#### **TENNESSEE VALLEY AUTHORITY**

#### A Wholly Owned Corporate Agency and Instrumentality of the United States of America

The Tennessee Valley Authority ("TVA" or the "Corporation") presents this Information Statement (this "Statement") for the information of interested individuals and potential purchasers of (1) its Power Bonds ("Power Bonds"), (2) its Discount Notes ("Discount Notes"), and (3) any other evidences of indebtedness ("Other Indebtedness") it may issue pursuant to the Tennessee Valley Authority Act of 1933, as amended, 16 U.S.C. §§831-831ee (2000 and Supp. II 2002) (the "Act" or the "TVA Act"). TVA issues Power Bonds pursuant to the Act and the Basic Tennessee Valley Authority Power Bond Resolution adopted by the Board of Directors of TVA (the "Board" or the "TVA Board of Directors") on October 6, 1960, as amended on September 28, 1976, October 17, 1989, and March 25, 1992, (the "Basic Resolution"). TVA issues Discount Notes and Other Indebtedness pursuant to the Act and their authorizing resolutions. Power Bonds, Discount Notes, and Other Indebtedness are collectively referred to in this Statement as "Evidences of Indebtedness."

EVIDENCES OF INDEBTEDNESS ARE NOT OBLIGATIONS OF THE UNITED STATES OF AMERICA, AND THE UNITED STATES OF AMERICA DOES NOT GUARANTEE THE PAYMENT OF THE PRINCIPAL OF OR INTEREST ON ANY EVIDENCES OF INDEBTEDNESS. TVA IS NOT REQUIRED TO REGISTER EVIDENCES OF INDEBTEDNESS UNDER THE SECURITIES ACT OF 1933 OR TO MAKE PERIODIC REPORTS TO THE SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES EXCHANGE ACT OF 1934. (See "Management's Discussion and Analysis of Financial Condition and Results of Operations" — "Subsequent Events" — "Legislative" in Part II.)

TVA may offer Evidences of Indebtedness from time to time or on a continuous basis either by direct placement or through selected investment dealers, dealer banks, underwriters, or underwriting syndicates.

- For Power Bonds offered from time to time, TVA typically prepares an offering circular describing the specific terms and
  conditions of the Power Bonds. For Power Bonds offered under a program on a continuous basis, TVA typically prepares
  a single offering circular that describes the general terms and conditions common to all securities issued under the program.
- For offerings of Discount Notes, TVA typically prepares a single offering circular describing the general terms and conditions common to all offerings of Discount Notes.
- For offerings of Other Indebtedness, TVA typically prepares either an offering circular describing the specific terms and conditions of the particular offering or a more general offering circular, as TVA deems appropriate.

For any offerings made through a program under which Evidences of Indebtedness are offered on a continuous basis, the offering circular typically describes how, if at all, the offering circular will be supplemented in order to reflect, among other things, the specific terms and conditions of the securities being offered. You should read this Statement, as it may be supplemented or amended, together with the appropriate offering circular, as it may be supplemented or amended, for each offering.

For each offering of an Evidence of Indebtedness, you should rely only on the information contained in (1) this Statement, (2) the relevant offering circular, and (3) any supplements or amendments to these documents approved by TVA. TVA has not authorized anyone to provide you with any information that is different from that found in this Statement and each relevant offering circular and any supplements or amendments to such documents. This Statement does not constitute an offer to sell or a solicitation of an offer to buy any Evidences of Indebtedness in any jurisdiction to any person to whom it is unlawful to make an offer or solicitation.

This Statement is accurate only as of its date. TVA may supplement, amend, or replace this Statement from time to time, generally no more often than annually, to reflect its annual financial results or otherwise as TVA deems appropriate. However, TVA assumes no duty to update this Statement. If TVA does supplement, amend, or replace this Statement, you should rely on the most recent supplements or amendments to or replacement of this Statement over different information in this Statement.

Any statements in this Statement involving matters of opinion, regardless of whether expressly so identified, are opinions only and not factual representations. This Statement is not a contract with the purchaser of any Evidences of Indebtedness.

You may obtain additional copies of this Statement by writing to Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1401, Attention: Investor Relations or by calling 1-888-882-4975.

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#### PART I

#### **BUSINESS**

General

#### Forward-Looking Information

This Statement contains forward-looking statements relating to future events and future performance. Any statements regarding expectations, beliefs, plans, projections, estimates, objectives, intentions, assumptions, or otherwise relating to future events or performance may be forward-looking.

In certain cases, forward-looking statements can be identified by the use of words such as "may," "will," "should," "expect," "anticipate," "believe," "intend," "project," "plan," "predict," "assume," "forecast," "estimate," "objective," "possible," "potential," or other similar expressions.

Some examples of forward-looking statements include statements regarding TVA's projections of forecasts and future power and energy requirements; future costs related to environmental compliance; impacts of potential legislation on TVA and the likelihood of enactment of such legislation; strategic objectives; debt reduction targets; anticipated availability of nuclear waste storage facilities; projections of nuclear decommissioning costs; projections regarding the cost and timetable for restarting Browns Ferry Unit 1; planned construction expenditures for property, plant, and equipment additions; and impacts of pending litigation and various administrative orders which have been or may be issued.

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 the forward-looking statements. These factors include, among other things, new laws, regulations, and administrative orders, especially those related to the restructuring of the electric power industry and various environmental matters; increased competition among electric utilities; changes in the ability of the Board to set TVA's rates as specified in the TVA Act; changes in the structure of the Board; legal, legislative, and administrative proceedings affecting TVA; the financial and economic environment, including changes in interest rates, foreign currency exchange rates, equity market prices, and commodity prices; changes in the rating of TVA's rated securities; performance of TVA's generation and transmission assets; fuel prices; demand for electricity; changes in technology; changes in the price of power; loss of any significant customers or suppliers; creditworthiness of counterparties; weather conditions and other natural phenomena; damage to power production or transmission facilities or systems due to accidental events or terrorist activity; changes in accounting standards; and unforeseeable events. New factors emerge from time to time, and it is not possible for management to predict all such factors or to assess the extent to which any factor combination of factors may impact TVA's business or cause results to differ materially from those contained in any forward-looking statement.

TVA undertakes no obligation to update any forward-looking statement to reflect developments that occur after the statement is made.

Fiscal Year

Unless otherwise indicated, years (2004, 2003, etc.) in this Statement refer to TVA's fiscal years ended September 30.

Notes

References to "notes" are to the Notes to Financial Statements contained in Part II.

# The Corporation

TVA is a corporate agency and instrumentality of the United States government created in 1933 by the Act and charged with providing navigation, flood control, and agricultural and industrial development, while providing electric power to the Tennessee Valley region. TVA has developed and operates one of the largest electric power systems in the United States, having produced nearly 155 billion kilowatt-hours ("kWh") of electricity in 2004. TVA is wholly owned by the United States government and is administered by a board of three persons appointed by the President and confirmed by the Senate. Appointments are for nine-year staggered terms, with one term expiring each three-year interval.

Historically, the programs at TVA have consisted of power and nonpower programs. Revenues and expenses of the power program are segregated from other revenues and expenses. Substantially all of TVA's revenues and assets are attributable to its power program. For a discussion of the funding of TVA's nonpower programs, see note 11 in Part II.

The Act requires the power program to be self-supporting from power system revenues and capital TVA raises through its power program financings. The Act authorizes TVA to issue Evidences of Indebtedness in an amount not exceeding \$30 billion outstanding at any one time, the proceeds of which may be used only for the power program. See "Certain Provisions of the Tennessee Valley Authority Act and Related Laws: Public Law No. 105-62" and "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" in Part I.

Under certain circumstances, the Act permits TVA to borrow up to \$150 million for a period of one year or less from the United States Treasury ("Treasury"). The Act requires TVA to obtain the approval of the Secretary of the Treasury of the issue date and maximum interest rate for any issuance of an Evidence of Indebtedness with a term of one year or longer. The Office of Management and Budget ("OMB") includes TVA's finances as part of the budget of the United States.

The Act requires TVA to annually file a financial statement and complete report as to its business with the President and Congress. The Government Corporation Control Act authorizes the Comptroller General of the United States to periodically audit the transactions of TVA.

# Regulation of TVA

# Congress

Congress has the authority to govern TVA's activities through legislation. In order to allow TVA more freedom to operate than a traditional agency, however, Congress, in passing the TVA Act in 1933, exempted TVA from many general federal laws that govern other agencies, such as laws related to the hiring of employees, the procurement of supplies and services, and the acquisition of land. Since 1933, Congress has exempted TVA from certain federal laws applicable to other agencies in recognition of TVA's unique status. Other federal laws enacted since the creation of TVA have been made applicable to TVA, including those related to the protection of the environment and cultural resources, and civil rights laws.

# Federal Energy Regulatory Commission

TVA is not a "public utility" as defined in the Federal Power Act ("FPA"). Therefore, TVA is not subject to the plenary jurisdiction of the Federal Energy Regulatory Commission ("FERC") under the FPA. TVA is, however, an "electric utility" as defined in the FPA and thus is subject to certain aspects of FERC's jurisdiction under Sections 210 to 212 of the FPA. TVA has chosen to implement various FERC orders and regulations on a voluntary basis to the extent consistent with TVA's obligations under the TVA Act.

# States

The Supremacy Clause of the United States Constitution prohibits states, without congressional consent, from regulating the manner in which the federal government conducts its activities. As a federal agency, TVA is exempt from regulation, control, and taxation by states except in certain areas such as air and water quality where Congress has given the states limited powers to regulate federal activities.

# Governmental Entities

TVA's activities and records are also subject to review by various governmental entities including TVA's Office of Inspector General, the Government Accountability Office, the Congressional Budget Office, and the OMB.

#### The Area Supplied by the Tennessee Valley Authority

TVA supplies power in most of Tennessee, northern Alabama, northeastern Mississippi, and southwestern Kentucky, and in small portions of Georgia, North Carolina, and Virginia. TVA serves a population of more than eight

million people. Subject to certain minor exceptions, TVA may not without specific authorization by act of Congress enter into contracts which would have the effect of making it or the distributors of its power a source of power supply outside the area for which TVA or the distributors were the primary source of power supply on July 1, 1957.

#### **Rates and Customers**

TVA is primarily a wholesaler of power. Its customers consist of three major groups: (1) distributors, consisting of municipalities and cooperatives; (2) industries that have large or unusual loads; and (3) federal agencies. Additionally, TVA has entered into exchange power arrangements with most of the electric systems that surround it.

The Act gives the Board sole responsibility for establishing the rates TVA charges for power and authorizes the Board to include in power contracts terms and conditions that it judges necessary or desirable for carrying out the purposes of the Act. The Act requires TVA to charge rates for power which, among other things, will produce gross revenues sufficient to provide funds for (1) operation, maintenance, and administration of its power system; (2) payments to states and counties in lieu of taxes; (3) debt service on outstanding Evidences of Indebtedness; and (4) annual payments to the Treasury in repayment of and as a return on the government's appropriation investment in TVA power facilities. See "Certain Provisions of the Tennessee Valley Authority Act and Related Laws" and "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" — "Rate Covenant" in Part I. Rates set by the Board are not subject to review or approval by any state or federal regulatory body. In a future restructured electric power industry (discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" — "TVA and Competition" in Part II), it is possible that the ability of the Board to set TVA's rates as specified in the TVA Act could be adversely affected by legislative changes or by competitive pressures.

A summary of operating revenues by customer type for each of the last four years ended September 30 is shown in "Selected Financial Data" in Part II.

# Municipal and Cooperative Distributors

Sales to municipal and cooperative distributors accounted for approximately 86 percent of TVA's total revenues in 2004. TVA has wholesale power contracts with 158 municipal and cooperative distributors. All of these contracts require distributors to purchase substantially all of their electric power and energy requirements from TVA.

All distributors purchase power under one of three basic arrangements. Forty-nine distributors purchase power under contracts that require ten years' notice to terminate. These contracts provide that on each anniversary beginning on the tenth anniversary, one additional year is automatically added to the term. Five distributors have contracts that require 15 years' notice to terminate the contract. On each anniversary of these contracts, beginning on the fifth anniversary, one additional year is automatically added to the term. TVA currently has contracts with five distributors with durations of less than five years. See "Termination Notices" below. TVA has also offered distributors the option of moving from ten-year or 15-year termination notice periods to a five-year termination notice period. Ninety-nine distributors, including two of the largest, have entered into contractual arrangements of this type. Sales to these two distributors generated approximately 13 percent of TVA's total operating revenues in 2004. See "Business" – "Rates and Customers" — "Termination Notices" in Part I.

TVA's wholesale power contracts contain standard provisions specifying the wholesale rate and terms and conditions under which power is sold to distributors. Under these contracts, TVA, on a quarterly basis, may determine and make adjustments in the wholesale rate schedules necessary to enable TVA to meet all the requirements of the Act and the financial covenants and provisions of its bond resolutions. The contracts provide for agreement between the parties on general or major changes in the wholesale schedules. If, however, agreement is not reached, the contracts permit TVA to make changes in these schedules to carry out the objectives of the Act, to meet financial requirements and covenants, and to comply with the provisions of its bond resolutions.

Most of the power contracts between TVA and the distributors of TVA power specify the resale rates that distributors charge the ultimate power customers. These rates are revised from time to time to reflect changes in costs, including changes in the wholesale cost of power. They are designed to promote the Act's objective of providing an adequate supply of power at the lowest feasible rates.

A number of TVA distributors, including some with the largest loads, have expressed interest in further revising their wholesale power contracts to allow them more options with respect to contract term and other matters, such as purchasing a portion of their power requirements from suppliers other than TVA. TVA is working with distributors and the Tennessee Valley Public Power Association ("TVPPA"), an association which includes all distributors of TVA power, to develop future wholesale pricing options and new long-term contract options.

TVA has also entered into agreements with four distributors that significantly reduce TVA's involvement with their resale rates and with five that provide for TVA's termination notice period to generally be ten years even if the distributor has chosen the five-year option described above. The contracts with two distributors contain both of these features.

For a discussion of the effects of competition in a restructured electric power market, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" — "TVA and Competition" in Part II.

During October 2002, TVA introduced the Discounted Energy Units ("DEU") program. Under this program, TVA customers may purchase DEUs in \$1 million increments which entitles them to a 0.025 dollar/kilowatt-hour discount on a specified quantity of firm load over a period of years, (five, ten, 15, or 20) for each kilowatt-hour in the prepaid block. The remainder of the price of the kilowatt-hours delivered is due upon billing. Upon termination of the power contract, the DEU agreement will terminate unless TVA and the distributor agree to other supply arrangements. Absent such agreement, the remaining net present value of the balance of the unearned revenue will be returned to the distributor upon termination.

Sales for the 2004 program included agreements of 5.5 DEUs totaling \$5.5 million over a ten-year period and 1.75 DEUs totaling \$1.75 million over a five-year period. Sales for the 2003 program, all for a ten-year period, were 47.25 DEUs totaling \$47.25 million. TVA is accounting for the prepaid power as unearned revenue. (See "Management's Discussion and Analysis of Financial Condition and Results of Operations" — "Energy Prepayment Obligations" in Part II.)

In November 2003, TVA, Memphis Light, Gas and Water Division ("MLGW"), and the City of Memphis entered into an arrangement whereby MLGW prepaid a portion of its power requirements for 15 years for a fixed amount of kilowatt-hours. The prepayment will be applied to MLGW's monthly power bill on a straight-line basis over the same 15-year period. The amount of the prepayment was \$1.5 billion (see "Management's Discussion and Analysis of Financial Condition and Results of Operations" — "Energy Prepayment Obligations" in Part II). TVA is accounting for the prepaid power as unearned revenue.

# Other Sources of Revenues

Revenues from directly served industries, from federal agencies, and from exchange power arrangements with other power systems and other revenue accounted for approximately 13 percent of TVA's total operating revenues in 2004. Contracts with industries and federal agencies directly served by TVA are normally for ten-year terms. These contracts are subject to termination by TVA or the customer upon a minimum notice period that varies according to the customer's contract demand and the period of time service has been provided to the location where service would be terminated. TVA establishes the rates it charges to industrial customers it directly serves. These rates normally are the same as those charged by the distributors of TVA power to large customers (those with demand greater than 25,000 kilowatts).

TVA also has exchange power arrangements with 12 neighboring power systems. As part of the TVA self-financing legislation enacted by Congress in 1959, TVA was restricted to selling power outside of the TVA service area to what was then 14 power generating companies. Due to mergers and acquisitions over the years, there are now 12 of these grandfathered organizations remaining. The agreements are open-ended but do have termination provisions.

# Termination Notices

During 2004, TVA received notice from Monticello Electric Plant Board that terminates its power contract with TVA in November 2008 and notice from Glasgow Electric Plant Board that terminates its power contract with TVA in December 2008. Also in 2004, Meriwether Lewis Electric Cooperative ("MLEC"), with TVA's agreement, rescinded its October 2002 notice to terminate its power contract with TVA.

Since October 2002, five distributors (excluding MLEC) have given notice that terminates their power contracts with TVA. The table below lists these five distributors, the date that their power contracts with TVA terminate, the amount of revenues that TVA generated by selling power to these distributors in 2004, and the percentage of TVA's total 2004 revenues represented by these revenues.

Distributor	Date of Termination Power Contract	Sales to Distributor in 2004	Percentage of Operating Revenues in 2004
		(in millions)	
Bowling Green Municipal Utilities	October 2007	\$ 43	0.6%
Warren Rural Electric Cooperative Corporation	April 2008	80	1.1%
Duck River Electric Membership Corporation	August 2008	80	1.1%
Monticello Electric Plant Board	November 2008	5	0.1%
Glasgow Electric Plant Board	December 2008	18	0.2%
Total		\$ 226	3.1%

In May 2004, the Board of Directors of Warren Rural Electric Cooperative Corporation ("WRECC") voted to become a full member of East Kentucky Power Cooperative ("EKPC") and receive its full power requirements from EKPC when WRECC's current contract with TVA expires.

For additional information regarding termination notices, see "Qualitative and Quantitative Disclosures about Market Risk" — "Risk of Loss of Customers" in Part II.

In January 2004, the United States Enrichment Corporation ("USEC") announced it will begin constructing its new commercial centrifuge facility in Piketon, Ohio. Once this new facility is opened, it is unclear how much electricity USEC will need to acquire from TVA for its Paducah, Kentucky facility ("Paducah Facility"). Under the current contract with TVA, USEC is required to purchase a fixed amount of electricity for its Paducah Facility through May 2006. In 2004, sales to USEC for its Paducah Facility generated approximately 3.4 percent of TVA's total operating revenues. TVA does not expect any loss of revenues from sales to USEC to have a material effect on TVA's results of operations.

# **Power and Energy Requirements**

TVA prepares annual forecasts of future power and energy requirements as part of its planning and budgeting process. TVA's forecast procedure involves producing a range of load forecasts for the explicit purpose of bounding the range of uncertainty associated with load growth. TVA produces the load forecasts probabilistically. TVA believes that there is a 90 percent probability that the actual load will be less than the high load forecast, a 50 percent probability that the actual load will be less than medium load forecast, and a ten percent probability that the actual load will be less than the low load forecast. TVA's current load forecast through 2006 reflects an average annual energy growth rate of 3.0 percent, 2.4 percent, and 0.7 percent for the high, medium, and low load forecasts, respectively. Numerous factors could cause actual results to differ materially from TVA's forecasts. See "Forward Looking Information" in Part I.

#### Fuel

Management believes the sources and availability of fuel materials essential to its business should be adequate for the foreseeable future.

#### Fossil Fuel

Coal consumption at TVA generating facilities during 2004 was 42.6 million tons. Coal is purchased under contracts ranging from a single delivery to multiple deliveries over several years. TVA coal inventory targets vary from plant to plant based upon a probabilistic inventory model. As of September 30, 2004, TVA had 20 days' system-wide coal supply in inventory at full burn. Inventory levels were lower at the end of 2004 due to abnormally high inventories in 2003 and system-wide transportation and coal supply constraints in 2004. The abnormally high inventories in 2003 were attributable to an extended fossil plant outage while the transportation and coal supply constraints in 2004 are attributable to a surge in demand for coal in both the western and eastern regions of TVA. Total fossil fuel inventory at September 30, 2004, and 2003 amounted to \$193 million and \$219 million, respectively, of which \$158 million and \$180 million, respectively, related to coal inventory.

TVA has in place term coal contracts which supplied 83 percent of TVA's total coal requirements for 2004. The remaining 17 percent was purchased in the spot coal market under contracts with terms of one year or less. Forty percent of TVA's coal supply comes from western states; the remainder comes from Illinois, Kentucky, Pennsylvania,

Tennessee, Virginia, and West Virginia. Thirty-four percent of TVA's coal supply was delivered by train, 20 percent was delivered by barge, and 37 percent was delivered by a combination of barges and trains. The remainder was delivered by truck.

During 2004, TVA purchased substantially all of its natural gas requirements under contracts with terms of one year or less. TVA purchases substantially all of its natural gas to operate combustion turbine peaking units and to supply fuel under power purchase agreements in which TVA is the fuel supplier. The combustion turbine units, which can also operate on distillate fuel, produced less than 0.2 percent of the electricity that TVA generated during 2004.

#### Nuclear Fuel

TVA owns all nuclear fuel held for its nuclear units. The net book value of this fuel was \$365 million as of September 30, 2004. TVA will meet future uranium requirements through a combination of term and spot purchase contracts while maintaining diversity of supply source. TVA currently has approximately 70 percent of its forward five-year (2005 to 2009) uranium requirements either in inventory or under contract for its boiling water reactor units at its Browns Ferry Plant (see note 14) and has 100 percent of its forward two-year (2005 to 2006) uranium requirements under contract for its pressurized water reactor ("PWR") units at its Sequoyah and Watts Bar Plants. For 2007 through 2009, TVA's PWR uranium supplier has an option to provide natural uranium for the three PWR units.

TVA also has agreements with the Department of Energy ("DOE") and Nuclear Fuel Services to use Blended Low Enrichment Fuel at its reactors. This fuel is currently being processed for use in Browns Ferry Unit 2.

