARK O. MEDFORD

Executive Vice President, Customer Service and Marketing

Joined TVA in 1989 as VP & Nuclear Technical Director . . . served in several TVA executive positions before being named to current position in 1996 . . . responsible for relations

between TVA and its customers . . . directs staffs managing customer accounts, product development and pricing, marketing, economic development, and bulk-power trading . . . has more than 24 years of public and private utility experience . . . before joining TVA, was Manager of Nuclear Regulatory Affairs at Southern California Edison . . . served in U.S. Navy 1971-75 and was assigned to the staff of Vice Admiral H. G. Rickover ... B.S. and M.S. degrees from Rice University ... M.B.A. from California State Polytechnic University . . . doctorate in executive management from Claremont Graduate School.



JOHN A. SCALICE

Chief Nuclear Officer & Executive Vice President, TVA Nuclear Joined TVA in 1989 as Plant Manager at Watts Bar Nuclear Plant . . . served as Browns Ferry Plant Manager . . . as Site VP at Watts Bar, played a key role in the successful licensing, start-

up and operation of that nuclear unit . . . named to current position in 1998 . . . responsible for all management of TVA's three operating nuclear plants . . . has more than 28 years of experience in the nuclear industry in areas of plant operations, nuclear security, reactor engineering . . . Senior Reactor Operating license . . . B.S. in mechanical engineering and M.S. in nuclear engineering from Polytechnical Institute of New York.



forward-looking STATEMENTS

This annual report contains forward-looking statements relating to future events and future performance. Any statements regarding expectations, beliefs, plans, projections, estimates, objectives, intentions or assumptions or otherwise relating to future events or performance may be forward-looking. Some examples include statements regarding TVA's projections of future power and energy requirements, future costs related to environmental compliance, targets for TVA's future competitive position, and the potential effect of the Year 2000 issue on TVA's operations. Although TVA believes that the assumptions underlying the forward-looking statements are reasonable, TVA does not guarantee the accuracy of these statements. Numerous factors could cause actual results to differ materially from those in forward-looking statements. Such factors include, among other things, new laws and regulations, especially those related to the restructuring of the electric power industry, and various environmental matters; increased competition among electric utilities; legal and administrative proceedings affecting TVA; the financial environment; performance of TVA's generating facilities; fuel prices; the demand for electricity; weather conditions; changes in accounting standards; the efficacy of TVA's Year 2000 remediation efforts and the efforts of those entities with which TVA interfaces; and unforeseeable events.

General Inquiries

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> E-mail: tvainfo@tva.gov ♦ TVA homepage: www.tva.com

TVA is an equal opportunity and affirmative action employer. TVA also ensures that the benefits of programs receiving TVA financial assistance are available to all eligible persons regardless of race, color, sex, national origin, religion, disability or age. This document can be made in an alternate format upon request.