#### **PROPERTIES**

The Tennessee River system provides multiple benefits for people of the Tennessee Valley. TVA manages the use of resources among its multiple river-system responsibilities: navigation, flood control, power generation, environmental stewardship, shoreline use, and water supply for power plant operations, consumer use, recreation, and industry.

TVA's power system is one of the largest in the United States in capacity and in energy production. Its size permitted the construction of large facilities which has resulted in lower unit costs. TVA's dams were completed decades ago when construction costs were far below present-day levels. In accordance with the Act, all real estate acquired by TVA is acquired in the name of the United States. See "Certain Provisions of the Tennessee Valley Authority Act and Related Laws" in Part I.

## **Generating Resources**

TVA's power generating facilities at September 30, 2004, included 29 conventional hydroelectric plants, 11 coal-fired plants, three nuclear plants, one pumped storage hydroelectric plant, six combustion turbine plants, one wind energy site, and 15 solar photovoltaic sites. Energy is delivered to TVA customers over a transmission system which interconnects with neighboring power systems at numerous points.

The following table summarizes TVA's net generation in millions of kilowatt-hours by generating source for the years indicated:

# GENERATION BY FUEL SOURCE (millions of kWh)

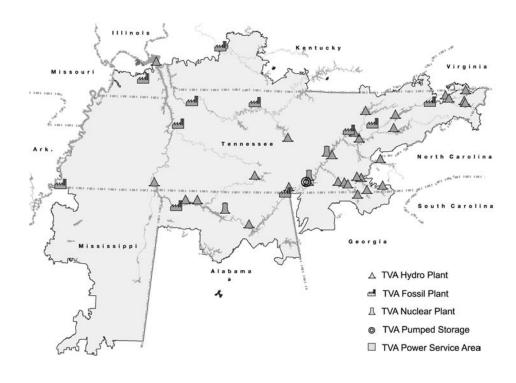
	2004	2003	2002	2001	2000
Hydroelectric	13,916	16,103	10,205	9,508	8,769
Coal Fired	94,648	90,975	94,930	100,118	95,271
Nuclear	46,003	43,167	45,179	45,615	46,921
Combustion Turbine and diesel generators	278	817	1,190	1,073	1,032
Other	18	15	18	5	_
	154,863	151,077	151,522	156,319	151,993

Hydro electric power plays a vital role in the TVA power system because it is economical and reliable, and it can be brought online quickly when the demand for electricity is high or when energy is needed due to system problems or lost generation. TVA maintains 29 conventional hydroelectric dams and one pumped storage plant for the production of electricity. Nine of these hydroelectric dams are on the main channel of the Tennessee River, and 20 are on tributary rivers. The hydroelectric system typically generates between six and 11 percent of TVA's electricity supply each year.

TVA's fossil plants include coal-fired plants and combustion turbines that are fueled by natural gas and fuel oil. The 59 units at TVA's 11 coal-fired plants provide nearly two-thirds of the power produced by TVA. The 72 combustion turbine units at six sites are quick-start facilities that, at times of peak demand, bolster TVA's ability to supply its customers with power. The combustion turbines generate less than one percent of TVA's power annually.

TVA began building nuclear power plants in the 1960s and currently has five operating units at three sites. These plants typically supply approximately 29 percent of TVA's power. A sixth unit is currently in recovery and is expected to be online in 2007. (See "Nuclear Power Program" below.)

During 2004, 61 percent of the power generated by the TVA coordinated system was by coal-fired plants and combustion turbines, 30 percent by nuclear units, and nine percent by hydroelectric units.



The following table summarizes the winter net dependable capacity ("NDC") in megawatts ("MW") on this coordinated system as of September 30, 2004:

TVA-OWNED/LEASED FACILITIES	Location	Number of Units	Winter Net Dependable Capacity (MW) (1)	Date Last Unit Placed in Service
Hydroelectric				
Conventional Plants	North Carolina Tennessee Georgia Alabama and Kentucky	109	3,384	1914-1972
Pumped Storage Total Hydro	Tennessee	<u>4</u> 113	1,597 4,981	1979
Coal Fired				
Coal-Fired Allen	Tennessee	3	750	1959
Bull Run Colbert Cumberland	Tennessee Alabama Tennessee	1 5 2	885 1,196 2,528	1967 1965 1973
Gallatin	Tennessee	4	988	1959
John Sevier	Tennessee	4	712	1957
Johnsonville	Tennessee	10	1,254	1959
Kingston	Tennessee	9	1,448	1955
Paradise	Kentucky	3	2,317	1970
Shawnee	Kentucky	10	1,369	1956
Widows Creek Total Coal-Fired	Alabama	<u>8</u> 59	<u>1,629</u> 15,076	1965
Nuclear				
Browns Ferry	Alabama	2	2,286	1977
Sequoyah	Tennessee	2	2,323	1982
Watts Bar Total Nuclear	Tennessee	<u> </u>	<u>1,168</u> 5,777	1996
Combustion Turbine				
Allen	Tennessee	20	575	1972
Colbert	Alabama	8	486	1972
Gallatin	Tennessee	8	730	2000
Johnsonville	Tennessee	20	1,372	2000
Kemper	Mississippi	4	374	2002
Lagoon Creek	Tennessee	12	1,125	2002
Total Combustion Turbine		72	4,662 (2)	
Diesel Generator				
Meridian	Mississippi	5	9	1998
Bellefonte	Alabama	2	14	1998
Total Diesel Generators		7	23 (2)	
Total TVA-Owned /Leased Facilitie	s		30,519	
OTHER FACILITIES (NON-TVA OWNE	<b>O)</b> <sup>(3)</sup>			
TAPOCO, Inc.			331 (4)	
U.S. Army Corps of Engineers			405 (5)	
Purchased Power Agreements Total Other Facilities			1,934 <sup>(6)</sup> 2,670	
Total Long-Term Available Capacit	у		33,189	

#### Notes

- (1) NDC is the net power output which can be obtained for a period adequate to satisfy the daily load patterns under expected conditions of operation with equipment in an average state of maintenance excluding any fluctuations in capacity that may occur due to planned outages, unplanned outages, and deratings. For planning purposes, TVA currently estimates summer dependable total hydro capacity of approximately 5,383 megawatts; coal-fired capacity of approximately 14,585 megawatts; nuclear power capacity of approximately 5,607 megawatts; combustion turbine capacity (on gas at 95 degrees Fahrenheit) of approximately 3,848 megawatts, diesel generator capacity of approximately 23 megawatts, and capacity at other facilities of approximately 2,613 megawatts for a total summer NDC of approximately 32,059 megawatts.
- (2) Combustion turbine and diesel generator capacities include 4,662 megawatts for turbines and 23 megawatts for generators (on oil at 25 degrees Fahrenheit). As of September 30, 2004, 24 of TVA's combustion turbine units were leased to private entities and leased back to TVA under long-term leases.
- (3) Other Facilities (Non-TVA Owned) include generation that TVA has purchased or acquired to meet the peak load and energy requirements of its customers.
- (4) Four hydro plants owned by TAPOCO, Inc., a subsidiary of Alcoa, Inc., are operated as part of the TVA power system. Under contractual arrangements with TAPOCO, Inc., electric power generated at these facilities is supplied to TVA.
- (5) Under arrangements among TVA, the U.S. Army Corps of Engineers (the "CORPS"), and the Southeastern Power Administration ("SEPA"), eight hydro plants of the CORPS on the Cumberland River system are operated in coordination with the TVA system. These arrangements further provide for capacity (405 megawatts) and energy from the Cumberland River system to be supplied to TVA by SEPA at the points of generation at a price based on the operating and maintenance expenses and amortization of the power facilities. A portion of the output of the Cumberland River system is also made available to SEPA's customers outside the TVA region. The agreement with SEPA covering these arrangements for power from the Cumberland River system can be terminated upon three years' notice. This notice may be given beginning June 30, 2017.
- (6) TVA has contracted with various independent power producers and power distributors for additional capacity to be provided by their facilities. In total, these agreements constitute 1,934 megawatts of winter net dependable capacity. Approximately one-half of this total capacity is made available to TVA under power purchase transactions having terms of two years or less.

TVA has executed agreements with the Midwest Independent Transmission System Operator, Inc. ("MISO") to become a "market participant" in August 2003 and with the PJM Interconnection, L.L.C. ("PJM") in July 2004 as an "other supplier." These arrangements facilitate the purchase and sale of electric energy when beneficial to TVA and in accordance with TVA's statutory limitations on the sale of surplus generation.

TVA has also supplemented its existing generation portfolio with additional renewable resource assets (wind, solar, and methane gas technologies). Due to the nature of these sources, TVA does not consider them part of its net winter dependable capacity. Of these technologies, TVA owns approximately ten megawatts and has power purchase agreements for an additional 33 megawatts for a total of 43 megawatts of generating capacity.

# **Transmission Operations**

The TVA transmission system is one of the largest in North America, delivering 171 billion kilowatt-hours of electricity in fiscal 2004 and maintaining 99.999 percent reliability over the last five years in delivering electricity to customers. This system is comprised of about 17,000 circuit miles of transmission lines and includes 2,400 miles of extrahigh-voltage (500,000 volt) transmission lines, and 535 substations, power switchyards, and switching stations. There are 258,000 right-of-way acres. During 2004, TVA added nearly 80 miles of transmission lines and 17 connection points for a total of 1,032 individual interchange and connection points.

A key indicator of reliability measuring the average number of interruptions per year at customer connection points has declined from 1.40 in 2000 to 0.88 in 2004—reflecting a 37 percent improvement. In addition, load-not-served has decreased from 9.45 system minutes in 1999 to 6.19 system minutes in 2004 (a 34 percent improvement).

# **Nuclear Power Program**

# Overview

TVA has five operating nuclear units, three deferred nuclear units, and one nuclear unit in recovery that is scheduled to be returned to service in 2007. Selected statistics of each of these units are included in the chart below.

Nuclear Unit	Status	Installed Capacity (MW)	Net Capacity Factor for 2004	Date of Expiration of Operating License	Date of Expiration of Construction License
Sequoyah Unit 1	Operating	1,221 *	98.6	2020	_
Sequoyah Unit 2	Operating	1,221 *	83.9	2021	_
Browns Ferry Unit 2	Operating	1,190	95.2	2014	-
Browns Ferry Unit 3	Operating	1,190	88.4	2016	_
Watts Bar Unit 1	Operating	1,270 *	92.2	2035	_
Watts Bar Unit 2	Deferred	_	_	_	2010
Bellefonte Unit 1	Deferred	_	_	_	2011
Bellefonte Unit 2	Deferred	_	_	_	2014
Browns Ferry Unit 1	Recovery	_	_	2013	_

#### Note

#### Status of Certain Nuclear Units

Browns Ferry Unit 1 was taken offline in 1985 for modifications and improvements. The undepreciated cost of Browns Ferry Unit 1 of \$32 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. In March 2002, the Board determined the operation of all three units at Browns Ferry over an extended license period could reduce TVA's delivered cost of power relative to the market giving TVA more financial flexibility for the future. Accordingly, the Board initiated activities for the return of Browns Ferry Unit 1 to service. It is anticipated that the Browns Ferry Unit 1 recovery project will cost approximately \$1.8 billion, excluding allowance for funds used during construction. Browns Ferry Unit 1 is expected to return to service in 2007 and is expected to provide additional generating capacity of approximately 1,280 megawatts which is expected to lower TVA's average cost of power and provide additional cash flow. In 2004, TVA incurred approximately \$408 million of costs on the restart project, which is in line with the total planned costs for the project. Planned spending for fiscal years 2005 to 2007 is \$432 million, \$417 million, and \$81 million, respectively.

TVA has three units in deferred status. In 1988, TVA suspended construction activities on Watts Bar Unit 2, and the unit is currently in lay-up status. Bellefonte Unit 1 and Unit 2 were deferred in 1988 and 1985, respectively. Upon review, it was determined that certain assets at the Bellefonte site, such as the diesel generators, training facilities, transmission structures, and other assets, have achieved a usable state. Consequently, during 2004, the Board approved the reclassification of approximately \$203 million of Bellefonte assets from Deferred Nuclear Generating Units to Completed Plant. Estimated 2005 expenditures for the three deferred units are limited to costs incurred to ensure that options for the use of the units remain viable.

In December 1994, TVA determined that it would not, by itself, complete Bellefonte Unit 1 and Unit 2 and Watts Bar Unit 2 as nuclear plants. Bellefonte remains in a deferred status: however, TVA continues to evaluate options for Bellefonte. Options for conversion of Bellefonte to a fossil-fired plant (e.g., natural gas or gasified coal) have been evaluated. TVA is currently leading a team conducting a cost and schedule study on building an Advanced Boiling Water Reactor ("ABWR") on the Bellefonte site. Other members of the team doing this study, which is being performed under the DOE's Nuclear Power 2010 program, include Toshiba Corp., General Electric Corp., Bechtel Corp., USEC, and Global Nuclear Fuels – Americas. The ABWR has been design-certified in the United States by the Nuclear Regulatory Commission ("NRC"). The study will verify the costs of building a new ABWR plant, which could provide another option for utilities interested in preserving the nuclear option for the future.

While future decisions on TVA's deferred units will ultimately impact the method of cost recovery, the TVA Board determined as of the end of 2001 that the values of some of its existing assets were not appropriate in a competitive marketplace. Certain nuclear assets, portions of Bellefonte Unit 1 and Unit 2 and Watts Bar Unit 2 in its entirety, were identified as assets for which the estimated cash flows expected to be provided through future rates were less than recorded book values. Consequently, in 2001 TVA revalued these assets downward by \$2,220 million and recognized an impairment loss. The Board will develop a specific plan to recover Bellefonte site costs upon receiving management's recommendation (see "Business" — "Rates and Customers" in Part I, "The Basic Resolution; Power Bonds, Discount Notes, and Other Indebtedness" — "Covenants for Protection of Bondholders' Investments" in Part 1, and note 1—Impairment of Assets).

<sup>\*</sup> While the nameplate ratings of the units has not changed, the net electrical output of these units has been increased slightly through a license amendment with the Nuclear Regulatory Commission.

### Spent Nuclear Fuel

Pursuant to the Nuclear Waste Policy Act of 1982, TVA (and all other domestic nuclear utilities) entered into a contract with DOE for the disposal of spent nuclear fuel ("SNF"). Payments to DOE are based upon TVA's nuclear generation and charged to nuclear fuel expense. Although the contracts called for DOE to begin accepting SNF from the utilities by January 31, 1998, DOE has announced that it will not begin picking up spent nuclear fuel from any domestic nuclear utility until 2010 at the earliest. TVA, like other utilities, stores SNF in pools of borated water at its nuclear sites. Although TVA would have had sufficient space to continue to store spent nuclear fuel in those storage pools at its Sequoyah and Browns Ferry Nuclear plants indefinitely had DOE begun accepting spent nuclear fuel, DOE's failure to do so required TVA to construct dry cask storage facilities at its Browns Ferry and Sequoyah Nuclear Plants and to purchase special storage containers for the SNF. (Watts Bar Nuclear Plant currently has sufficient storage capacity in its spent fuel pool to last until 2018.) The Sequoyah facility has been constructed, approved by the NRC, and is now in use. The Browns Ferry facility will be completed in 2005. To recover the cost of providing long-term, on-site storage for SNF, TVA filed a breach of contract suit against the United States in the Court of Federal Claims in 2001. The case is scheduled to go to trial in June 2005.

#### Low-Level Radioactive Waste

Low-level radioactive waste ("radwaste") resulting from the normal operation of nuclear units includes such materials as disposable protective clothing, mops, and filters. Disposal costs for radwaste have increased significantly in recent years. Pursuant to the Low-Level Radioactive Waste Policy Act, each state is responsible for disposal of radwaste generated in that state. States may form regional compacts to jointly fulfill their disposal responsibilities. The states of Tennessee and Alabama (where TVA's nuclear plants are located) have joined with other southeastern states to form the Southeast Compact Commission for Low-Level Radioactive Waste Management. This Commission regulates the siting of new disposal facilities and the disposal of radwaste within the southeastern states.

Until July 1995, the radwaste generators located in the southeastern states were required to dispose of their radwaste at the Barnwell, South Carolina, disposal facility. South Carolina is no longer a member of the interstate compact serving the southeastern states and is now a member of the Atlantic Interstate Low-Level Radioactive Waste Compact. South Carolina has volume caps that cannot be exceeded for radwaste generated in states that are not members of the Atlantic Interstate Low-Level Radioactive Waste Compact. After June 2008, no waste will be accepted from such states, which include Tennessee and Alabama.

After reviewing its storage and disposal options for radwaste management, TVA, in 1999, began temporary self-storage of the type of radwaste that had previously been sent to Barnwell at the storage facilities located at two of TVA's plant sites. These facilities are sized to handle the anticipated storage needs for the foreseeable life of TVA's operating plants. A liability was recognized for this undisposed waste. In 2003, TVA resumed shipping the stored waste to Barnwell for disposal, and TVA has contracted to dispose of radwaste at Barnwell through June 2008. TVA also has a contract with Envirocare in Utah to ship certain classes of low level waste.

#### Nuclear Decommissioning Costs

TVA's current accounting policy for nuclear decommissioning costs recognizes all obligations related to closure and removal of its nuclear units as incurred (see note 1—Decommissioning Costs). TVA measures and records such liabilities, at their fair values, in the period in which they are incurred along with an accompanying addition to the recorded cost of the long-lived assets. The fair values of these liabilities represent the present value of the estimated future cash outflows to decommission the assets. The present value of the liabilities is determined by discounting the future cash outflows using a credit-adjusted, rate of interest. The recorded amounts for the liabilities and assets may be subsequently modified to comply with the prevailing accounting provisions. Earnings from decommissioning fund investments, amortization expense of the decommissioning regulatory asset, and interest expense on the decommissioning liability are deferred in accordance with Statement of Financial Accounting Standards ("SFAS") No. 71, Accounting for the Effects of Certain Types of Regulation (see note 1—Decommissioning Costs and note 10—Contingencies—Decommissioning Costs).

#### Nuclear Insurance

The Price-Anderson Act provides coverage for the general public in the event of a nuclear accident. This act, which was established in 1957 by Congress, expired on December 31, 2003. While Congress has not renewed the Price-Anderson Act, its provisions will indefinitely remain in force for existing licensed reactors pending energy legislation by Congress.

The Price-Anderson Act provides a layered framework of protection to compensate for losses arising from a nuclear event. The protection would primarily come from private insurance and payments made by nuclear plant licensees. The first layer of this protection comes from the \$300 million nuclear liability insurance policy which TVA purchases from American Nuclear Insurers ("ANI") for each of its plants with an operating license. The second layer, the Secondary Financial Program ("SFP"), would come from an assessment of up to \$100.59 million from the licensees of each of the 104 NRC licensed reactors in the United States. The assessment for any nuclear accident would be limited to \$10 million per year per reactor. ANI, under a contract with the NRC, administers the SFP. With its six licensed units, TVA could be required to pay a maximum of \$603.54 million per nuclear incident, but it would have to pay no more that \$60 million per incident in any one year. When the contributions of the nuclear plant licensees are added to the insurance proceeds of \$300 million, over \$10.7 billion would be available.

Under the Price-Anderson Act, if the first two layers are exhausted, Congress is required to take action to provide additional funds to cover the additional losses.

#### Nuclear Decontamination and Property Insurance

NRC regulations require each nuclear power plant licensee to acquire \$1.06 billion of nuclear decontamination and property insurance per nuclear site. In accordance with NRC regulations, the proceeds of the insurance are to be used first to ensure the reactor is in a safe and stable condition and that it can be maintained in a condition that prevents significant risk to the public. Next, the proceeds are to be used for decontamination of the nuclear site. Lastly, any remaining insurance proceeds can be used for damage to the site property.

TVA carries \$2.06 billion of nuclear decontamination and property insurance from Nuclear Electric Insurance Limited ("NEIL"). Under each of the NEIL policies, there is a potential retrospective premium assessment. Currently, the assessment is ten times the annual premium which equals a retrospective premium of approximately \$65 million. The assessment could be called by the NEIL Board if the loss reserves and available reinsurance were exhausted.

# Accidental Outage Insurance

On September 23, 2004, the TVA Board approved the purchase of accidental outage (business interruption) insurance for TVA's nuclear sites from NEIL. In the event of an accident covered by the policy that takes a nuclear unit offline or keeps a nuclear unit offline, NEIL will pay TVA, after a deductible waiting period, an indemnity (a set dollar amount per week) up to a maximum indemnity of \$490 million per unit. The policies went into effect in October 2004.

# Operating License Extensions

In December 2003, TVA submitted an application to the NRC for a 20-year extension of the operating licenses for three reactors at Browns Ferry Nuclear Plant. Current expiration dates for the Browns Ferry units are:

Browns Ferry Unit 1	 2013
Browns Ferry Unit 2	 2014

The original 40-year term on licenses issued pursuant to the Atomic Energy Act and the NRC regulations was based on economic and antitrust considerations and not on limitations of technology. If the NRC approves the application, it will allow TVA to continue production of power from the facility until 2033, 2034, and 2036 for Units 1, 2, and 3, respectively. The NRC has set a 28-month schedule to review TVA's application. This review is a few months longer than a more standard review due to the complexity and uniqueness of the application, since it involves Browns Ferry Unit 1, which has been shut down for 19 years. The license renewal proceeding is uncontested.

# Tritium Production

In September 2002, the NRC issued an amendment to the Watts Bar Nuclear Plant operating license, allowing TVA to irradiate tritium-producing burnable absorber rods ("TPBARS") at the plant to assist DOE in producing tritium. TVA's license amendment currently allows operation with a maximum of 240 TPBARS in the Watts Bar reactor. A planned future license amendment will permit installation of up to 2,304 TPBARS. The TPBARS will be irradiated for a full cycle, which lasts about 18 months. TVA will then remove the irradiated TPBARS for shipment to DOE's tritium-extraction facility at the Savannah River Site near Aiken, South Carolina. TVA began tritium production at Watts

Bar in the fall of 2003. Also in September 2002, the NRC issued a similar amendment to the Sequoyah Nuclear Plant operating license allowing tritium production. At this time, no tritium production has been scheduled at the Sequoyah Nuclear Plant. While producing tritium, TVA is able to operate the reactors for its program mission of producing electricity.

TVA has a long-term interagency agreement with DOE to utilize TVA's Sequoyah and Watts Bar Nuclear Plants to produce tritium. This agreement, ending in 2035, requires DOE to reimburse TVA for costs incurred plus a fee per TPBAR produced for irradiation services.

#### **Stewardship Activities**

TVA has federal jurisdiction for managing the United States' fifth largest river system, the Tennessee River and its tributaries, to deliver multiple benefits, including year-round navigation, reduced risk of flooding, affordable and reliable electricity, and, consistent with these primary purposes, recreational opportunities, adequate water supply, improved water quality, and sustainable economic development. TVA owns and operates 49 dams which comprise its integrated reservoir system. Twenty-nine of these dams produce conventional hydroelectric power, and one additional project is solely a pumped storage hydroelectric project. The reservoir system provides 800 miles of commercially navigable waterways and also provides significant flood reduction benefits both within the Valley and downstream on the lower Ohio and Mississippi Rivers. Total flood damage averted since the development of the TVA reservoir system is estimated to be over \$5.7 billion. The reservoir system also provides a water supply for residential and industrial customers, including cooling water for TVA thermal power projects.

TVA's responsibilities for managing public resources began with its creation in 1933. It has direct steward-ship responsibility for 293,000 acres of public land, 11,000 miles of shoreline, and 650,000 acres of reservoir water surface available for recreation and other purposes. TVA reservoirs and public lands provide outdoor recreation opportunities for millions of visitors each year. TVA has over 100 recreation facilities including campgrounds, boat ramps, fishing piers, and picnic areas. More than 228,000 acres of the public land managed by TVA have been designated for resource management, including the enhancement of wildlife habitat and protection of sensitive resources.

As of September 30, 2004, TVA's stewardship properties include assets of \$684 million representing multipurpose dams and reservoirs used for navigation, flood control, recreation, and economic development (see note 11).

# **LEGAL PROCEEDINGS**

In the fall of 1999, the Environmental Protection Agency ("EPA") commenced judicial or administrative actions against a number of utilities in the eastern United States, including TVA, alleging that they modified their coal-fired units without complying with the new source review ("NSR") requirements under the Clean Air Act ("CAA"). EPA issued an administrative order directing TVA to install additional pollution control equipment on 14 of its coal-fired units and evaluate whether more controls should be installed on other units. TVA challenged the validity of this order, and on June 24, 2003, the Court of Appeals for Eleventh Circuit issued its decision in the case. Although the Eleventh Circuit did not rule on the merits of the case, the court held that the procedure used by EPA against TVA was unconstitutional because it allowed EPA to decide that a regulated party like TVA violated the law and could be liable for severe penalties without ever allowing the regulated party to present evidence on whether the law was in fact violated. On May 3, 2004, the United States Supreme Court denied a petition for review filed on behalf of EPA, refusing to review the Eleventh Circuit's decision. EPA has taken no legal action against TVA on these allegations since this decision by the United States Supreme Court. In similar lawsuits filed by EPA and others against other utility companies, the rulings by the respective courts differ widely.

The National Parks Conservation Association ("NPCA") and the Sierra Club filed cases in two federal district courts in 2001 alleging similar NSR violations to those in EPA's administrative order at TVA's Bull Run Fossil Plant ("Bull Run") and Colbert Fossil Plant Unit 5 ("Colbert"). These cases had been stayed pending the Supreme Court's decision on the Eleventh Circuit's ruling, but in light of the Supreme Court's action, the stays have been lifted. Trial has been set in the Sierra Club's action in the Bull Run case for September 20, 2005, and the parties have each filed motions for summary judgment or partial summary judgment on various issues. In the Sierra Club's Colbert case, a final pretrial scheduling conference is scheduled for November 30, 2005, and trial is scheduled to begin four to eight weeks thereafter.

Environmental groups are taking legal action against TVA, as well as against other utilities across the country, for allegedly violating opacity limits and other environmental regulations applicable to coal-fired plants.

- The Alabama Environmental Council and the Sierra Club filed a lawsuit in federal district court in Florence, Alabama, alleging that TVA violated CAA opacity limits applicable to Colbert Fossil Plant between July 1, 1997, and June 30, 2002. The groups sought a court order that could require TVA to incur substantial costs, in addition to the costs TVA is already planning to incur for environmental controls, and pay civil penalties of up to approximately \$250 million. The court found that TVA had not violated the CAA, and the complaint was dismissed in its entirety. The plaintiffs have appealed the district court's decision to the Court of Appeals for the Eleventh Circuit.
- On July 25, 2003, TVA received a notice of intent to sue from Our Children's Earth Foundation ("OCE"). OCE contends that TVA violated the NSR requirements of the CAA by undertaking major modifications of TVA's Allen Unit 3, Bull Run, Cumberland Units 1 and 2, Kingston Units 6 and 8, John Sevier Unit 3, Paradise Units 1, 2, and 3, Shawnee Units 1 and 4, Colbert Unit 5, and Widows Creek Unit 5 without installing additional pollution control equipment. OCE also contends the CAA new source performance standards at Colbert Unit 5 and the operations at TVA's Johnsonville Fossil Plant have not met the applicable opacity requirements. This notice does not specify a monetary amount of TVA's claimed liability. OCE's allegations about Bull Run and Colbert Unit 5 are already the subject of litigation in federal district courts initiated by the NPCA and the Sierra Club. In 2004, OCE obtained the district court's permission to join as a plaintiff in the Bull Run NSR suit. It made a similar request in the Colbert NSR suit which the court denied as untimely.
- The Sierra Club gave notice in a September 26, 2002, letter that it intends to sue TVA for violating CAA opacity limits applicable to the John Sevier and Kingston Fossil Plants. The notice claims that TVA violated opacity standards at the two plants from July 1, 1997, to the present. The alleged opacity violations substantially overlap those that were challenged in a lawsuit filed by the NPCA four years ago in federal court in Knoxville, Tennessee. TVA ultimately prevailed in that lawsuit. The Sierra Club has not filed suit.

For a discussion of TVA's CAA activities, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" — "Environmental Matters" in Part II.

On December 28, 2001, Bowater Incorporated and Bowater Newsprint South, Inc. (together, "Bowater") filed a lawsuit against TVA in federal court in Knoxville challenging TVA's charges for Economy Surplus Power ("ESP") and Testing and Restart Power ("TRP") for two Bowater plants. In its complaint, Bowater alleges that in violation of the contract provision which states that TVA will charge ESP and TRP customers based on TVA's actual hourly incremental cost of providing ESP (1) TVA included certain alleged non-incremental costs in the prices for ESP and TRP, and (2) when calculating such prices, TVA used the cost of providing the most expensive 100 megawatts of ESP sold during a given hour instead of the average cost in that hour of serving the entire ESP load. The complaint also alleges that TVA has been unjustly enriched as a result of these overcharges. The lawsuit seeks, among other things, compensatory damages of approximately \$45 million plus interest. The case is set for trial in January 2005. On August 30, 2004, the judge in the case granted TVA's partial summary judgment motion as to Bowater Newsprint South Inc. ("Newsprint"), on the issue of statute of limitations. The court held that Newsprint could only seek damages from December 29, 1995, forward, rather than 1990 as Newsprint had alleged. This ruling reduces Newsprint's potential damages claim by approximately \$8.3 million, plus interest. TVA has filed a similar motion with respect to Bowater, Inc.

On August 31, 1999, Birmingham Steel Corporation filed a lawsuit in the U.S. District Court for the Northern District of Alabama alleging that TVA overcharged for ESP during the summer of 1998. The lawsuit was filed as a class action on behalf of industrial customers who participated in TVA's ESP program. Under ESP contracts, the hourly ESP energy price is calculated using TVA's actual incremental cost of supplying the ESP load in each hour. The plaintiff alleges that TVA overcharged for ESP during the summer of 1998 by including in the price of ESP some costs that were added to TVA's incremental cost. The complaint seeks over \$100 million in damages on behalf of Birmingham Steel and the other class members. In September 2002, the district court decertified the class and then dismissed Birmingham Steel's individual claim without prejudice on a jurisdictional issue. The class lawyers appealed the ruling on class decertification, and in December 2003, the Court of Appeals for the Eleventh Circuit reversed that ruling and sent the case back to the district court to allow the class lawyers a reasonable time to find a new class representative. The class lawyers have identified two new proposed class representatives. On August 26, 2004, the district court granted the motion of Citation Camden Castings, Inc. (one of the substituted class representative) to withdraw as representative. The district court recently allowed the substitution of the other proposed representative (Johns Manville) and the class action is proceeding.

In April 2004, a lawsuit was filed against TVA and 22 electric cooperatives (which provide power to members/consumers across many counties in Tennessee) in federal district court in Nashville, Tennessee. The plaintiffs are Tennessee residents and customers of some of the cooperatives and are seeking class action status on behalf of all similarly situated customers. The plaintiffs allege a number of violations of federal and state law, including the antitrust laws and the Tennessee Consumer Protection Act. They claim that (1) TVA and the cooperatives have unreasonably restrained trade and have created and maintained artificially high power rates, (2) the cooperatives are required by Tennessee law to issue patronage refunds or reduce rates and have failed to do so, and (3) the cooperatives have breached the fiduciary duty owed to the plaintiffs by mismanaging assets, using the assets in an improper manner, and entering into contracts with TVA which precluded them from issuing patronage refunds or reducing rates as required by law. The plaintiffs have asked the court to issue an injunction barring TVA and the cooperatives from engaging in unfair competition practices and to award the plaintiffs actual and treble damages (based on the alleged violation of antitrust statutes), restitution, rescission, or any other appropriate remedy pursuant to the Tennessee Consumer Protection Act. The defendants moved to dismiss the complaint, after which the plaintiffs filed an amended complaint. Although the plaintiffs have only partially responded to the motion to dismiss, they recently asked the court to allow them to file a second amended complaint. TVA will respond to the complaint, as amended, after the court decides whether to allow the second amendment.

In July 2004, two lawsuits were filed against TVA in federal court in New York City alleging that global warming is a public nuisance and that carbon dioxide ("CO<sub>2</sub>") emissions from TVA's fossil-fired electric generating facilities should be ordered abated because they contribute to causing the nuisance. The first case was filed by the States of California, Connecticut, Iowa, New Jersey, New York, Rhode Island, Vermont, and Wisconsin and the City of New York against TVA, American Electric Power, Inc., American Electric Power Service Corporation, Southern Company, Xcel Energy, Inc., and Cinergy Corporation. The second case, which also alleges private nuisance, was filed against the same defendants by Open Space Institute, Inc., Open Space Conservancy, Inc., and the Audubon Society of New Hampshire. There are no CAA requirements limiting CO<sub>2</sub> emissions, and, accordingly, the suits do not involve allegations of regulatory noncompliance. The theory of the cases is that global warming constitutes a nuisance and defendants' CO<sub>2</sub> emissions are contributing to the nuisance. Plaintiffs do not seek monetary damages, but do seek injunctive relief. Specifically, plaintiffs seek a court order requiring each defendant to cap its CO<sub>2</sub> emissions and then reduce these emissions by a specified percentage each year for at least a decade. The defendants filed motions to dismiss as of September 30, 2004. A briefing schedule has been set with final submissions due in December 2004.

It is not possible to predict with certainty whether TVA will incur any liability or to estimate the damages, if any, that TVA might incur in connection with the law suits described above except as specifically noted.

## CERTAIN PROVISIONS OF THE TENNESSEE VALLEY AUTHORITY ACT AND RELATED LAWS

The following summaries of certain provisions of the Act and related laws are not complete and are qualified in their entireties by reference to the full text of the Act and related laws.

#### **Payments in Lieu of Taxes**

TVA is not subject to federal income taxes or to taxation by states or their subdivisions. However, the Act requires TVA to make payments in lieu of taxes to states and counties in which the Corporation conducts power operations and in which the Corporation has acquired properties previously subject to state and local taxation. The basic amount of these payments is five percent of gross revenues from the sale of power during the preceding year excluding sales or deliveries to other federal agencies and off-system sales to other utilities, with a provision for minimum payments under certain circumstances. During 2004 and 2003, TVA made payments totaling \$338 million and \$329 million, respectively, to the states of Alabama, Georgia, Illinois, Kentucky, Mississippi, North Carolina, Tennessee, and Virginia.

### **Payments to the Treasury**

The Act requires TVA to make certain payments to the Treasury each year from Net Power Proceeds in excess of those required for debt service as a return on and reduction of the appropriation investment in TVA's power program (see note 5). The appropriation investment in the power program totaled \$448 million as of September 30, 2004. Net Power Proceeds are defined as the remainder of gross power revenues from TVA's power program

#### after deducting

- the costs of operating, maintaining, and administering its power properties (including multiple-purpose properties in the proportion that multiple-purpose costs are allocated to power) and
- payments to states and counties in lieu of taxes.

#### but before deducting

· depreciation accruals or other charges representing the amortization of capital expenditures,

#### plus

• the net proceeds of the sale or other disposition of any interest in TVA's power properties that constitute an operating unit or system.

## **Acquisition of Real Estate**

The Act empowers TVA to acquire real estate in the name of the United States of America by purchase or by exercise of the right of eminent domain, "and thereupon all such real estate shall be entrusted to the Corporation as the agent of the United States to accomplish the purposes of [the] Act." Thus, all references in this Statement to TVA properties, and to the amounts invested in TVA properties, should be read and construed in the light of this provision of the Act.

# Public Law No. 105-62

In October 1997, Congress enacted the Energy and Water Development Appropriations Act, 1998, Pub. L. No. 105-62, 111 Stat. 1320, 1338 (1997). The paragraph captioned "TENNESSEE VALLEY AUTHORITY" in Title IV of this act (the "Appropriations Act Paragraph") requires TVA, beginning with 1999, to fund nonpower programs that constitute "essential stewardship activities" with revenues derived from one or more of various sources, including power revenues, notwithstanding provisions of the TVA Act and power bond covenants to the contrary. These programs historically had been funded primarily with appropriated funds rather than power revenues.

In compliance with the Appropriations Act Paragraph, TVA is and plans to continue funding its essential stewardship activities with funds from its power program (and other available funds) to the extent that Congress does not make appropriations available for these activities.

In 1999, the last year TVA received appropriated funds, it spent a total of approximately \$75 million on essential stewardship activities, \$30 million of which was power funds. In 2003 and 2004, TVA spent a total of approximately \$83 million and \$87 million, respectively, on essential stewardship activities.

# THE BASIC RESOLUTION: POWER BONDS, DISCOUNT NOTES AND OTHER INDEBTEDNESS

TVA issues Power Bonds pursuant to section 15d of the Act and pursuant to the Basic Resolution. At September 30, 2004, TVA had \$19.4 billion, DM1.5 billion (issued in September 1996), and £600 million (£200 million issued in December 1998, £250 million issued in July 2001, and £150 million issued in June 2003) principal amount of Power Bonds outstanding. TVA may issue Power Bonds only to provide capital for TVA's power program (including refunding any Evidences of Indebtedness issued for like purposes) and only as authorized by law at the time of issuance. However, see also "Certain Provisions of the Tennessee Valley Authority Act and Related Laws"— "Public Law No. 105-62." Power Bonds are payable as to both principal and interest solely from Net Power Proceeds, but TVA may, at its option, pay Power Bonds from the proceeds of refunding obligations or other funds legally available for such payment. Net Power Proceeds for 2004, 2003, and 2002 were \$3.1 billion, \$2.8 billion, and \$2.8 billion,

respectively. Power Bonds of each series must be further authorized by Supplemental Resolution. Power Bonds are not obligations of, or guaranteed by, the United States of America.

TVA intends from time to time to issue new Power Bonds with maturities and terms determined in light of market conditions at the time of sale. TVA may sell new Power Bonds to dealers or underwriters, who may resell the new Power Bonds in public offerings or otherwise. Additionally, TVA may sell new Power Bonds directly or through other entities.

The offering circular, and any appropriate amendment or supplement to the offering circular, for each offering of new Power Bonds, except for new Power Bonds offered under a program on a continuous basis, typically sets forth the following information: (1) the aggregate principal amount, (2) maturity, (3) interest rate or method for determining such rate, (4) interest payment dates, if any, (5) purchase price to be paid to TVA, (6) any terms for redemption or other special terms, (7) form and denomination of new Power Bonds, (8) if applicable, information as to any stock exchange listing, (9) the names of any dealers, underwriters, or agents, (10) a description of any amendments or supplements to the Basic Resolution in connection with the sale of the new Power Bonds, and (11) other terms of the new Power Bonds.

For Power Bonds offered under a program on a continuous basis, TVA typically prepares a single offering circular that describes the general terms and conditions common to all Power Bonds issued under the program. The offering circular typically describes how, if at all, the offering circular will be supplemented in order to reflect, among other things, the specific terms and conditions of the Power Bonds being offered. At the time of each sale, TVA typically determines if the Power Bonds being sold will be subject to redemption prior to the maturity date and will establish the purchase price, principal amount, interest rate or interest rate formula, maturity date, and certain other terms of such sale.

TVA also issues Discount Notes pursuant to section 15d of the Act and in accordance with section 2.5 of the Basic Resolution. As of September 30, 2004, TVA had approximately \$1.9 billion in Discount Notes outstanding. Discount Notes are payable solely from Net Power Proceeds, but TVA may, at its option, pay Discount Notes from the proceeds of refunding obligations or other funds legally available for such payment. TVA intends to offer Discount Notes for sale on a continuous basis to a group of securities dealers selected by TVA, who will resell the notes. TVA will issue Discount Notes in a form and upon terms and conditions as it deems appropriate. Certain information respecting Discount Notes is typically set forth in a Discount Notes offering circular and any appropriate supplement to the offering circular. Discount Notes are not obligations of, or guaranteed by, the United States of America.

TVA may issue Other Indebtedness pursuant to section 15d of the Act and in accordance with section 2.5 of the Basic Resolution. An offering circular, and any appropriate amendment or supplement to the offering circular, for each offering of Other Indebtedness typically sets forth the following information: (1) the aggregate principal amount, (2) maturity, (3) interest rate or method for determining such rate, (4) interest payment date(s), (5) purchase price to be paid to TVA, (6) any terms for redemption or other special terms, (7) form and denomination of Other Indebtedness, (8) if applicable, information as to any stock exchange listing, (9) the names of any dealers, underwriters or agents, and (10) other terms of Other Indebtedness. Other Indebtedness will not be obligations of, or guaranteed by, the United States of America.

Income on Evidences of Indebtedness issued by TVA is subject to United States federal income taxation and various other federal tax consequences. There is no special exemption for Evidences of Indebtedness from federal estate and gift taxes. Under the Act, Evidences of Indebtedness are exempt both as to principal and interest from all taxation now or hereafter imposed by any state or local taxing authority except estate, inheritance, and gift taxes. This exemption might not extend to franchise or other nonproperty taxes imposed on corporations or to gain or loss realized upon the sale or exchange of an Evidence of Indebtedness even though such gain might in some cases be treated as interest income for federal income tax purposes.

The following summary of certain provisions of the Basic Resolution is not complete and is qualified in its entirety by reference to the full text of the Basic Resolution. See also "Certain Provisions of the Tennessee Valley Authority Act and Related Laws" — "Public Law No. 105-62."

# **Application of Net Power Proceeds**

Section 2.3 of the Basic Resolution provides as follows:

Net Power Proceeds shall be applied, and the Corporation hereby specifically pledges them for application,

first to payments due as interest on Bonds, on Bond Anticipation Obligations, and on any Evidences of Indebtedness issued pursuant to Section 2.5 which rank on a parity with Bonds as to interest; to payments of the principal due on Bonds for the payment of which other provisions have not been made and on any Evidences of Indebtedness issued pursuant to Section 2.5 which rank on a parity with Bonds as to principal and for the payment of which other provisions have not been made; and to meeting requirements of sinking funds or other analogous funds under any Supplemental Resolutions. The remaining Net Power Proceeds shall be used only for:

- (a) Required interest payments on any Evidences of Indebtedness issued pursuant to Section 2.5 which do not rank on a parity with Bonds as to interest.
- (b) Required payments of or on account of principal of any Evidences of Indebtedness which do not rank on a parity with Bonds as to principal.
- (c) Minimum payments into the United States Treasury required by the Act in repayment of and as a return on the Appropriation Investment.
- (d) Investment in Power Assets, additional reductions of the Corporation's capital obligations, and other lawful purposes related to the Power Program; provided, however, that payments into the United States Treasury in any fiscal year in reduction of the Appropriation Investment in addition to the minimum amounts required for such purpose by the Act may be made only if there is a net reduction during such year in the dollar amount of outstanding Evidences of Indebtedness issued for capital purposes, and only to such extent that the percentage of aggregate reduction in the Appropriation Investment during such year does not exceed the percentage of net reduction during the year in the dollar amount of outstanding Evidences of Indebtedness issued for capital purposes.

# Section 2.4 of the Basic Resolution provides as follows:

The Corporation, having first adopted a Supplemental Resolution authorizing the issuance of a series of Bonds and pending such issuance, may issue Bond Anticipation Obligations and renewals thereof (including Interim Obligations to the Secretary of the Treasury) to be paid from the proceeds of such series of Bonds when issued or from other funds that may be available for that purpose.

#### Section 2.5 of the Basic Resolution provides as follows:

To assist in financing its Power Program the Corporation may issue Evidences of Indebtedness other than Bonds and Bond Anticipation Obligations, which may be payable out of Net Power Proceeds subject to the provisions of Section 2.3 hereof. Such other Evidences of Indebtedness may rank on parity with but shall not rank ahead of the Bonds as to payments on account of the principal thereof or the interest thereon.

See "Certain Provisions of the Tennessee Valley Authority Act and Related Laws" — "Public Law No. 105-62" and note 11 in Part II for a discussion of legislation relating to appropriations for TVA's nonpower programs and the funding of such programs, including the use of power revenues.

# **Rate Covenant**

### Section 3.2 of the Basic Resolution provides as follows:

The Corporation shall fix, maintain, and collect rates for power sufficient to meet in each fiscal year the requirements of that portion of the present subsection (f) of section 15d of the Act which reads as follows:

The Corporation shall charge rates for power which will produce gross revenues sufficient to provide funds for operation, maintenance, and administration of its power system; payments to States and counties in lieu of taxes; debt service on outstanding bonds, including provision and maintenance of reserve funds and other funds established in connection therewith; payments to the Treasury as a return on the appropriation investment pursuant to subsection (e) hereof; payment to the Treasury of the repayment sums specified in subsection (e) hereof; and such additional margin as the Board may consider desirable for investment in power system assets, retirement of outstanding bonds in advance of maturity, additional reduction of appropriation investment, and other purposes connected with the Corporation's power business, having due regard for the primary objectives of the Act, including the objective that power shall be sold at rates as low as are feasible.

For purposes of this Resolution, "debt service on outstanding bonds," as used in the above provision of the Act, shall mean for any fiscal year the sum of all amounts required to be (a) paid during such fiscal year as interest on Evidences of Indebtedness, (b) accumulated in such fiscal year in any sinking or other analogous fund provided for in connection with any Evidences of Indebtedness, and (c) paid in such fiscal year on account of the principal of any Evidences of Indebtedness for the payment of which funds will not be available from sinking or other analogous funds, from the proceeds of refunding issues, or from other sources; provided, however, that for purposes of clause (c) of this definition Bond Anticipation Obligations and renewals thereof shall be deemed to mature in the proportions and at the times provided for paying or setting aside funds for the payment of the principal of the authorized Bonds in anticipation of the issuance of which such Bond Anticipation Obligations were issued.

The rates for power fixed by the Corporation shall also be sufficient so that they would cover all requirements of the above-quoted provision of subsection (f) of section 15d of the Act as if, in such requirements, there were substituted for "debt service on outstanding bonds" for any fiscal year the amount which if applied annually for 35 years would retire, with interest at the rates applicable thereto, the originally issued amounts of all series of Bonds and other Evidences of Indebtedness, any part of which was outstanding on October 1 of such year.

Rates set by the Board are not subject to review or approval by any state or federal regulatory body. In a future restructured electric power industry (discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" — "TVA and Competition" in Part II), it is possible, however, that the ability of TVA's Board to set TVA's rates as specified in the TVA Act and the Basic Resolution could be adversely affected by legislative changes or by competitive pressures.

#### Covenant for Protection of Bondholders' Investment

Under the Act and section 3.3 of the Basic Resolution, TVA must, in each successive five-year period beginning October 1, 1960, use an amount of Net Power Proceeds at least equal to the sum of (1) depreciation accruals and other charges representing the amortization of capital expenditures and (2) the net proceeds from any disposition of power facilities (such sum being hereafter referred to as the "Section 3.3 Amount") for either (a) the reduction of its capital obligations (including Evidences of Indebtedness and the Appropriation Investment) or (b) investment in power assets.

The next time TVA will make the calculation under section 3.3 of the Basic Resolution will be after the end of 2005. TVA has concluded that write-downs are generally not included in the Section 3.3 Amount because write-downs do not constitute depreciation or amortization under generally accepted accounting principles. Accordingly, when calculating the Section 3.3 Amount after the end of 2005, TVA will exclude most of the write-down that was taken in 2001. In 2001, TVA identified assets that would not be recovered in future rates and reduced the value of these assets by a total of \$3,419 million. Of this amount \$2,220 million was attributable to deferred nuclear generating units, \$789 million was attributable to deferred debt refinancing costs, and \$410 million was attributable to plant held for future use. Of these amounts, only the \$789 million of deferred refinancing costs will be included in the section 3.3 bond test calculation in 2005 because this amount was being amortized at the time it was written down.

#### Issuance of Additional Bonds and Other Evidences of Indebtedness

The Act limits the issuance of Evidences of Indebtedness by TVA to a total of \$30 billion outstanding at any one time. At September 30, 2004, TVA had approximately U.S. \$21.3 billion, DM1.5 billion (issued in September 1996), £600 million (£200 million issued in December 1998, £250 million issued in July 2001, and £150 million issued in June 2003) of Evidences of Indebtedness outstanding. The Basic Resolution and the Act permit the issuance of Power Bonds only to finance TVA's power program, including the refunding of any Evidences of Indebtedness issued for that purpose. However, see also "Certain Provisions of the Tennessee Valley Authority Act and Related Laws"— "Public Law No. 105-62."

Power Bonds, the terms and conditions of which may not be inconsistent with the Basic Resolution, must also be authorized by Supplemental Resolution.

Pending the issuance of Power Bonds authorized by a Supplemental Resolution, TVA may issue Bond Anticipation Obligations and renewals of Bond Anticipation Obligations (including Interim Obligations to the Secretary of the Treasury), to be paid from the proceeds of such Power Bonds when issued or from other funds that may be available for that purpose.

TVA may also issue Evidences of Indebtedness other than Power Bonds and Bond Anticipation Obligations, such as Discount Notes, to assist in financing TVA's power program. They may be payable out of Net Power Proceeds subject to the provisions of Section 2.3 of the Basic Resolution. They may not rank ahead of the Power Bonds as to principal or interest.

# **Mortgaging and Disposal of Power Properties**

TVA may not mortgage any part of its power properties and may not dispose of all or any substantial portion of these properties unless it provides for a continuance of the interest, principal, and sinking fund payments due and to become due on all outstanding Evidences of Indebtedness, or for the retirement of such Evidences of Indebtedness.

#### Modifications of Resolutions and Outstanding Bonds

The Basic Resolution provides for amendments to it, to any Supplemental Resolution, and to any outstanding Power Bonds. Generally, TVA may make amendments to the respective rights and obligations of TVA and the bondholders with the written consent of the holders of at least  $66^2/_3$  percent in principal amount of the outstanding Power Bonds to which the amendment applies. However, TVA may not make changes in the maturity of the principal of any Power Bond or any interest installment thereon or reduction in the principal amount, redemption premium, or rate of interest with respect to any Power Bond, or in the above percentage for any such consent, without the consent of the holder of such Power Bond.

Additionally, TVA may amend the Basic Resolution or any Supplemental Resolution without the consent of the bondholders in order (1) to close the Basic Resolution against the issuance of additional Power Bonds or to restrict such issuance by imposing additional conditions or restrictions; (2) to add other covenants and agreements to be observed by TVA or to eliminate any right, power, or privilege conferred upon TVA by the Basic Resolution; (3) to modify any provisions to release TVA from any of its obligations, covenants, agreements, limitations, conditions, or restrictions, provided that such modification or release shall not become effective with respect to any Power Bonds issued prior to the adoption of such amendment; (4) to correct any defect, ambiguity, or inconsistency in, or to make provisions in regard to matters or questions arising under, the Basic Resolution or any Supplemental Resolution, so long as such amendments are not contrary to, or inconsistent with, the Basic Resolution or such Supplemental Resolution; or (5) to make any other modification or amendment which the Board by resolution determines will not materially and adversely affect the interests of holders of the Power Bonds; provided, however, that no such amendatory resolution shall be deemed to waive or modify any restriction or obligation imposed by the Basic Resolution or any Supplemental Resolution upon TVA in respect of, or for the benefit of, any of the then outstanding Power Bonds.

#### **Events of Default**

Any of the following shall be deemed an Event of Default under the Basic Resolution: (1) default in the payment of the principal or redemption price of any Power Bond when due and payable at maturity, by call for redemption or otherwise; (2) default in the payment of any installment of interest on any Power Bond when due and payable for more than 30 days; or (3) failure of TVA to duly perform any other covenant, condition, or agreement contained in the Power Bonds or in the Basic Resolution or any Supplemental Resolution for 90 days after written notice specifying such failure has been given to TVA by the holders of at least five percent in aggregate principal amount of the thenoutstanding Power Bonds.

Upon any such Event of Default, the holders of the Power Bonds may proceed to protect and enforce their respective rights, subject to the restrictions described below. The holders of at least five percent in aggregate principal amount of Power Bonds then outstanding shall, subject to certain restrictions, have the right and power to institute a proceeding (1) to enforce TVA's covenants and agreements, (2) to enjoin any acts in violation of the rights of holders of Power Bonds, and (3) to protect and enforce the rights of holders of Power Bonds. Such holders have no right to bring any such action or proceeding against TVA unless they have given TVA written notice of an Event of Default and TVA has had a reasonable opportunity to take appropriate corrective action with respect thereto and has failed or refused to do so. Power Bonds do not provide for acceleration upon an Event of Default.

Holders of a majority in aggregate principal amount of the outstanding Power Bonds have the right to direct the time, method, and place of conducting any proceeding for any remedy available and may waive any default and its consequences, except a default in the payment of the principal of or premium, if any, or interest on any Power Bonds.

# Fourth Amendatory Resolution to the Basic Resolution

On March 25, 1992, TVA adopted a resolution amending the Basic Resolution, entitled "Fourth Amendatory Resolution to Basic Tennessee Valley Authority Power Bond Resolution," that (1) deleted from the Basic Resolution limitations on issuance of Power Bonds formerly set forth as section 3.4 thereof and (2) amended the Basic Resolution to permit issuance of other Evidences of Indebtedness under section 2.5 thereof that rank on a parity with Power Bonds as to principal and interest. With the deletion of section 3.4 of the Basic Resolution, sections 3.5 through 3.10 were renumbered as appropriate. This amendatory resolution became effective December 16, 1999, with retroactive application to all Power Bonds issued after March 25, 1992.

# **PART II**

# **SELECTED FINANCIAL DATA**

The following selected financial data for the years 2001 through 2004 should be read in conjunction with the audited financial statements and notes thereto (collectively, the "Financial Statements") presented in "Financial Statements and Supplementary Data." Certain reclassifications have been made to the 2003, 2002, and 2001 financial statements to conform to the 2004 presentation (see note 1–*Reclassifications*).

# Statements of Income Data (in millions)

For the	years er	ded Sep	otember	30
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	2004	2003	2002	2001
Operating revenues	\$ 7,533	\$ 6,953	\$ 6,798	\$ 6,896
Operating expenses	(5,873) (1)	(5,398)	(5,323) (2)	(5,445)
Operating income	1,660	1,555	1,475	1,451
Unrealized losses on derivative contracts, net	(7)	(7)	_	_
Other income, net	37	29	17	258
Loss on asset impairment	_	_	_	(3,419) (3)
Interest expense, net	(1,304)	(1,350)	(1,429)	(1,633)
Cumulative effect of accounting changes		217 (4)		
NET INCOME (LOSS)	\$ 386	\$ 444	\$ 63	\$ (3,343)

# Balance Sheets Data (in millions)

# At September 30

		2004		2003		2002		2001
Assets								
Current assets	\$	2,386	\$	2,321	\$	1,682	\$	1,624
Property, plant, and equipment, net		23,789		23,218		22,271		22,248
Deferred nuclear generating units		3,909		4,110		4,113		4,110
Investment funds		744		638		510		606
Deferred charges and other assets	_	3,452	_	2,824	_	2,313	_	1,855
TOTAL ASSETS	\$	34,280	\$	33,111	\$	30,889	\$	30,443
Liabilities and proprietary capital								
Current liabilities	\$	5,511	\$	5,902	\$	4,811	\$	6,339
Other liabilities		7,168		5,114		3,304		2,806
Long-term debt, net of discount		19,337		20,201		21,358		19,851
Total liabilities		32,016		31,217		29,473		28,996
Retained earnings		1,162		783		349		306
Other proprietary capital		1,102		1,111		1,067		1,141
Total proprietary capital	_	2,264		1,894		1,416	_	1,447
TOTAL LIABILITIES AND PROPRIETARY CAPITAL	\$	34,280	\$	33,111	\$	30,889	\$	30,443

# Notes

<sup>(1)</sup> During 2004, TVA was notified by a supplier that it would not proceed with manufacturing of fuel cells to be installed in the partially completed Regenesys energy storage plant in Columbus, Mississippi. Accordingly, TVA recognized a net \$20 million loss on the cancellation of the Regenesys project. See note 1—Project/Plant Cancellation.

- (2) Due to changes in the market forecast, TVA elected not to complete a gas-fired combine cycle plant in 2002. TVA recognized a \$154 million loss related to the cancellation of this project. See note 1—*Project/Plant Cancellation*.
- (3) During 2001, TVA identified certain assets for which the estimated cash flows provided through future rates were likely to be less than recorded book values. Accordingly, a \$3,419 million impairment loss was recognized.
- (4) The cumulative effects of \$217 million are due to two accounting changes. Effective October 1, 2002, the Board approved a change in the methodology for estimating unbilled revenue from electricity sales. The impact of this change resulted in an increase in accounts receivable of \$412 million with a corresponding cumulative effect gain for the change in accounting for unbilled revenue. In addition, TVA adopted SFAS No. 143, *Accounting for Asset Retirement Obligations*, which resulted in a cumulative effect charge to income of \$195 million, and an increase in accumulated depreciation of \$206 million. See note 1 *Accounting Changes*.

# FINANCIAL OBLIGATIONS (in millions)

	At September 30					
	2004	2003	2002	2001		
LONG-TERM OBLIGATIONS						
Long-term debt, including current maturities	\$ 21,326	\$ 22,795	\$ 21,763	\$ 22,359		
Other obligations						
Capital leases	138	151	162	172		
Lease/leaseback commitments	1,178	1,238	561	271		
Energy prepayment obligations	1,455	47				
Total other obligations	2,771	1,436_	723_	443		
Total long-term obligations	24,097	24,231	22,486	22,802		
DISCOUNT NOTES	1,924	2,080	3,492	3,016		
FINANCIAL OBLIGATIONS	\$ 26,021	\$ 26,311	\$ 25,978	\$ 25,818		

For additional discussion on long-term obligations, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" — "Liquidity and Capital Resources" — "Cash Requirements and Contractual Obligations" following.

# COMPARATIVE FOUR-YEAR DATA STATISTICAL AND FINANCIAL SUMMARIES

# For the years ended September 30

	For	the years ended	a September 30	,
	2004	2003	2002	2001
Sales (millions of kWh) (a)				
Municipalities and cooperatives	133,161	130,769	128,600	129,760
Industries directly served	29,344	27,756	26,478	23,306
Federal agencies and other	3,353	3,009	3,579	5,967
Total sales	165,858	161,534	158,657	159,033
Operating revenues (millions of dollars) (a)				
Electric				
Municipalities and cooperatives\$	6,457	\$ 5,974	\$ 5,856	\$ 5,908
Industries directly served	842	781	732	659
Federal agencies and other	140	120	120	226
Other	94	78	90	103
Total revenues		\$ 6,953	\$ 6,798	\$ 6,896
Electric revenue per kWh (cents)	4.49	4.26	4.23	4.27
Winter net dependable generating capacity (megawatts) (b)				
Hydro	4,981	5,022	4,924	4,941
Fossil	15,076	15,029	15,023	15,050
Nuclear units in service	5,777	5,776	5,751	5,715
Combustion turbine and diesel generators (c)	4,685	4,655	4,643	3,923
TVA facilities	30,519	30,482	30,341	29,629
	2,670	1,176	1,176	736
Other facilities				
Total long term available capacity (d)	33,189	<u>31,658</u>	<u>31,517</u>	30,365
System peak load (megawatt)—summer	29,966	28,530	29,052	27,368
System peak load (megawatt)—winter	27,997	29,866	26,061	27,163
Percent gross generation by fuel source				
Fossil	61%	60%	63%	64%
Hydro	9%	11%	6%	6%
Nuclear	30%	29%	30%	29%
Combustion turbine	NM	NM	1%	1%
Fuel cost per kWh (cents)				
Fossil	1.48	1.43	1.39	1.32
Combustion turbine	9.01	7.61	4.65	6.07
Nuclear	0.39	0.39	0.41	0.44
Aggregate fuel cost per kWh net thermal generation	1.14	1.14	1.11	1.08

Notes

<sup>(</sup>a) Sales and revenues have been adjusted to include sales to other utilities and to exclude interdivisional sales.

<sup>(</sup>b) See "Generating Resources" in Part I of the 2004 Information Statement.

<sup>(</sup>c) As of September 30, 2004, includes twenty-four 85-megawatt units subject to lease/leaseback arrangements.

<sup>(</sup>d) Total summer NDC for 2004, 2003, 2002, and 2001 was approximately 32,059 megawatts, 30,743 megawatts, 30,477 megawatts, and 29,405 megawatts, respectively.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") explains the results of operations and general financial condition of TVA. In this MD&A, TVA's future outlook is discussed as well as its results of operations, both operational and financial. The MD&A then discusses TVA's liquidity and capital resources, significant balance sheet changes, critical accounting policies and estimates, and new accounting pronouncements. Finally, TVA's competitive and regulatory environment and business strategy are discussed as well as subsequent events and various uncertainties that could affect future results of operations. The MD&A should be read in conjunction with the Financial Statements.

#### Overview

The power industry is changing and TVA will eventually have to operate in competitive power markets. Potential changes in the market could affect TVA, its stakeholders, and the way it fulfills its obligations. TVA's financial health in the future will depend on what changes may come and how well it is able to adapt to those changes. Over the next several years, TVA plans to concentrate on four specific areas:

- Developing new, more highly differentiated prices, services, and contract terms that more closely tie the cost and the risk of the product to its terms and pricing.
- Addressing the range of issues related to wholesale market design and transmission pricing, including how TVA will interface with the markets that are expected to surround it, as well as how TVA will price transmission services within its service area when distributors can choose other suppliers.
- Retiring total financing obligations and driving to higher interest-coverage ratios in order to provide the financial flexibility needed to tolerate the higher levels of revenue and cost volatility associated with a more competitive market.
- Maintaining and operating its generation and transmission assets so that it can continue to fulfill its supply
  obligations in a safe and reliable manner.

#### Customers

TVA implemented a multi-part rate action which included a rate adjustment and a rate change in October 2003, its second rate increase in sixteen years. Residential and commercial rates in the service area remained competitive with other areas of the region, however, and below the national average.

In addition to rates charged to customers, TVA is developing new, more differentiated prices, service and customer contracts that more closely tie risk, cost, and product differences to pricing (see "Rates and Customers" in Part I).

# Wholesale Market Design and Transmission Pricing

By the late 1990's, the nation appeared to be well on its way to restructuring both wholesale and retail electricity markets. During the past four years, however, market and regulatory events have increased the uncertainty about the ultimate outcome and timing of electricity market restructuring in the United States. Despite the current uncertainty, TVA believes that wholesale competitive electricity markets are likely to continue to evolve.

While TVA is generally not subject to Federal Energy Regulatory Commission ("FERC") jurisdiction, TVA complies with FERC regulations where consistent with the provisions of the TVA Act and other provisions of federal law. At the present time there are several fully integrated utilities as well as Regional Transmission Organizations bordering on TVA, and all are operating under current FERC regulations. TVA will continue to operate within the bounds of applicable laws and regulations, and will adapt as they may change in the future. In the meantime, TVA plans to examine how it should prepare to structure its wholesale energy and transmission businesses to accommodate the possible future changes, including the impacts of customer choice. In addition, TVA is voluntarily seeking ways to meet FERC's objective to improve regional transmission operations in a manner consistent with TVA's responsibilities under the TVA Act.

### Reduction of Total Financing Obligations

TVA is committed to increasing its financial flexibility by moving to a business model that can provide sufficient free cash flow on a current basis to lower its dependence on fixed income capitalization and other debt-like financing instruments. In 2004, TVA began reporting debt and debt-like instruments in its capitalization as "total financing obligations," which currently are comprised of debt, lease/leaseback obligations, and energy prepayments. Due to the uneven nature of TVA's expenditures both for expense and capital cost, the amount of total financing obligations that TVA can retire will vary in each year as a function of its margin on power sales, its ability to control its expense of operation, and requirements for capital which generally can be broken down into base capital needed to sustain existing plant, environmental capital such as the funds required to build facilities that reduce emissions on TVA's fossil fleet, and growth capital such as that needed for increasing the capacity of TVA generating plant and transmission grid.

The reduction in total financing obligations is being considered under several options, and in combination with, and in the context of, setting multi-year annual performance plans and budgets, including:

- Continued emphasis on cost reduction through process improvements,
- Asset improvements to increase performance,
- Capital rationing:
  - Deferring and/or canceling capital projects when necessary and appropriate,
  - Synchronizing investment criteria with the changing portfolio of customer contracts and commitments, and
- Rate adjustments and rate changes consistent with changes in market and power supply conditions.

Principal threats to TVA's ability to reduce total financing obligations are loss of load, increased operating expenses, and unforeseen capital costs due to changing environmental standards which are not made up through rate increases. TVA continually evaluates business conditions, regulations, and costs to identify ways to improve financial flexibility.

# Maintain Assets

While it is unclear what role TVA will play in competitive markets in the future, even indirect competitive pressure will mean that TVA's financial health will be more dependent on its ability to control expenses, while keeping power rates competitive.

TVA is working to reduce its financing obligations, improve efficiency, and maintain its generating fleet as viable so that it will continue to be the provider of choice for its customers in a competitive environment. TVA's generating fleet supplemented by purchased power, as appropriate, is expected to be adequate to meet Valley demand for the foreseeable future, especially as Brown's Ferry Nuclear Plant Unit 1 is brought on line. This unit is expected to begin operations in 2007, and is expected to add 1,280 megawatts of energy to TVA's system and have the effect of reducing TVA's cost of power.

TVA expects cash flow to be adequate in coming years to be able to complete its current clean air commitments and currently planned investments in its power system. However, new environmental mandates, other required expenditures, or a decline in power demand could threaten expected cash flows.

#### **Economic Outlook**

TVA's current load forecast through 2006 reflects an average annual energy growth rate of 2.4 percent. Numerous factors, such as weather conditions and the health of the regional economy, could cause actual results to differ materially from TVA's forecasts. TVA's regional economic outlook is a major driver of its sales forecast. The health of the regional economy can be measured in three ways. Generally, population is most important for residential sales, employment for commercial sales, and regional gross domestic product for manufacturing sales. The growth rates through 2006 from TVA's economic outlook are:

	Range of Forecast				
	<u>High</u>	<u>Medium</u>	Low		
Regional Gross Domestic Product	6.4%	4.6%	-0.2%		
Total Nonfarm Payroll Employment	3.5%	2.2%	-1.2%		
Total Population	1.5%	1.1%	0.2%		

For additional information on TVA's longer-term future outlook, see "TVA and Competition" and "Business Strategy" — "Strategic Plan" below.

### Legislative Matters

In February 2004, Senate Energy and Natural Resources Committee Chairman, Pete V. Domenici, R-NM, introduced a new "slimmed down" national energy policy bill, S. 2095 ("S. 2095"). Among other things, S. 2095 would (1) convert TVA's Board of Directors into a part-time Board of nine members serving sequenced five-year terms and create a new position of CEO to manage TVA's day-to-day operations, (2) authorize FERC to review TVA's transmission rates and terms and conditions of service to determine whether they are comparable to those TVA imposes on itself and whether they are unduly discriminatory, and (3) authorize FERC to order refunds if the rates charged by TVA and other nonjurisdictional entities on wholesale electricity transactions for a term of 31 days or less are not just and reasonable. In addition, S. 2095 contains some unclear language that might be interpreted as inadvertently repealing the Anti-Cherrypicking Provision. However, TVA does not believe that this provision of S. 2095 was included with the intention of repealing the Anti-Cherrypicking Provision.

In June 2004, the House again passed the Energy Policy Act of 2004, which was identical to the conference version of the Energy Policy Act of 2003 that the House approved in 2003. The Energy Policy Act of 2004 contains the same provisions with respect to TVA that are included in S. 2095.

A number of controversial issues have prevented the Senate and House from reaching agreement on common language for an energy bill. Although key members of Congress have pledged to work together to resolve the differences on the energy bill, it is not likely that there will be energy legislation in this session of Congress and, if Congress does take action, it is unclear how it will affect TVA.

During 2004, OMB prepared draft legislation that would expand the type of evidences of indebtedness that count toward TVA's \$30 billion debt ceiling. Under this legislation, long-term obligations that finance capital assets would count toward the debt ceiling, including lease-leaseback arrangements and power prepayment agreements whose original term exceeded one year. This legislation, which would be effective for transactions into which TVA entered after December 31, 1999, has not yet been introduced in Congress.

A number of existing environmental regulatory programs have been and are being made more stringent in their application to fossil-fuel units, and additional regulatory programs potentially affecting fossil-fuel units have been proposed. The total cost of future compliance with nitrogen oxide ("NO<sub>x</sub>"), sulfur dioxide ("SO<sub>2</sub>"), mercury reduction requirements, and other environmental-related requirements cannot reasonably be determined at this time because of the uncertainties surrounding emerging EPA regulations, resultant compliance strategies, potential for the development of new emission control technologies, court litigation, and future amendments to the Clean Air Act (see note 10—*Environmental Matters*). Litigation over emissions from coal-fired generating units is growing, including litigation against TVA (see "Legal Proceedings" in Part I). It is not possible to predict with any precision how these developments will impact the operation of existing and new fossil-fuel generating units. It is virtually certain that environmental requirements placed on the operation of fossil-fuel generating units will become more restrictive.

It is difficult to predict whether the legislative initiatives discussed above will become law in the future and what their impact would be on TVA.

### **Results of Operations**

### Operational Results

Generation. TVA prepares a power supply plan, semi-annually, to help generation assets meet projected loads and to enhance system reliability. This plan considers historical seasonal weather and hydro power availability information, projected load growth, expected generation asset performance, and market price forecasts. This plan is also a key element in the planning of generation asset outages. The plan is updated monthly to reflect factors such as near term weather forecasts, actual rainfall effects on hydro-electric power, and generation asset availability, including outage schedule revisions.

Asset Availability. During 2004, asset availability was slightly better than planned. All generating types—fossil, hydro, and nuclear—performed essentially in accordance with the plan allowing for efficient dispatch of the system. While some specific units did not meet availability targets, overall system performance was not adversely impacted. See "Business Strategy" — "Key Indicators and Objectives" below.

*Transmission.* In 2004, TVA's Transmission/Power Supply organization set another record in reducing the frequency of customer outages. Power was delivered with 99.999 percent reliability for the fifth straight year. Also

during the year, TVA built nearly 80 miles of new transmission lines and 17 new delivery points to improve system reliability. Responding to an investigation which found that improper right-of-way maintenance was a major cause of the 2003 Midwest/Northeast blackout, TVA renewed its focus on removing vegetation in its own service area that could come into contact with power lines. TVA removed over half a million trees that could have jeopardized reliability and set a record of 176 days during 2004 without a tree-caused power disturbance.

In addition to providing reliable electric service to its own seven-state region, TVA, under separate agreements, provides system Reliability Coordinator Services for several neighboring systems, including Associated Electric Cooperative, Inc., Big Rivers Electric Corporation, East Kentucky Power Cooperative, and Electric Energy Inc. These agreements enhance compliance with the North American Electric Reliability Council ("NERC") reliability standards for the entire service territory.

To further grid reliability, TVA works closely with independent generators to enhance compatibility with the transmission system, develop and implement consistent operating procedures, and minimize practices that can result in interrupted service.

Rates and Customers. Commencing with sales made in October 2003, TVA implemented a multi-part rate action which included a rate adjustment and a rate change. The purpose of the rate adjustment was to provide additional money to fund capital costs for environmental compliance. As of September 30, 2004, TVA had collected approximately \$339 million in added revenue due to the rate adjustment. The rate change was intended to have no effect on TVA's revenues in total. Rather, its purpose was to adjust the rates of various customer classes in order to bring them in line with rates of comparable utilities. This change effectively increased rates for residential and commercial customers while decreasing rates for certain industrial customers.

Rates for customers in the TVA service territory continue to be low as compared to the national average despite the rate increase implemented in October 2003. From January 1, 2003 through December 31, 2003, the average rate for electricity consumers in the TVA service area was  $5.60 \, \text{¢}$  per kilowatt-hour, comprised of  $6.62 \, \text{¢}$ ,  $6.80 \, \text{¢}$ , and  $3.98 \, \text{¢}$  per kilowatt-hour for residential, commercial, and industrial customers, respectively. The national average (excluding sales in the TVA service area) for this same period was  $7.45 \, \text{¢}$  per kilowatt-hour, which includes  $8.73 \, \text{¢}$ ,  $7.88 \, \text{¢}$ , and  $5.05 \, \text{¢}$  per kilowatt-hour for residential, commercial, and industrial customers, respectively. In total, the average rate for customers in the TVA service territory was 25 percent lower than the national average.

In addition, TVA's system has been designed and built over the years to optimize serving major power "load centers" in the Valley, such as major cities. This means that power is generated close to where it is consumed, which increases reliability and reduces cost. TVA's power system operates across two time zones and possesses geographic weather diversity, which helps diversify peak power demands, and because of the region's natural seasonality, the TVA system peaks in both the summer and winter.

# Financial Results

The following table compares operating results and selected statistics for the years ended September 30:

# Summary Statements of Income (in millions)

	2004	2003	2002
Operating revenues	\$ 7,533	\$ 6,953	\$ 6,798
Operating expenses	(5,873)	(5,398)	(5,323)
Operating income	1,660	1,555	1,475
Unrealized losses on derivative contracts, net	(7)	(7)	_
Other income, net	37	29	17
Interest expense, net	(1,304)	(1,350)	(1,429)
Income before cumulative effects of accounting changes	386	227	63
Cumulative effects of accounting changes, net		217	
Net income	\$ 386	\$ 444	\$ 63

	2004	2003	2002
Sales (millions of kWh)	165,858	161,534	158,657
Heating degree days (normal 3,459)	3,266	3,505	2,978
Cooling degree days (normal 1,777)	1,702	1,602	1,999

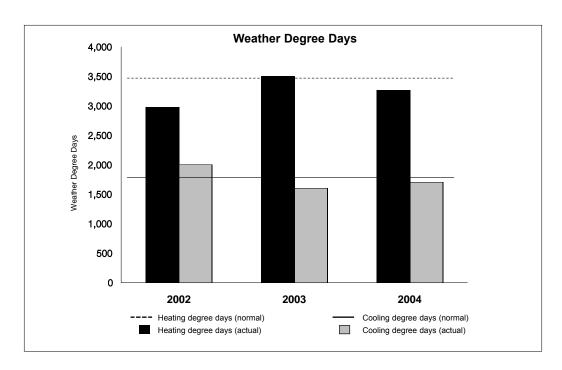
#### 2004 Compared to 2003

Net income for 2004 was \$386 million, compared with net income of \$444 million for 2003. The decrease was primarily due to two non-cash accounting changes implemented in the first quarter of 2003. These accounting changes included a \$412 million gain related to a change in accounting for unbilled revenue and a \$195 million charge related to a change in accounting for asset retirement obligations. Income before cumulative effects of accounting changes for 2004 increased \$159 million compared to 2003. This increase was primarily due to the rate adjustment implemented in October of 2003.

Operating Revenues. A detailed table of electricity sales and operating revenue is as follows:

	Years ended September 30 (millions of kWh)			Years ended September 30 (millions of dolla		
	2004	2003	Percent Change	2004	2003	Percent Change
Sales of electricity and operating revenue						
Municipalities and cooperatives	133,161	130,769	1.8%	\$ 6,457	\$ 5,974	8.1%
Industries directly served	29,344	27,756	5.7%	842	781	7.8%
Federal agencies and other utilities	3,353	3,009	11.4%	140	120	16.7%
Other revenue	_	_	_	94	78	20.5%
Total sales of electricity and operating revenue	165,858	161,534	2.7%	\$ 7,533	\$ 6,953	8.3%

Operating revenues were \$7,533 million in 2004 compared to \$6,953 million in 2003. The \$580 million, or eight percent, increase in revenue was driven primarily by an increase in sales to municipalities and cooperatives of \$483 million related to a higher average rate due to the rate adjustment implemented in October of 2003, partially offset by \$42 million in prepaid revenue discounts. Also contributing to the increase in revenue was a six percent increase in sales volume to directly served industrial customers, partially offset by decreased rates to large manufacturing customers due to the October 2003 rate action. Other revenue increased \$16 million, or 21 percent, from \$78 million in 2003 to \$94 million for 2004. The increase is attributable to a one time sale of the Johnson City, Tennessee Customer Service Center and associated property of \$2.4 million, along with increased external business activity. The TVA service territory experienced six percent more cooling degree days and seven percent fewer heating degree days this year compared to last year. Although the net effect should have been minimal to sales to TVA's customers, total kilowatt-hour sales to customers increased four billion kilowatt-hours, or three percent, from 162 billion in 2003 to 166 billion in 2004. This increase can be attributed to population growth, increased demand in the industrial sector, and increased demand for electricity across the Valley.



A "Weather Degree Day" is a unit of measure used to express the extent to which temperatures vary from a specific reference temperature during a given period. Companies may use standard reference figures of 80 degrees Fahrenheit for cooling degree days and 60 degrees Fahrenheit for heating degree days. Others sometimes use 65 degrees Fahrenheit as the standard reference for both heating and cooling degree days. TVA uses 65 degrees Fahrenheit.

Operating Expenses. A detailed table of operating expenses is as follows:

	Years ended September 30 (millions of dollars)				
		2004		2003	Percent Change
Operating expenses					
Fuel and purchased power	\$	2,081	\$	1,957	6.3%
Operating and maintenance		2,319		2,039	13.7%
Depreciation and accretion		1,115		1,073	3.9%
Tax-equivalents		338		329	2.7%
Loss on project cancellation		20	_	<u> </u>	
Total operating expenses	\$	5,873	\$	5,398	8.8%

Total operating expenses increased \$475 million or approximately nine percent in 2004. Fuel costs increased \$81 million, or five percent, driven by reduced hydro generation, an increase in the price of coal and natural gas, and a 2.7 percent increase in electricity sales in 2004 as compared to 2003. Purchased power costs increased approximately ten percent, or \$43 million, primarily due to higher off-system prices partially offset by lower volume. Operating and maintenance ("O&M") expense increased \$280 million, or 14 percent. The largest contributor to this variance was pension financing expense which changed from a \$49 million credit in 2003 to a \$66 million charge in 2004. This \$115 million change is due primarily to the amortization of unrecognized pension costs due to decreasing the discount rate used to calculate the present value of the pension benefit obligation ("PBO") from 7.05 percent to 6.0 percent, coupled with a lower expected return on pension assets. This lower expected return on pension assets can be attributed to a lower asset base, partially offset by a higher rate of return used to calculate the expected return on assets. An increase in scheduled outage costs contributed \$68 million, or 24 percent, to the total O&M expense variance. This increase is attributable to increased amortization of refueling outages at nuclear plants and increases in outages at fossil plants to install emission control equipment. Severance expense was also a contributor to the O&M expense variance. Due to a loss of 690 employees to voluntary and involuntary reductions in force, TVA recognized severance expense of \$36 million in 2004 compared to no severance expense in 2003 (see note 1—Reduction in Workforce). Increased pension service costs also contributed \$22 million to the total O&M expense due to decreasing the discount rate used to calculate the PBO. Depreciation and accretion increased \$42 million, or four percent, due primarily to capital projects placed in service during the year.

In December 2003, TVA was notified that Regenesys Technologies Limited ("RTL") would not proceed with manufacturing of the fuel cells to be installed in the partially completed Regenesys energy storage plant in Columbus, Mississippi. TVA had invested approximately \$35 million in the Regenesys project. RTL reimbursed TVA for early termination of the contract in the amount of \$15 million, which reduced the net loss to \$20 million on the cancellation of the Regenesys project (see note 1—*Project/Plant Cancellation*).

Unrealized Loss on Derivative Contracts, Net. Unrealized losses on derivative contracts were \$7 million in 2004 and 2003 due primarily to losses on mark-to-market adjustments on swaption and swap contracts (see note 6).

Other Income. TVA had net other income of \$37 million in 2004 compared with net other income of \$29 million in 2003. The increase in net other income relates to an increase in non-electric business activity.

Interest Expense. A detailed table of interest expense, outstanding debt and interest rates is as follows:

	(millions of dollars)				
	2004	2003	Percent Change		
Interest expense					
Interest on debt	\$ 1,379	\$ 1,396	(1.2%)		
Amortization of debt discount, issue, and					
reacquisition costs, net	24	28	(14.3%)		
Allowance for funds used during construction	(99)	(74)	(33.8%)		
Net interest expense	\$ 1,304	\$ 1,350	(3.4%)		
Outstanding bonds and notes	\$ 23,250	\$ 24,875	(6.5%)		

	Ye	ars ended Septembe (percent)	er 30
	2004	2003	Percent Change
Interest rates (average)			
Long-term	6.36	6.22	2.3%
Short-term	1.15	1.28	(10.2%)
Blended	6.16	5.66	8.8%

Net interest expense was \$1,304 million for the year ended September 30, 2004, compared to \$1,350 million for the year ended September 30, 2003. This reduction reflects a lower level of total outstanding debt during 2004 as compared to 2003 coupled with an increase in allowance for funds used during construction ("AFUDC") due to increased construction work in progress. Total outstanding indebtedness, excluding discounts and premiums, as of September 30, 2004, was \$23.3 billion with a blended average interest rate (of long-term and short-term debt) of 6.16 percent; as of September 30, 2003, total debt outstanding, excluding discounts and premiums, was \$24.9 billion with a blended average interest rate of 5.66 percent. The average long-term and short-term interest rates for the year ended September 30, 2004, were 6.36 percent and 1.15 percent, respectively, as compared with 6.22 percent and 1.28 percent for 2003.

Net interest expense is one of TVA's largest single expenses. Interest expense as a percentage of revenue has declined from 34 cents of every revenue dollar in 1997 to 17 cents in 2004. However, interest rates are expected to rise in the future.

### 2003 Compared to 2002

Net income for 2003 was \$444 million, compared with net income of \$63 million for 2002. The increase was primarily due to two noncash accounting changes implemented during the first quarter of 2003. These accounting changes included a \$412 million gain related to a change in accounting for unbilled revenue and a \$195 million charge related to a change in accounting for asset retirement obligations (see note 1—*Cost-Based Regulation* and *Impact of New Accounting Standards and Interpretations*). In addition, TVA elected during 2002 not to complete a gas-fired combined cycle plant. Accumulated costs of the project totaled \$154 million which TVA recognized as a loss on plant cancellation during 2002.

Operating Revenues. A detailed table of electricity sales and operating revenue is as follows:

	Years ended September 30 (millions of kWh)				ember 30 Ilars)		
	2003	2002	Percent Change	2003		2002	Percent Change
Sales of electricity and operating revenue							
Municipalities and cooperatives	130,769	128,600	1.7%	\$5,974	\$	5,856	2.0%
Industries directly served	27,756	26,478	4.8%	781		732	6.7%
Federal agencies and other utilities	3,009	3,579	(15.9%)	120		120	0.0%
Other revenue	_	_	_	78		90	(13.3%)
Total sales of electricity and							
operating revenue	161,534	_158,657	1.8%	\$6,953	\$_	6,798	2.3%_

Operating revenues, consisting of sales of electricity and other revenues, increased by \$155 million, or more than two percent, in 2003 over 2002. The increase in revenues from sales of electricity related to increased volume primarily related to the impacts of colder winter weather, higher average rates, and increased demand in the industrial sector. The TVA service territory experienced 20 percent less cooling degree days coupled with 18 percent more heating degree days in 2003 as compared with 2002. Accordingly, total kilowatt-hour sales to customers increased 2.9 billion, or two percent, from 158.7 billion in 2002 to 161.5 billion in 2003. The class of customers that is most affected by weather is the residential sector which accounts for approximately 45 percent of the total municipality and cooperative sales. Directly served industries revenue increased due to higher average prices on interruptible products resulting from changes in the product and service mix among customers. The decrease in OTHER REVENUE of \$12 million is attributable to fewer interconnection requests and a decline in external business activity.

The pro-forma effects of the change in accounting for unbilled revenue (see note 1—*Accounting Changes*), if applied retroactively, would increase revenue from municipalities and cooperatives by \$81 million for the year ended September 30, 2002. Consequently, if total operating revenues of \$6,953 million for the year ended September 30, 2003, are compared to pro-forma operating revenues of \$6,879 million for the same period of 2002, the result is an increase in total operating revenues of \$74 million, or one percent.

Operating Expenses. A detailed table of operating expenses is as follows:

	Years ended September 30					
		2003		2002	Percent Change	
Operating Expenses						
Fuel and purchased power	\$	1,957	\$	1,877	4.3%	
Operating and maintenance		2,039		1,861	9.6%	
Depreciation and accretion		1,073		1,037	3.5%	
Tax-equivalents		329		328	0.3%	
Loss on plant cancellation		_		154	_	
Accelerated amortization		_		66	_	
Total operating expenses	\$	5,398	\$	5,323	1.4%	

Operating Expenses. Total operating expenses increased \$75 million, or over one percent, from 2002 to 2003. Fuel costs decreased \$32 million, or two percent, from 2002 to 2003. The decrease in fuel costs relates to forced outages at TVA fossil plants coupled with increased hydro generation as a result of increased rainfall and runoff. Purchased power cost increased approximately \$113 million, or 35 percent. This is primarily due to the impact of several forced outages in 2003 combined with higher spot market prices for electricity. O&M expenses increased \$178 million, or ten percent. O&M base costs increased \$77 million in comparison with the prior year due to several unplanned outages and higher generation expenses. O&M outage costs were \$16 million lower than the prior year due to delays in several planned outages made necessary to meet system requirements because of forced outages. Other O&M costs increased \$135 million in comparison with the prior year due to increased pension expense of \$94 million resulting from actuarial decreases in asset returns and the change in related discount rate, increased benefit costs of \$19 million, increased workers' compensation costs of \$27 million, and increased allowance for inventory obsolescence of \$9 million. Non-recurring O&M project costs decreased \$32 million in comparison with the prior year primarily due to costs of feasibility studies of the restart of Browns Ferry Unit 1 which were incurred during 2002. Costs

of the restart project are now being capitalized, including AFUDC. Depreciation and accretion expense increased \$36 million from the same period in 2002 due to increased depreciation expense of \$24 million for capital projects placed in service during the year and increased accretion expense of \$12 million related to the adoption of Statement of Financial Accounting Standards ("SFAS") No. 143, Accounting for Asset Retirement Obligations.

Due to changes in the market forecast, TVA elected during 2002 not to complete a gas-fired combined-cycle plant that would have provided 510 megawatts of power beginning in 2004. Accumulated costs of the project totaled \$154 million, which TVA recognized as a loss on plant cancellation in 2002.

Accelerated amortization decreased \$66 million in 2003 as compared to 2002 due to the complete amortization of regulatory assets subject to accelerated amortization in 2002.

Other Income. TVA had net other income of \$29 million in 2003 compared with net other income of \$17 million in 2002. The slight increase in net other income relates to an increase in non-electric business activity.

Unrealized Losses on Derivative Contracts, Net. The unrealized loss on derivative contracts in 2003 was primarily related to mark-to-market adjustments on swaption and swap contracts (see note 6).

Interest Expense. A detailed table of interest expense, outstanding debt, and interest rates is as follows:

	Years ended September 30 (millions of dollars)				
	2003	2002	Percent Change		
Interest expense Interest on debt Amortization of debt discount, issue, and	\$ 1,396	\$ 1,468	(4.9%)		
reacquisition costs, net	28	22	27.3%		
Allowance for funds used during construction	(74)	(61)	21.3%		
Net interest expense	\$ 1,350	\$ 1,429	(5.5%)		
Outstanding bonds and notes	<u>\$ 24,875</u>	<u>\$ 25,255</u>	(1.5%)		
	Ye	ars ended Septembe (percent)	er 30		
	2003	2002	Percent Change		
Interest rates (average) Long-term	6.22	6.53	(4.7%)		

Net interest expense was \$79 million less for the year ended September 30, 2003, compared to 2002. This reduction reflects lower average interest rates and a lower level of total outstanding debt during 2003 compared to 2002. Total outstanding indebtedness, excluding discounts and premiums, as of September 30, 2003, was \$24.9 billion with a blended average interest rate (of long-term and short-term debt) of 5.66 percent; as of September 30, 2002, total debt outstanding, excluding discounts and premiums, was \$25.3 billion with a blended average interest rate of 6.06 percent. The average long-term and short-term interest rates for the year ended September 30, 2003, were 6.22 percent and 1.28 percent, respectively, as compared with 6.53 percent and 1.93 percent for 2002.

1.28

5.66

1.93

6.06

(33.7%)

(6.6%)

Cumulative Effects of Accounting Changes. The net gain of \$217 million from accounting changes during the first quarter of 2003 included a gain related to a change in accounting for unbilled revenues of \$412 million, partially offset by a change in accounting for asset retirement obligations of \$195 million (see note 1—Accounting Changes).

# **Liquidity and Capital Resources**

Capital Structure

Short-term

Blended

Primarily 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 in order to finance its growing

power program. Since that time, TVA's power program has been required to be self-supporting. As a result, TVA funds its capital requirements through internal cash generation, through borrowings (subject to a congressionally-mandated \$30 billion limit on the amount of outstanding Evidences of Indebtedness), and through other financing arrangements including customer prepayments and lease/leaseback transactions.

TVA currently maintains credit ratings of "Aaa" with Moody's Investors Service, "AAA" with Standard and Poor's, and "AAA" with Fitch Ratings (the "rating agencies"). Since TVA's capital structure is composed almost entirely of debt, retention of the "triple-A" credit rating and investor confidence is critical to TVA's financial health. TVA's current ratings are based to a large extent upon the Board's ratemaking authority and continued ownership by and support of the U.S. Government. TVA has been told by the rating agencies that absent these important attributes, TVA's underlying business model would not entitle it to its current rating. TVA's current debt, including its short-term debt, is continually refinanced as it matures. A reduction in TVA's credit rating could have a dramatic impact upon its currently expected cash flows, which could result in some combination of the need to increase borrowings, the need to reduce other expenses or capital expenditures, and the need to increase rates. Other factors that could potentially have an adverse impact on TVA's cash flow and, consequently, on TVA's overall financial health include national energy legislation, load loss, and weather extremes.

TVA is required to pay the U.S. Government a return on the appropriation investment in TVA power facilities, plus a repayment of the investment as specified by law. The combined payment for 2004 was \$38 million. Cumulative repayments and return on investment paid by TVA to the U.S. Treasury ("Treasury") approximate \$3.5 billion on the government's appropriation investment of \$1.4 billion, approximately \$995 million of which TVA has repaid.

TVA is very different from traditional utilities in its capital structure. When monitoring its financial condition, TVA considers its ability to generate adequate cash flow from operations, the extent to which cash flow covers interest expense, and the proportion of interest expense to the amount of revenue generated. TVA has recently improved these measures and is committed to improving its financial flexibility in the future. Nonetheless, TVA is very dependent upon liquidity provided by the capital markets in order to run its business and refinance its debt. Loss of its current ratings, loss of access to the capital markets, or an inability to recover its costs could lead to potentially severe financial distress.

In the past, a lower level of interest coverage was adequate for TVA. However, a higher level of coverage may be more prudent for TVA as its business environment changes. TVA calculates its interest coverage ratio as the sum of its cash flow from operations plus interest on debt, divided by interest on debt. TVA's interest coverage has improved from 1.42 times in 1995 to 2.22 times in 2004.

Another meaningful indictor for TVA is the level of cash TVA generates on its assets, or "cash return on assets" ("CROA"). This measure considers the amount of cash provided from operations divided by the total assets. This measure reflects a company's investment in capital assets, its leverage of available capital, how well it is positioned, and how well management is using cash for daily operations. The fact that TVA has a strong CROA shows that TVA's asset base is aligned with the scope of its operations. TVA considers the cash return on its assets important for making short-term and long-term investment decisions.

#### Cash Flow

The cash flow that TVA generates from its operations is important to its financial health. Cash flow, in and of itself, is not a measure of financial health, but rather the level of cash that TVA generates relative to its operating and financial leverage.

TVA's average annual cash flow from operations reflects an upward trend over the past decade, and cash flow from operations continued to improve in 2004 over the prior year. Because of the nature of TVA's business, however, which is highly influenced by seasonal and economic factors, it is helpful to look at average cash flow over a multi-year period. Three-year average cash flow from operations has increased by more than 60 percent since the mid 1990's. Other factors that could potentially have an adverse impact on TVA's cash flow and, consequently, on TVA's overall financial health include national energy legislation, load loss, and weather extremes.

## Comparative Cash Flow Analysis

TVA's summary cash flows for the years ended September 30 are:

_	2004		2003	2002
		(ir	millions)	
Cash provided by/(used in):				
Operating activities	3,123	\$	1,511	\$ 1,314
Investing activities	(1,551)		(1,824)	(1,314)
Financing activities	(1,586)		446	 57
Net (decrease) increase in cash and cash equivalents \$	(14)	\$	133	\$ 57

#### 2004 Compared to 2003

Net cash provided by operating activities increased \$1,612 million from 2003 to 2004. The increase primarily reflects \$1.5 billion in proceeds received from MLGW for energy prepayments and higher operating revenues of \$580 million driven primarily by the 2004 rate increase coupled with increased sales volume offset by \$92 million of prepaid energy services. Cash outlays for interest declined \$17 million. Expenditures for nuclear refueling outages decreased \$7 million due to the number and timing of outages. Other changes included increased cash paid for fuel and purchased power of \$121 million and increased cash outlays for operating and maintenance costs of \$92 million. Working capital requirements increased \$124 million, from net cash provided of \$46 million in 2003 to net cash used of \$78 million in 2004. The unfavorable working capital fluctuation is primarily a result of increased accounts receivable of \$41 million, resulting from the rate increase and an increase in sales volume, as opposed to a \$78 million reduction in the prior year, a smaller increase in accounts payable and accrued liabilities of \$123 million due to timing of accruals made in 2003 and paid in 2004, a decrease in accrued interest of \$5 million, due to a lower level of total outstanding debt during 2004 as compared to 2003, as opposed to an increase of \$2 million in the previous year, partially offset by a smaller increase in short-term investments of \$50 million and a \$10 million reduction in inventory, partially due to a reduction in the number of days of inventory supply on hand, as opposed to a \$65 million increase in the previous year.

Cash used in investing activities decreased \$273 million primarily due to a decrease in expenditures for capital projects of \$141 million, an increase in AFUDC of \$25 million, a decrease in nuclear fuel expenditures of \$68 million, proceeds received from the Regenesys project cancellation settlement of \$15 million, and net cash provided by loans and long-term receivables of \$5 million as opposed to net cash used by the same items of \$9 million in the prior year. Three nuclear plants completed refueling outages between September 2003 and September 2004. The current year reflects certain nuclear fuel inventory that built up during the prior year in preparation for the reloads. Both factors contributed to the overall decrease in nuclear fuel expenditures.

Net cash used in financing activities was \$1,586 million for the year ended September 30, 2004, compared to net cash provided by financing activities of \$446 million in the prior year. Long-term debt issues decreased \$1,537 million and redemptions of long-term debt increased \$966 million primarily due to the receipt of \$1.5 billion in proceeds from MLGW for energy prepayments and the refinancing of callable debt at lower interest rates. Redemptions net of issuances of short-term debt decreased \$1,255 million compared to the prior year due to lower outstanding short-term debt balances during the year. In 2004, TVA received proceeds of \$97 million of bond reopening premium and proceeds of \$55 million from payment of a swap receivable (see note 6). In 2003, TVA received proceeds of \$256 million from bond call monetizations, proceeds of \$389 million from qualified technological equipment ("QTE") leasing, and proceeds of \$325 million from combustion turbine leasing. No proceeds were received during the current year from either leasing or call monetizations. Payments to the Treasury decreased \$4 million in comparison with the prior year. This was offset by equipment lease payments of \$29 million. Also, net financing costs in 2003 were \$58 million in comparison with net costs of \$3 million in the current year.

# 2003 Compared to 2002

Net cash provided by operating activities increased \$197 million from 2002 to 2003. The increase relates to increased operating revenues of \$155 million primarily due to colder winter temperatures in comparison with the prior year. Outlays for interest declined \$72 million. Proceeds of \$51 million were received during 2003 related to distributor energy prepayments not present in the prior year. Cash outlays for fuel and purchased power increased \$94 million to meet higher demand and replace power lost during unplanned outages. Additionally, there was an increase in

cash outlays for O&M costs of \$53 million as a result of several unplanned outages and higher generation expenses. Working capital provided \$46 million, compared to the use of \$11 million in 2002. This favorable working capital fluctuation resulted from a larger reduction of accounts receivable of \$12 million and an increase in accounts payable and accrued liabilities of \$149 million as opposed to a reduction of these items of \$5 million, partially offset by a larger increase in inventories and other of \$16 million, a larger increase in short-term investments of \$88 million, and a smaller increase of accrued interest of \$5 million.

Cash used in investing activities increased \$510 million due to additional expenditures for capital projects of \$463 million primarily related to the Browns Ferry Unit 1 restart and clean air initiatives and higher nuclear fuel expenditures of \$41 million due to timing of enrichment services received.

Net cash provided by financing activities increased \$389 million for the year ended September 30, 2003, compared to the prior year. Long-term debt issues increased \$189 million and redemptions of long-term debt decreased \$1,435 million due primarily to fewer bonds maturing in 2003 relative to 2002. Net redemptions of short-term debt were \$1,412 million in 2003 compared to net borrowings of \$476 million in 2002. Proceeds of \$256 million from bond call monetizations and proceeds of \$389 million from a QTE lease/leaseback were received in 2003 which did not exist in the prior year. Also, payments on lease/leaseback transactions for combustion turbines increased \$5 million during 2003.

# Working Capital

The table below summarizes the components of working capital and short-term debt. At September 30, 2004, TVA had negative working capital of \$3,125 million, largely attributable to \$3,924 million in short-term indebtedness. TVA's cash management policy is to use cash provided by operations as well as Discount Notes to fund current cash requirements, and TVA plans to continue to use such financing instruments as long as short-term interest rates remain favorable.

	2004	2003	2002
		(in millions)	
Current assets		\$ 2,321 (5,902)	\$ 1,682 (4,811)
Working capital (deficit)	\$ (3,125)	\$ (3,581)	\$ (3,129)
Discount notes <90 days	\$ 1,924	\$ 2,080	\$ 3,492
Current portion of long-term debt	2,000	2,336_	
Total short-term debt	\$ 3,924	\$ 4,416	\$ 3,492

# Capital Resources

A typical investor-owned utility ("IOU") raises capital through the issuance of a combination of common stock, preferred stock, and short and long-term debt. By contrast, the Act limits TVA's financing methods resulting in a capital structure that is very different from that of an IOU and explains why TVA's debt levels are higher than IOUs. TVA's capital structure is composed almost entirely of debt. Though interest rates are expected to increase, the overall average interest rates on TVA debt should be somewhat insulated, reflecting the 13-year average life of TVA's long-term debt portfolio.

From October 1, 2003, to September 30, 2004, TVA issued \$222 million of electronotes® with an average interest rate of 4.78 percent and also reopened its 2002 Series A bonds due May 23, 2012, for an additional \$550 million principal amount at an effective interest rate of 4.22 percent. During this period, one issue of power bonds totaling \$400 million with an interest rate of 5.00 percent matured. In addition, two power bonds of \$25 million each, one with an interest rate of 7.50 percent and one with an interest rate of 7.65 percent, were redeemed. TVA also redeemed \$200 million of electronotes® carrying an average interest rate of 5.47 percent as well as two issues of power bonds of \$476 million and \$10 million carrying interest rates of 6.88 and 4.75 percent, respectively. On May 3, 2004, investors put \$115 million of the 1999 Series A PARRS issue back to TVA. On May 1, 2004, the interest rate on the remaining outstanding bonds of that issue reset from 6.50 percent to 5.62 percent.

TVA also has access to financing arrangements with the Treasury, whereby the Treasury is authorized to accept a short-term note with the maturity of one year in an amount not to exceed \$150 million. TVA may draw any

portion of the authorized \$150 million during the year. Interest is accrued daily and paid quarterly at a rate determined by the Secretary of the Treasury each month based on the average of outstanding obligations of the United States with maturities of one year or less. During 2004, 2003, and 2002, the daily average amounts outstanding were approximately (in millions) \$35, \$12, and \$5, respectively. The outstanding balances were repaid quarterly. See note 7—Short-Term Debt.

# Energy Prepayment Obligations

Discounted Energy Units. During October 2002, TVA introduced the Discounted Energy Units ("DEU") program. Under this program TVA customers generally may purchase DEUs in \$1 million increments which entitle them to a 0.025 dollar/kilowatt-hour discount on a specified quantity of firm load over a period of years (five, ten, 15, or 20) for each kilowatt-hour in the prepaid block. The remainder of the price of the kilowatt-hours delivered is due upon billing.

Sales for the 2004 program included agreements of 5.5 DEUs totaling \$5.5 million over a ten-year period and 1.75 DEUs totaling \$1.75 million over a five-year period. Sales for the 2003 program, all for a ten-year period, were 47.25 DEUs totaling \$47.25 million TVA is accounting for the prepayment proceeds as unearned revenue and is reporting the obligations to deliver power as ENERGY PREPAYMENT OBLIGATIONS and CURRENT PORTION OF ENERGY PREPAYMENT OBLIGATIONS on the September 30, 2004 and 2003 Balance Sheets. TVA recognizes revenue as electricity is delivered to customers, based on the ratio of units of kilowatt-hours delivered to total units of kilowatt-hours under contract. As of September 30, 2004, nearly \$9.0 million had been applied against power billings on a cumulative basis during the life of the program, of which \$5.5 million was recognized as noncash revenue during 2004 and nearly \$3.5 million was recognized as noncash revenue during 2003.

Prepayment of Energy Services. During 2004, TVA and its largest customer, MLGW, entered into an energy prepayment agreement under which MLGW prepaid TVA \$1.5 billion for the future costs of electricity to be delivered by TVA to MLGW over a period of 180 months. In exchange for this prepayment, MLGW receives a credit on its monthly bills during this period. The City of Memphis issued bonds with net proceeds of \$1.5 billion which were used to fund this prepay arrangement. The principal and interest on the bonds are payable from MLGW's pledged revenues. The bonds are not obligations of TVA and are not secured by TVA revenues or property. TVA received the \$1.5 billion prepayment in December 2003, accounted for the prepayment as unearned revenue, and is reporting the obligation to deliver power as Energy prepayment obligations and Current portion of energy prepayment obligations on the September 30, 2004 Balance Sheet under this arrangement. TVA expects to recognize approximately \$100 million of noncash revenue in each year of the arrangement as electricity is delivered to MLGW based on the ratio of units of kilowatt-hours delivered to total units of kilowatt-hours under contract. For the year ended September 30, 2004, over \$90.3 million of noncash revenue was recognized related to this energy prepayment transaction.

# Rate Actions

On August 27, 2003, TVA approved a rate adjustment to fund expenditures for clean-air improvements. For 2004, TVA collected approximately \$339 million in additional revenue related to this adjustment.

#### Monetization of Call Options

During the second guarter of 2002, TVA monetized the call provisions on a \$1 billion public bond issue by entering into a swaption agreement with a third party in exchange for \$175 million. In the fourth quarter of 2003, TVA monetized the call provisions on a second public bond issue of \$476 million by entering into a swaption agreement with a third party in exchange for \$81 million. A swaption essentially grants a third party the right to exercise the embedded call provision of the applicable bond while TVA continues to pay the holders of the swaption pursuant to the original bond issuance. In February 2004, the counterparty to the second swaption transaction exercised its option to enter into a swap with TVA, effective April 10, 2004, requiring TVA to make fixed rate payments to the counterparty of 6.875 percent and the counterparty to make floating payments to TVA based on London Interbank Offered Rate ("LIBOR"). These payments are based on a notional principal amount of \$476 million, and the parties began making these payments on June 15, 2004. The remaining swaption is recorded in Deferred LIABILITIES on the September 30, 2004 Balance Sheet and is designated as a hedge of future changes in the fair value of the original call provisions. Under SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, TVA records the changes in market value of both the swaption and the embedded call. These values historically have been highly correlated; however, to the extent that the values do not perfectly offset, any differences will be recognized currently through earnings as Other Income, NET. These differences (including those for the second swaption prior to its being exercised in February 2004) amounted to a nearly \$10 million noncash gain for the year ended September 30, 2004. The swap is also recorded in Deferred LIA- BILITIES on the September 30, 2004 Balance Sheet, and the changes in market value are recognized currently in earnings. These changes amounted to a \$23 million noncash loss for the year ended September 30, 2004.

#### Lease/Leaseback Transactions

During the summer of 2002, TVA completed construction of two sets of four combustion turbine ("CT") units which were part of a series of new peaking CT units. Of the financing options available to TVA for these units, long-term lease and leaseback arrangements provided outcomes that were the most economically favorable to TVA. The lease/leaseback for the first set of four units was finalized during the first quarter of 2003 and provided about \$163 million in lease proceeds. The cost of the first lease agreement approximated a full-term implicit rate of just above four percent. The lease/leaseback of the second set of four units was finalized during the third quarter of 2003 and provided about \$162 million in lease proceeds. The cost of the second lease agreement approximated a full-term implicit rate of slightly more than three and one half percent.

In addition to the financing activity for the CTs described above, TVA entered into another financing arrangement late in 2003 related to QTE consisting of certain transmission equipment and related software. Such QTE was leased to a group of investors and subsequently leased back by TVA under terms and conditions which substantially mirrored those contained in the CT lease/leaseback arrangements. The transaction resulted in financing proceeds of approximately \$389 million. The cost of the QTE lease agreement approximated a full-term implicit rate of slightly less than four percent.

TVA accounted for the respective CT and QTE lease proceeds as financing obligations in accordance with SFAS No. 66, *Accounting for Sales of Real Estate*, and SFAS No. 98, *Accounting for Leases*. As of September 30, 2003, the outstanding financing obligations of \$1,238 million were included in Lease/Leaseback obligations (\$1,170 million) and Current Portion of Lease/Leaseback obligations (\$68 million), respectively, on TVA's 2003 year-end Balance Sheet. The outstanding financing obligations of \$1,178 million at September 30, 2004, are included in Lease/Leaseback obligations (\$1,143 million) and Current Portion of Lease/Leaseback obligations (\$35 million), respectively, on TVA's 2004 year-end Balance Sheet.

# Cash Requirements and Contractual Obligations

Due to the nature of the power industry, which requires large multi-year capital investments, using trends and multi-year forecasts are important in assessing the effectiveness of management's decisions related to capital expenditures, pricing and accessing capital markets.

The future planned construction expenditures for property, plant, and equipment additions, including clean air projects and new generation, are expected to be internally funded and are estimated to be as follows:

(in millions)	 Actual 2004	 2005	ated Co 2006	ction Exp 2007	ures 2008	2	2009
Browns Ferry Unit 1 Restart	\$ 442	\$ 432	\$ 417	\$ 81	\$ _	\$	_
Clean Air Expenditures	436	264	237	300	284		272
Transmission Expenditures (1)	170	225	242	272	287		293
Other Capital Expenditures (2)	 504	 481	 521	 576	 477		408
Total Capital Projects Requirements	\$ 1,552 (3)	\$ 1,402	\$ 1,417	\$ 1,229	\$ 1,048	\$	973

#### Notes

- (1) Transmission Expenditures includes reimbursable projects.
- (2) Other Capital Expenditures are primarily associated with short lead time construction expenditure projects aimed at the continued safe and reliable operation of generating assets.
- (3) Includes AFUDC of \$99 million. All projections are based on direct costs excluding AFUDC.

TVA conducts a continuing review of its construction expenditures and financing programs. The amounts shown in the table above are forward-looking amounts based on a number of assumptions and are subject to various uncertainties. Actual amounts may differ materially based upon a number of factors, including changes in assumptions about system load growth, environmental regulation, rates of inflation, total cost of major projects, and availability and cost of external sources of capital, as well as the outcome of the ongoing restructuring of the electric industry.

TVA does not anticipate receiving a financial return on its clean air expenditures because these expenditures neither generate revenues nor reduce costs. In fact, clean air equipment will reduce the operating efficiency and increase the operating costs of TVA's fossil units. In the near term, TVA will be negatively impacted by investments in new generation (e.g., Browns Ferry Unit 1) that are not expected to return a cash contribution until 2007. TVA also has contractual cash obligations, including minimum payments on operating leases, purchase obligations, power purchase contracts, and fuel purchase contracts (see note 10—*Commitments*). For reporting purposes, TVA defines "contractual cash obligations" as written agreements to purchase goods and services that may or may not be legal commitments but which TVA intends to exercise. TVA expects that cash provided by operating activities and new financing activities will be adequate to meet these estimated cash requirements, as well as capital expenditures. As of September 30, the amounts of contractual cash obligations for each of the next five years and thereafter are shown below:

(in millions)	2005	2006	2007	2008	2009	Thereafter	Total
Debt	\$ 3,924	\$ 2,621	\$ 959	\$ 91	\$ 2,031	\$ 13,624	\$ 23,250
Leases	72	71	66	60	57	89	415
Lease/leaseback transactions	84	85	85	89	85	1,299	1,727
Power purchase obligations	173	165	156	130	130	3,610	4,364
Other obligations	642	460	265	149	60	68	1,644
Fuel purchase obligations	744	338	164	172	137	345	1,900
Pension contribution *	53	=					53
Total	\$ 5,692	\$ 3,740	<u>\$ 1,695</u>	\$ 691	\$ 2,500	\$ 19,035	\$ 33,353

#### Notes

In addition to the cash requirements above, TVA has contractual obligations, in the form of revenue discounts, related to energy prepayments discussed above.

(in millions)	:	2005	 2006	 2007	 2008	:	2009	The	reafter	 Total
Energy Prepayment Obligations	\$	105	\$ 106	\$ 106	\$ 105	\$	105	\$	928	\$ 1,455

#### Debt

At September 30, 2004, TVA had outstanding short-term debt of \$1,924 million and long-term debt (including current maturities) at varying maturities and interest rates of \$21,326 million for a total outstanding indebtedness of \$23,250 million (see note 7).

## Leases

TVA leases certain property, plant, and equipment under agreements with terms ranging from one to 30 years. Obligations under capital lease agreements in effect at September 30, 2004, total \$52 million for 2005, \$54 million for 2006, \$56 million for 2007, \$54 million for 2008, \$54 million for 2009, and an aggregate of \$81 million thereafter, for a total commitment of \$351 million. Of this amount, \$90 million represents the cost of financing. Obligations under non-cancelable operating lease agreements in effect at September 30, 2004, total \$20 million for 2005, \$17 million for 2006, \$10 million for 2007, \$6 million for 2008, \$3 million for 2009, and \$8 million thereafter for a total commitment of \$64 million.

# Lease/Leaseback Transactions

Obligations under the lease/leaseback transactions in effect at September 30, 2004, total \$84 million for 2005, \$85 million for 2006 and 2007, \$89 million for 2008, \$85 million for 2009, and an aggregate of \$1,299 million thereafter, for a total commitment of \$1,727 million. Of this amount, \$549 million represents the cost of financing (see notes 8 and 10).

#### Power Purchase Obligations

TVA has contracted with various independent power producers and power distributors for additional capacity to be made available to TVA. In total, these agreements constitute 1,934 megawatts of winter net dependable

Contributions beyond 2005 to be determined.

capacity. Approximately one-half of this total capacity is made available to TVA under power purchase agreements having terms of two years or less. The total financial obligation of these contracts is approximately \$4,261 million. Additionally, TVA has contracted with various other counterparties for the purchase of power from renewable sources (wind and methane gas technologies). These arrangements constitute approximately 33 megawatts of capacity. However, due to the nature of these sources, TVA does not consider them part of its net winter dependable capacity. TVA's financial obligation of these renewable resource power purchase agreements is \$103 million. In total, TVA's financial obligation for all of its power purchase agreements is approximately \$4,364 million. Costs under these contracts are included in the Statements of Income for the years ended September 30, 2004, 2003, and 2002 as FUEL AND PURCHASED POWER EXPENSE and are expensed as incurred.

Under the Public Utility Regulatory Policies Act of 1978, TVA is obligated to purchase power from qualifying facilities. There are currently two independent power producers that qualify under this program, and as a result TVA could be required to take up to 1,600 megawatts of power during certain on-peak hours from these facilities, depending on the amount of power put on the system. Costs associated with these purchases are based on rates as specified in "Attachment A" of the *Dispersed Power Production Guidelines for TVA and the Distributors of TVA Power* as approved annually by the Board.

TVA also has an agreement with the Southeastern Power Administration to receive 405 megawatts of net dependable capacity from the Cumberland River Basin Projects for use in the TVA system. TVA receives a yearly energy allocation of 607,500 megawatt hours which is based on the reserved capacity. Once this allocation is exceeded, TVA is assessed an additional energy charge for the excess generation received based on rates as specified in the *Federal Register*.

# Other Obligations

Other obligations totaling \$1.6 billion consist of contracts and purchase orders negotiated as of September 30, 2004, for goods and services primarily related to capital projects as well as other major recurring operating costs. TVA has approximately \$1.1 billion in long-term construction commitments consisting primarily of the construction of generating assets (including the Browns Ferry Unit 1 restart) and emission control equipment. In addition to construction commitments, TVA is committed under various other contracts for recurring goods and services of \$506 million with terms extending into 2010.

## Fuel Purchase Obligations

TVA has approximately \$784 million in long-term fuel purchase commitments ranging in terms of up to four years for the purchase and transportation of coal and approximately \$1.1 billion of long-term commitments ranging in terms of up to ten years for the purchase of enriched uranium and fabrication of nuclear fuel assemblies.

#### Pension Contribution

TVA's Board has approved a pension contribution of \$53 million for fiscal year 2005.

#### **Significant Balance Sheet Changes**

Total assets increased \$1,169 million, or 3.5 percent, during 2004 due in part to a net increase in Property, Plant, and Equipment of \$571 million primarily due to capital expenditures for Browns Ferry Unit 1 restart and projects related to TVA's clean air initiatives. The increase in Other deferred charges of \$443 million is primarily due to the mark-to-market ("MTM") valuation of derivative contracts. The \$196 million increase in Regulatory assets is due to increased accrued pension costs. Additionally, Investment funds increased \$106 million due to additional investment holdings of \$18 million for retirement plan assets and unrealized gains on decommissioning fund investments of \$88 million. Total liabilities increased \$799 million, or 2.6 percent, primarily due to energy prepayment obligations of \$1,504 million, MTM derivative adjustments of \$432 million, and an increase in pension and postretirement benefit obligations of \$347 million, offset primarily by a reduction in long-term debt of \$1,469 million.

# **Critical Accounting Policies and Estimates**

The preparation of financial statements requires TVA to estimate the effect of various matters that are inherently uncertain as of the date of the financial statements. Although the statements are prepared in conformity with generally accepted accounting principles, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the amounts of rev-

enue and expenses reported during the reporting period. Each of these estimates varies in regards to the level of judgment involved and its potential impact on TVA's financial results. Estimates are deemed critical when a different estimate could have reasonably been used or where changes in the estimate are reasonably likely to occur from period to period and would materially impact TVA's financial condition, changes in financial position, or results of operations. TVA's critical accounting policies are also discussed in note 1.

#### Regulatory Assets and Liabilities

Although TVA's power rates are not subject to regulation through a public service commission or other similar agency, its Board of Directors receives authority from the TVA Act to maintain and operate the property of TVA and to set binding rates for power sold to its customers in accordance with the provisions of the TVA Act. The rate-setting authority vested in the TVA Board by the TVA Act meets the "self-regulated" 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 regulated ratemaking process that would not be recorded under generally accepted accounting principles ("GAAP") for non-regulated entities. Regulatory assets generally represent incurred costs that have been deferred because such costs are probable of future recovery in customer rates. Regulatory liabilities generally represent obligations to make refunds to customers for previous collections for costs that are not likely to be incurred. Management continually assesses whether the regulatory assets are probable of future recovery by considering factors such as applicable regulatory changes, potential legislation, and changes in technology. Based on this continual assessment, management believes the existing regulatory assets are probable of recovery. This determination reflects the current regulatory and political environment and is subject to change in the future. If future recovery of regulatory assets ceases to be probable, TVA would be required to write-off these costs under the provisions of SFAS No. 101, Regulated Enterprises-Accounting for the Discontinuation of Application of FASB Statement No. 71. The asset write-offs would be required to be recognized in earnings in the period in which regulatory accounting under SFAS No. 71 ceased to apply.

Regulatory assets capitalized under the provisions of SFAS No. 71 are included in Regulatory assets on the Balance Sheets. These assets consist of certain charges related to the closure and removal of nuclear generating units, mark-to-market valuation adjustments of certain derivative contracts, and an adjustment related to the minimum pension liability. TVA also has deferred costs consisting of debt issue and reacquisition costs related to deferred nuclear units as of September 30, 2004 (see note 2). The year-end balances of TVA's regulatory and deferred nuclear assets are as follows:

	At September 30					
(in millions)	20	004		2003		
Decommissioning costs	\$	755	\$	783		
Changes in fair value of derivative contracts		59		50		
Adjustment to accrue minimum pension liability (see note 10)						
Tennessee Valley Authority Retirement System	•	1,235		1,028		
Supplement Executive Retirement Plan		8				
Subtotal	2	2,057		1,861		
Reacquisition costs		277		241		
Deferred nuclear generating units	3	3,909		4,110		
	\$ 6	6,243	\$	6,212		

Reacquisition expenses, call premiums, and other related costs, such as unamortized debt issue costs associated with redeemed bond issues, are deferred under the provisions of the Federal Energy Regulatory Commission's Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act. These costs are deferred and amortized on a pooled straight-line basis over the weighted average life of TVA's debt portfolio. The unamortized balances of such debt issue and reacquisition costs at September 30, 2004 and 2003 were \$277 million and \$241 million, respectively.

Regulatory liabilities accounted for under provisions of SFAS No. 71 consist of MTM valuation of certain derivative contracts and other regulatory liabilities. The year-end balances of TVA's regulatory liabilities at September 30, 2004 and 2003, were \$478 million and \$46 million, respectively, and were included in Deferred Liabilities on the Balance Sheets.

#### Long-Lived Assets

TVA capitalizes long-lived assets such as property, plant, and equipment at historical cost, which includes

direct and indirect costs and an allowance for funds used during construction. TVA recovers the costs of these long-lived assets through depreciation of the physical assets as they are consumed in the process of providing products or services. Depreciation is generally computed on a straight-line basis over the estimated productive lives of the various classes of assets. When TVA retires its regulated long-lived assets, it charges the original asset cost plus removal costs, less salvage value, to accumulated depreciation in accordance with utility industry practice.

#### Long-Lived Asset Impairments

TVA evaluates the carrying value of long-lived assets when circumstances indicate the carrying value of those assets may not be recoverable. Under the provisions of SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, an asset impairment exists for long-lived assets to be held and used when the carrying value exceeds the sum of estimates of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. If the asset is impaired, the asset's carrying value is adjusted downward to its estimated fair value with a corresponding impairment loss recognized in earnings.

If TVA ceased to qualify as a regulated entity as a result of future legislation, competitive pressures, or other factors, TVA would be required to evaluate all of its long-lived assets, including generating plants and transmission facilities, to determine whether they were impaired under the provisions of SFAS No. 144. This evaluation could result in asset impairment losses due to a lower expected level of cash flows associated with certain assets in a competitive environment. Other assets, however, might produce future cash flows in a competitive environment which are greater than the current carrying values of those assets. In such circumstances the asset carrying values would remain unchanged instead of being adjusted upwardly to reflect the increase in expected cash flows.

#### Accounts Receivable

Accounts receivable primarily consist of amounts due from customers for power sales. The table below summarizes the types and amounts of receivables:

	At	September 30
(in millions)	2004	2003
Power receivables billed Power receivables unbilled	\$ 288	\$ 304
Total power receivables	<u>713</u> 1,001	655_ 959
Other receivables Allowance for uncollectible accounts	41 (8)	43 (8)
Net accounts receivable	\$ 1,034	\$ 994

# Allowance for Uncollectible Accounts

The allowance for uncollectible accounts reflects TVA's best estimate of probable losses inherent in the accounts receivable and loans receivable balances. TVA determines the allowance based on known accounts, historical experience, and other currently available evidence including events such as customer bankruptcy and/or a customer failing to fulfill payment arrangements after 90 days. TVA's Corporate Credit department is also consulted in order to assess the financial condition of a customer and quality of the accounts. The allowance for doubtful accounts was \$8 million at September 30, 2004, and 2003 for accounts receivable and \$14 million at September 30, 2004, and 2003 for loans receivable.

# Inventories

Coal, oil, limestone, tire-based fuel inventories, and materials and supplies inventories are valued using an average unit cost method. A new average cost is computed after each transaction and inventory issuances are priced at the latest moving weighted average unit cost.

# Allowance for Inventory Obsolescence

TVA reviews supplies and materials inventories by category and usage on a periodic basis. Each category is assigned a probability of becoming obsolete based on the type of material and historical usage data. Based on the estimated value of the inventory, TVA adjusts its allowance for inventory obsolescence. The allowance for surplus and obsolete inventory was \$36 million at September 30, 2004, and \$33 million at September 30, 2003.

# Revenue Recognition

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 the end of the month. The methodology for estimating unbilled revenue from electricity sales uses generation for the current billing period. (See note 1—Accounting Changes.)

Off-system sales are presented in the Statements of Income as a component of SALES OF ELECTRICITY—FEDERAL AGENCIES AND OTHER. Off-system sales are sales of excess power after meeting TVA native load customer requirements.

# Normal Purchases and Normal Sales Special Exemption

A unique characteristic of the electric utility industry is that electricity cannot readily be stored in significant quantities and, as a result, some contracts to buy and sell electricity afford the buyer some flexibility in determining when to take electricity, and in what quantity, to meet fluctuating demands. These contracts would normally qualify as derivatives, but because electricity cannot be readily stored and an entity engaged in selling electricity is obligated to maintain sufficient capacity to meet the electricity needs of its customers, an option contract for the purchase of electricity qualifies for the normal purchases and sales exemption described in paragraph ten of SFAS No. 133, as amended by SFAS No. 149, Amendment of Statement 133 on Derivative Instruments and Hedging Activities, and Derivative Implementation Group ("DIG") Issue No. C15, Scope Exceptions: Normal Purchases and Normal Sales Exception for Option-Type Contracts in Electricity, also as amended by SFAS No. 149. Contracts for the sale or purchase of power in future periods that meet the criteria of DIG Issue C15 have been categorized as "normal purchase, normal sales" contracts and are exempted from recognition in the financial statements until power is delivered to customers.

# Accelerated Amortization

Prior to 2003, annual provisions for amortization of deferred charges were adjusted as necessary in order to achieve certain earnings levels. Such earnings levels were set forth in resolutions adopted annually by the Board in connection with the rate review process. The targeted earnings levels were based on the requirements of the TVA Act and the Basic Resolution (see note 7—*Borrowing Authority*). As a result of surplus earnings levels TVA accelerated amortization of certain regulatory assets by \$66 million during 2002.

#### Asset Retirement Obligations

In accordance with the provisions of SFAS No. 143, *Accounting for Asset Retirement Obligations*, TVA recognizes legal obligations associated with the future retirement of certain tangible long-lived assets (see note 4). TVA records estimates of such disposal costs at the time the legal obligation arises or costs are actually incurred. Based on new engineering studies performed annually in accordance with Nuclear Regulatory Commission ("NRC") requirements, revisions to the amount and timing of certain cash flow estimates of nuclear asset retirement obligations may be made.

# Nuclear Decommissioning

At September 30, 2004, the present value of the estimated future nuclear decommissioning cost of \$1,555 million was included in Asset retirement obligations, and the unamortized regulatory asset of \$755 million was included in Regulatory assets. Under the NRC's regulations, the present value of the estimated future nuclear decommissioning cost amounts to \$1,010 million. This decommissioning cost estimate is based on NRC's requirements for removing a plant from service, releasing the property for unrestricted use, and terminating the operating license. The actual decommissioning costs may vary from the derived estimates because of changes in current assumptions, such as the assumed dates of decommissioning, changes in regulatory requirements, changes in technology, and changes in the cost of labor, materials, and equipment. Utilities that own and operate nuclear plants are required to use different procedures in estimating nuclear decommissioning costs under SFAS No. 143 than those that are used in estimating nuclear decommissioning costs that are reported to the NRC. Accordingly, the two sets of procedures produce different estimates for the costs of decommissioning.

TVA maintains a decommissioning trust fund to provide money for the ultimate decommissioning of its nuclear power plants. The fund is invested in securities generally designed to achieve a return in line with overall equity market performance. As of September 30, 2004, the decommissioning trust fund investments totaled approximately \$720 million. This amount is less than the present value of the estimated future decommissioning costs. In October 2003, TVA provided a schedule of annual funding targets to the NRC and stated its commitment to make contributions to the decommissioning trust fund or provide other methods of decommissioning funding assurance necessary to match projected decommissioning fund balances. TVA is closely monitoring the monetary value of its decommissioning trust fund in light of recent market performance and believes that, over the long term before cessation of plant operations and commencement of decommissioning activities, adequate funds from investments will be available to support decommissioning. TVA's nuclear power units are currently authorized to operate until 2013-2035, depending on the unit, with an additional 20 years of operation available at each unit in the event the NRC approves the renewal of the unit's license (see "Properties" — "Nuclear Power Program" — "Operating License Extensions" in Part I).

The following key assumptions can have a significant effect on estimates related to the nuclear decommissioning costs:

- Timing In projecting decommissioning costs, two assumptions must be made to estimate the timing of plant decommissioning. First, the date of the plant's retirement must be estimated. The expiration of the unit with the operating license with the latest expiration date is typically used for this purpose, or an assumption could be made that the plant will be relicensed and operate for some time beyond the original license term. Second, an assumption must be made whether decommissioning will begin immediately upon plant retirement, or whether the plant will be held in "safestor" status for later decommissioning, as permitted by applicable regulations. While the impact of these assumptions cannot be determined with precision, assuming either license extension or use of a "safestor" status can significantly decrease the present value of these obligations.
- Technology and Regulation Because of the age of the nuclear plants in the United States, there is limited experience with actual decommissioning of large nuclear facilities. Changes in technology and experience could cause cost estimates to change as well as changes in regulations regarding nuclear decommissioning. These situations could have potentially significant impacts on cost estimates. The impact of these potential changes is not presently determinable. TVA's cost studies assume current technology and regulations.
- Discount Rate TVA's decommissioning fund uses a blended rate of 5.65 percent to calculate the present value of the weighted estimated cash flows required to satisfy TVA's decommissioning obligation.
- Investment Rate of Return TVA assumes that its decommissioning fund will achieve a five percent real rate
  of return. Investment assets are expected to earn five percent more than the increase in cost of liabilities.
- Cost Escalation Factors TVA's decommissioning estimates include an assumption that decommissioning
  costs will escalate over present cost levels by four percent annually.

## Actuarial Assumptions

TVA utilizes professional actuaries to perform valuation services related to the areas of pension, postretirement, and postemployment benefits. Net periodic pension, postretirement, and postemployment benefit costs are determined using assumptions as of the beginning of each year. Funded status for each plan is determined using assumptions as of the end of each year. The valuations performed at the end of 2004 were based on actuarial assumptions that were consistent for all of TVA's benefit plans (see note 9).

Pension and Other Postretirement Benefits. TVA sponsors defined benefit pension plans which cover substantially all employees. Additionally, TVA provides postretirement health care benefits for substantially all employees who reach retirement age while still working for TVA. TVA's reported costs of providing these benefits, as described in note 9 to the financial statements, are impacted by numerous factors including the provisions of the plans, changing employee demographics, and various actuarial calculations, assumptions, and accounting mechanisms. Because of the complexity of these calculations, the long-term nature of these obligations, and the importance of the assumptions utilized, the costs as reported represent critical accounting estimates for TVA and its stakeholders.

Key actuarial assumptions utilized in determining these costs include:

- Discount rates used in determining the future benefit obligations;
- Projected health care cost trend rates;
- Expected long-term rate of return on plan assets; and
- Rate of increase in future compensation levels.

TVA reviews these assumptions on an annual basis and adjusts them as necessary. The falling interest rate environment and poor performance of the financial equity markets over the past several years have impacted TVA's funding and reported costs for these benefits. In addition, these trends have caused TVA to make a number of adjustments to its assumptions.

In selecting an assumed discount rate, TVA reviews market yields on high-quality corporate debt and long-term obligations of the U.S. Treasury. Based on recent market trends, TVA reduced its discount rate from 7.05 percent and 6.00 percent at the end of 2002 and 2003 respectively, to 5.81 percent at the end of 2004. TVA reviews actual recent cost trends and projected future trends in establishing health care cost trend rates. Based on this review process, TVA increased its health care cost trend rate assumption used in calculating the 2004 accumulated postretirement benefit obligation. The assumed health care cost trend rate has been reset to 9.0 percent at the end of 2004 and represents an increase from the 8.5 percent trend rate used during 2004. TVA has reset its health care cost trend rate at the end of each of the last three years. The nine percent health care cost trend rate is assumed to gradually decrease each successive year until it reaches a five percent annual increase in health care costs in 2011 and beyond.

In determining its expected long-term rate of return on pension plan assets, TVA reviews past long-term performance, asset allocations, and long-term inflation assumptions. TVA targets an asset allocation for its pension plan assets of approximately 60 percent equity securities and 40 percent fixed income securities. Pursuant to its allocation policy, the asset allocations are to be comprised of approximately 45 percent United States equities, of which five percent may be private equity or other similar investments, but not to include holding title to real property; 40 percent fixed income, of which ten percent may be high yield securities, and 15 percent non-United States equities. TVA's policy includes a permissible three percent deviation, plus or minus, from these target allocations. The Board can take action, as appropriate, to rebalance the system's assets consistent with the asset allocation policy. TVA decreased its expected long-term rate of return on pension plan assets from 8.50 percent at the end of 2003 to 8.25 percent at the end of 2004. TVA utilized a rate of return of 8.00 percent during 2003 in the aftermath of the market declines of 2002 and 2001.

TVA does not presently set aside assets dedicated solely to fund its postretirement benefits. Instead, TVA pays the costs of its postretirement benefit plan through premiums collected from participating retirees and TVA contributions.

The following chart reflects the sensitivity of pension cost to changes in certain actuarial assumptions:

Actuarial Assumption	Change in Assumption	•	ct on 2004 sion Cost	Impact on Projected Benefit Obligation
			(increase in	millions)
Discount Rate	(0.25%)	\$	14	\$ 185
Rate of Return on plan assets	(0.25%)	\$	14	-

The following chart reflects the sensitivity of postretirement benefit cost to changes in certain actuarial assumptions:

Actuarial Assumption	Change in Assumption	Impact on Postretire Benefit C	ment		ulated	act on Postretirement Obligation
			(increase	e in millions)		
Discount Rate Health Care Cost Trend	(0.25%) 0.25%	\$ \$	1 2		\$ \$	12 14

Each fluctuation above assumes that the other components of the calculation are held constant.

Accounting Mechanisms. In accordance with SFAS No. 87, Employers' Accounting for Pensions, TVA utilizes a number of accounting mechanisms that reduce the volatility of reported pension costs. Differences between actuarial assumptions and actual plan results are deferred and are amortized into cost only when the accumulated differences exceed ten percent of the greater of the projected benefit obligation or the market-related value of plan assets. If necessary, the excess is amortized over the average remaining service period of active employees.

Additionally, TVA smoothes the impact of asset performance on pension expense over a three-year phase-in period through a "market-related" value of assets calculation. Since the market-related value of assets recognizes investment gains and losses over a three year period, the future value of assets will be impacted as previously deferred gains or losses are recognized. As a result, the losses that the pension plan assets experienced in 2002 and 2001 may have an adverse impact on pension cost in future years depending on whether the actuarial losses at each measurement date exceed the ten percent corridor in accordance with SFAS No. 87.

Costs and Funding. In 2004, TVA's total pension cost was \$178 million. TVA expects 2005 pension cost to increase to \$275 million due to a decrease in the discount rate from 6.00 percent to 5.81 percent and the phased-in effect of poor asset performance in 2002. Pension funding was \$23 million for 2004 and is projected to be \$53 million for 2005.

Due to negative pension plan asset returns from 2002 and 2001, TVA's accumulated benefit obligation at September 30, 2004, and 2003 exceeded plan assets. As a result, TVA was required to recognize an additional minimum pension liability as prescribed in SFAS No. 87. The charge to establish the minimum liability and the subsequent increases thereto were charged to other comprehensive income, again in accordance with the requirements of SFAS No. 87. However, TVA reclassified all such minimum pension liability charges to a regulatory asset in accordance with SFAS No. 71, *Accounting for the Effects of Certain Types of Regulation*. The regulatory treatment of the original charges was deemed necessary from the perspective that it would be improper to presume a level of future earnings on pension assets sufficient to fully recover, within a period of one year, all such costs included in other comprehensive income.

Total postretirement health care costs for TVA in 2004 were \$36 million, including a \$7 million special termination benefit related to a voluntary reduction-in-force program. In December 2003, the Medicare Prescription Drug, Improvement and Modernization Act of 2003 became law. The act introduces a prescription drug benefit under Medicare (Part D) as well as a federal subsidy to employers who provide a retiree prescription drug benefit that is a least actuarially equivalent to Medicare Part D. Currently, specific authoritative guidance on the accounting for the federal subsidy is pending. The set of assumptions used in the end-of-year actuarial valuation process had no effect on postretirement benefit costs for 2004, 2003, or 2002 but, when coupled with further experience adjustments related to claims and contributions, will increase postretirement benefits expense for 2005 by approximately \$17 million compared to 2004. TVA expects 2005 postretirement health care cost to approximate \$46 million which represents an increase of \$17 million over 2004 costs, excluding Special Termination Benefits.

# **Risk Management Activities**

## Risk Governance

In August 2004, the TVA Board approved changes to the structure of risk management at TVA. The Board appointed a Chief Risk Officer ("CRO"), currently the Vice President of Corporate Finance & Risk Management. Corporate Finance & Risk Management is responsible for ensuring that all significant enterprise-level risk issues are effectively communicated to the TVA Management Committee and Board. The Management Committee and Board comprise the top tier of executive decision-making at TVA.

With the exception of credit evaluation, the functions of the former Risk Management group have been consolidated into the Corporate Finance & Risk Management department. The credit evaluation function is housed in TVA Treasury. Corporate Finance & Risk Management functions include leadership or development relating to risk management strategy, risk indicators, new trading/hedging instruments, models and assumptions used to evaluate risk, controls on the use of hedging instruments, policies/procedures intended to provide guidance for daily operations, and other analysis and financial planning functions. See "Qualitative and Quantitative Disclosures About Market Risk."

#### Derivatives

To manage the volatility attributable to its various risk exposures, TVA has entered into various nontrading derivative transactions. TVA risk management policies provide for the use of derivative financial instruments to manage financial exposures but prohibit the use of these instruments for speculative or trading purposes. TVA accounts for these derivative instruments in accordance with the provisions of SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, as amended by SFAS No. 138, Accounting for Certain Derivative Instruments and Certain Hedging Activities, and SFAS No. 149, Amendment of Statement 133 on Derivative Instruments and Hedging Activities.

Certain derivative contracts utilized by TVA consist of currency and interest rate swap agreements. Most of these currency and interest rate swap agreements qualify for cash flow hedge accounting treatment under SFAS No. 133. Consequently, the effective portions of gains and losses related to these types of contracts are deferred and reported in Accumulated other comprehensive loss with corresponding adjustments to the derivatives' book values until the contracts actually settle. The ineffective portions of the derivatives' changes in fair value are recognized immediately in the determination of earnings.

Other derivative contracts include various purchased power option contracts, coal and natural gas contracts, and certain swaption agreements. Hedges entered into in conjunction with these contracts qualify for fair value hedge accounting under SFAS Nos. 133 and 138 with changes in market values deferred and recognized as regulatory assets and/or liabilities in accordance with SFAS No. 71. Such treatment reflects TVA's ability and intent to account for these derivative instruments on a settlement basis for rate-making purposes. The ineffective portions of the derivatives' changes in fair value are recognized immediately in the determination of earnings. TVA also holds purchased options related to emission allowances and futures contracts with changes in fair value recognized immediately in the determination of earnings (see note 6).

# Summary of Hedging Derivative Instruments As of September 30, 2004

Derivative Hedging Instrument	Hedged Item	Purpose of Hedge Transaction	Type of Hedge– Fair Value (FV) or Cash Flow (CF)	Accounting for Derivative Hedging Instrument	Accounting for the Hedged Item
Inflation Swap	Variable-principal debt	To fix the debt's variable cash flows to a fixed flow	CF	Cumulative gains and losses are recorded in other comprehensive income to the extent they are offset by cumulative gains and losses on the hedged transaction.	No adjustment is made to the basis of the hedged item.
Currency Swaps	Anticipated payment denominated in a foreign currency	To protect against changes in cash flows caused by changes in foreign- currency exchange rates	CF	Cumulative gains and losses are recorded in other comprehensive income to the extent they are offset by cumulative gains and losses on the hedged transaction.	No adjustment is made to the basis of the hedged item.
Swaption	Embedded call	To protect against a decreases in value of the embedded call	FV	All gains and losses on the derivative are recorded in earnings.	All gains and losses on the derivative are recorded in earnings as interest expense.

# Summary of Non-Hedging Derivative Instruments As of September 30, 2004

Derivative Type	Purpose of Derivative	Accounting for Derivative Instrument
Interest Rate Swap	To fix the debt's variable cash flows to a fixed rate	Gains and losses are recorded in earnings as interest expense.
Coal Contracts-Volume Options	To protect against fluctuations in market prices of the item to be purchased	Gains and losses are recorded as regulatory assets or liabilities until settlement at which time they are recognized in fuel and purchased power expense.
Purchase Power Contracts	To protect against fluctuations in market prices of the item to be purchased	Gains and losses are recorded as regulatory assets or liabilities until settlement at which time they are recognized in fuel and purchased power expense.
Emission Allowance Call Options	To protect against fluctuations in market prices	Gains and losses are recorded in earnings as unrealized gains/losses on derivative contracts.

#### Weather Risk

The weather affects TVA's ability to both generate and sell electricity. Hot temperatures in the summer can limit TVA's ability to use water from the Tennessee River for cooling at generating facilities. Extreme peaks in either the summer or winter may require TVA to purchase electricity in the more expensive short-term market to meet demands from customers.

Historically, the weather risk has created short-term variability only. Over periods of one year or longer, however, the financial risks associated with weather have historically been modest, for reasons including averaging of effects over a large service territory, averaging of effects over different times of the year (which is particularly helpful to TVA since it is a "double-peaking utility"), and minor changes in hydroelectric availability during high-value periods. During 2004, TVA's hydro generation was nine percent of its total generation. (See "*Properties*" — "*Generating Resources*" in Part I.)

#### Operational Risk

Insurance. TVA generally does not purchase commercial general liability, auto liability, workers' compensation, accidental property damage, and business interruption insurance. Additionally, although TVA uses private companies to administer its health-care plans for eligible active and retired employees not covered by Medicare, TVA does not purchase health insurance. Consulting actuaries assist TVA in determining certain liabilities for self-assumed claims. TVA recovers the costs of losses through power rates and through adjustments to the participants' contributions to their benefit plans.

TVA maintains nuclear liability insurance and nuclear property, decommissioning, and decontamination insurance with an outside party. On September 23, 2004, the TVA Board approved the purchase of accidental outage (business interruption) insurance for TVA's nuclear sites from Nuclear Electric Insurance Limited ("NEIL"). In the event of an accident covered by the policy that takes a nuclear unit offline or keeps a nuclear unit offline, NEIL will pay TVA, after a deductible waiting period, an indemnity (a set dollar amount per week) up to a maximum indemnity of \$490 million per unit. The policy went into effect on October 1, 2004. (See note 10—Contingencies—Nuclear Insurance.)

The Federal Employees' Compensation Act governs liability to employees for service-connected injuries.

Additional information on risk management activities and the financial impact of these activities is provided in notes 1 and 10.

# Rate Setting

In a future restructured electric power industry, it is possible that the ability of the Board to set TVA's rates as specified in the TVA Act could be adversely affected by legislative changes or by competitive pressures.

#### Risk of Loss of Customers

The 1959 amendments to the TVA Act provide that, subject to certain minor exceptions, neither TVA nor its distributors may be a source of power supply outside TVA's defined service area. This statutory provision is referred to as the "Fence" because it "fences" TVA in, essentially limiting TVA's power sales within a defined service territory that includes most of Tennessee and parts of six other states: Kentucky, Mississippi, Alabama, Georgia, North Carolina, and Virginia. (See "Management's Discussion and Analysis of Financial Condition and Results of Operations" — "TVA and Competition.")

While the Fence confines TVA to this service area, the so-called "Anti-Cherrypicking Provision" provides that the Federal Energy Regulatory Commission cannot order TVA to deliver power from an outside source to a customer if the power would be consumed within the Fence. Thus, TVA cannot be ordered to provide access to its transmission lines for the purpose of delivering power to wholesale customers within the TVA service area.

The "Anti-Cherrypicking Provision" minimizes the financial exposure of TVA to loss of distributor customers due to their limited access to transmission resources.

During 2004, TVA received notice from Monticello Electric Plant Board that terminates its power contract with TVA in November 2008 and notice from Glasgow Electric Plant Board that terminates its power contract with TVA in December 2008. Also in 2004, Meriwether Lewis Electric Cooperative ("MLEC"), with TVA's agreement, rescinded its October 2002 notice to terminate its power contract with TVA.

Since October 2002, five distributors (excluding MLEC) have given notices that terminate their power contracts with TVA. The table below lists these five distributors, the date that their power contracts with TVA terminate, the amount of revenues that TVA generated by selling power to these distributors in 2004, and the percentage of TVA's total 2004 revenues represented by these revenues.

Distributor	Date of Termination of Power Contract	to Di	Sales stributor 2004	Percentage of Operating Revenues in 2004
	(in	millions)		
Bowling Green Municipal Utilities	October 2007	\$	43	0.6%
Warren Rural Electric Cooperative Corporation	April 2008		80	1.1%
Duck River Electric Membership Corporation	August 2008		80	1.1%
Monticello Electric Plant Board	November 2008		5	0.1%
Glasgow Electric Plant Board	December 2008		18	0.2%
Total		\$	226	3.1%

In May 2004, the Board of Directors of Warren Rural Electric Cooperative Corporation ("WRECC") voted to become a full member of East Kentucky Power Cooperative ("EKPC") and receive its full power requirements from EKPC when WRECC's current contract with TVA expires.

In January 2004, the United States Enrichment Corporation ("USEC") announced it will begin constructing its new commercial centrifuge facility in Piketon, Ohio. Once this new facility is opened, it is unclear how much energy USEC will need to acquire from TVA for its Paducah, Kentucky facility ("Paducah Facility"). Under the current contract with TVA, USEC is required to purchase a fixed amount of energy for its Paducah Facility through May 2006. In 2004, sales to USEC for its Paducah Facility generated approximately 3.4 percent of TVA's total operating revenues. TVA does not expect any loss of revenues from sales to USEC to have a material effect on TVA's financial condition.

# **Accounting Changes**

Effective October 1, 2002, the Board approved a change in the methodology for estimating unbilled revenue from electricity sales. The change in calculating unbilled revenue was from a method using cumulative generation to a method that uses only generation for the current billing period. TVA was able to make this change based on improved metering technology that allows TVA to more accurately capture the number of days power has been generated and transferred to its customers but not yet billed to those customers. Changing to this more accurate estimating methodology resulted in an increase in accounts receivable of \$412 million.

On October 1, 2002, TVA adopted SFAS No. 143, *Accounting for Asset Retirement Obligations*, which requires the recognition of a liability and capitalization of the associated asset retirement cost as part of the carrying amount of the long-lived asset for legal obligations associated with the retirement of long-lived assets that result from the acquisition, construction, development, and/or normal operation of long-lived assets. The effect of the adoption of SFAS No. 143 during 2003 included a cumulative effect charge to income of \$195 million, a corresponding additional long-term liability of \$734 million, an increase in assets of \$745 million, and related accumulated depreciation of \$206 million.

# **New Accounting Standards and Interpretations**

#### Variable Interest Entities

In January 2003, the Financial Accounting Standards Board ("FASB") published Interpretation No. 46, *Consolidation of Variable Interest Entities*, which was revised by Interpretation No. 46R ("46R") in December 2003. This interpretation explains how to identify variable interest entities ("VIEs") and how an enterprise assesses its interests in a VIE to decide whether to consolidate that entity. It also clarifies the application of Accounting Research Bulletin No. 51, *Consolidated Financial Statements*, to certain entities in which equity investors do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. The interpretation applies to nonpublic enterprises, and it becomes effective for TVA beginning October 1, 2005, for VIEs created on or before December 31, 2003, and immediately for VIEs created after December 31, 2003.

TVA has not identified any material VIEs created, or interest in VIEs obtained, after December 31, 2003, which require consolidation or disclosure under FIN 46(R). TVA continues to assess the existence of any interests in VIEs created on or prior to December 31, 2003, which may or may not be material to its results of operations or financial position.

#### Pension and Other Postretirement Benefit Disclosures

In December 2003, the FASB issued SFAS No. 132 (revised), *Employers' Disclosures about Pensions and Other Postretirement Benefits*, which is designed to improve financial statement disclosures for defined benefit plans and replaces existing FASB disclosure requirements for pensions. TVA adopted the nonpublic disclosure requirements of this standard for the quarter beginning January 1, 2004 (see note 9).

In May 2004, the FASB issued Staff Position ("FSP") FAS 106-2, *Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003*. This FSP provides accounting guidance for employers that sponsor defined benefit postretirement health care plans that provide prescription drug benefits, and requires those employers to provide certain disclosures regarding the effect of the federal subsidy provided by this act. TVA adopted the nonpublic disclosure requirements of the FSP for reporting periods beginning after June 15, 2004 (see note 9).

#### Accounting for Energy Trading Contracts

Effective October 1, 2002, TVA adopted Emerging Issues Task Force ("EITF") Issue 02-03, *Issues Related to Accounting for Contracts Involved in Energy Trading and Risk Management Activities*. EITF 02-03 rescinded EITF 98-10, *Accounting for Contracts Involved in Energy Trading and Risk Management Activities*, and reached two general conclusions:

- Energy trading contracts that do not meet the definition of a derivative under SFAS No. 133 should not be marked to fair market value, and
- Revenues should be shown in the income statement net of costs associated with trading activities, whether
  or not the trades are physically settled, if the derivative instruments are held for trading purposes. In addition, entities may simply choose to designate and report transactions on a net basis for ease of administration even though such transactions do not meet the strict definition of trading activities.

As a matter of policy and practice, TVA does not engage in trading activities as defined by the EITF as "active and frequent buying and selling...with the objective of generating profits on short-term differences in price." Rather, TVA makes purchases and sales decisions based on projected TVA system demand and supply positions. Under cer-

tain circumstances, TVA may find that it has purchased power commitments from others that turn out to be in excess of TVA system needs due to changing operating conditions (such as weather, TVA plant availability, transmission constraints, etc.) or changing economic conditions and TVA ultimately sells that surplus power to exchange power customers. Conversely, TVA also may need to purchase power from others to meet pre-existing sales commitments to others due to similar changing operating or economic conditions that impact the availability or deliverability of TVA system resources.

TVA does not differentiate between those transactions that are entered into based on changing operating conditions and those entered into based on changing market conditions. Accordingly, TVA refers to all of these types of transactions as "displacement purchases and sales." These displacement purchases and sales are usually transacted within days or hours of each other. In very limited situations, a purchase and sale transaction might be entered into at essentially the same time for the same quantity and for the same delivery time. For instance, at the time that a sales transaction is made from system resources at at certain price based upon an expected system cost projection, a purchase opportunity from the market for the system might also be immediately available that is priced less than or equal to the expected system cost. In that situation, the purchase transaction might be made to immediately support the system in meeting the initial sales commitment to mitigate the risk exposure due to the uncertainly in predicting the expected system cost.

TVA reports its displacement purchases and sales on a net basis on the Income Statements. During 2004, 2003, and 2002, TVA had net gains from displacement transactions of \$2.8 million, \$7.0 million, and \$5.7 million, respectively. In addition, the total volume of displacement transactions during 2004, 2003, and 2002 was 407,636, megawatt-hours, 1,240,325 megawatt-hours, and 1,357,836 megawatt-hours, respectively. As a result of adopting this new standard, revenue and purchased power expense in prior periods have been restated to conform to the current year presentation. There was no impact on net income in any period. The adoption of this new standard reduced revenue and purchased power expense by \$36 million and \$35 million for the years ended September 30, 2003 and 2002, respectively.

# **TVA and Competition**

By the late 1990's, the nation appeared to be well on its way to restructuring both wholesale and retail electricity markets. During the past four years, however, market and regulatory events have increased the uncertainty about the ultimate outcome and timing of electricity market restructuring in the United States. Despite the current uncertainty, however, TVA believes that wholesale competitive electricity markets are likely to continue to evolve.

Among the early initiatives that have begun to promote industry competition is the Energy Policy Act of 1992 (the "Energy Act"). The Energy Act and related FERC orders already allow competitors of a utility to access that utility's transmission system to sell electricity to other electric power suppliers and wholesale customers. In TVA's case, some special provisions apply.

Under the TVA Act, subject to certain minor exceptions, TVA may not currently enter into contracts that would have the effect of making it or the distributors of its power a source of power supply outside a statutorily specified area. Inside that same area, under the Anti-Cherrypicking Provision, TVA is not required to provide its competitors access to its transmission system to transmit power for consumption within the area that TVA or the distributors of its power may serve. Thus, while TVA may not sell power outside its current service area, TVA cannot be compelled to permit its competitors to use its transmission system to sell power within TVA's service area.

In the future, it appears likely that the current law that serves to limit competition between TVA and its competitors will change. In the past six years, numerous bills have been introduced in Congress designed to restructure the electric utility industry and mandate or promote competition in the industry. Within the context of restructuring legislation, some of the key issues for TVA are: (1) whether TVA rates and transmission system will be regulated by FERC, (2) whether TVA and the distributors of TVA power will be able to sell power outside the TVA service area and whether TVA will be required to provide its competitors access to its transmission system to transmit power for consumption within the TVA service area, and (3) whether Congress will attempt to shorten the terms of TVA's present wholesale power contracts with the distributors of its power. Whether TVA's existing customers will be expressly entitled by statute to "native load preference" under an unbundled transmission scenario is uncertain.

In the spring of calendar year 2000, TVA, the Tennessee Valley Public Power Association ("TVPPA"), an association comprising all of the distributors of TVA power, and the Tennessee Valley Industrial Committee ("TVIC"), an organization representing industries that TVA directly serves, reached consensus on draft legislation regarding the relationships between TVA and its customers in a restructured electric power industry. The draft legislation, as revised

by TVA, TVPPA, and TVIC in 2003, provides for: (1) simultaneous repeal on the effective date of the restructuring legislation of the Anti-Cherrypicking Provision and the provision that limits the area in which TVA and the distributors of TVA power can be a source of power supply, (2) a distributor option to gradually take up to a maximum of 30 percent partial requirements from other suppliers with advance notice to TVA, (3) new limitations on TVA retail sales in TVA's current service area, (4) stranded cost recovery through 2007, (5) FERC regulation of TVA's transmission service rates and terms and conditions of service to assure that those which TVA charges and imposes on other users of its system are comparable to those which TVA charges and imposes on itself, (6) TVA's subjection to antitrust laws (with the exception of monetary damages and attorney's fees), (7) as elected by individual distributors, reduction in TVA's existing regulatory role with respect to distributors, and (8) an express statutory limitation on new TVA generation to that needed to meet demand within the current TVA service area.

Based on extensive analysis of potential future market conditions, TVA believes its relative cost of power will meet or be lower than average market prices in most, but not all, scenarios. Given that TVA's generation mix has high fixed but low variable costs, TVA believes that it would be vulnerable to revenue losses, for example, in a world of low gas prices and high regional reserve margins. In addition, TVA currently sets its prices for distributors based on TVA's system-average costs. If continued under competition, rate averaging would allow competitive suppliers to cherry pick customers who cost less than the system average to serve.

In the near-term, TVA's strategic challenge is to accelerate its preparation for a more competitive future. At the same time, TVA must continue to supply all energy requirements for its distributors until legislation opening up electricity markets in the Valley is enacted. As market conditions change in the coming years, TVA's strategic planning process will continue as an iterative and adaptive process. Concepts outlined in the strategic plan will be applied to TVA's power supply planning process and its performance planning and budgeting process. TVA conducts ongoing power supply planning to forecast growth in the region's power needs and evaluate the best options for meeting those needs. The performance planning process focuses primarily on the next fiscal year and includes detailed performance plans and budgets. Taken together, these three planning processes support the effective management of TVA's operations today and for the long-term. See "Business Strategy" — "Strategic Plan" below.

# **Regional Transmission Organizations**

While not generally subject to FERC jurisdiction, TVA is voluntarily seeking ways to meet FERC's objective to improve regional transmission operations in a manner consistent with TVA's responsibilities under the TVA Act. TVA is moving forward on two initiatives.

First, in 2002, TVA and Associated Electric Cooperative, Inc. ("AECI"), of Springfield, Missouri, took the initial steps to form the Public Power Regional Transmission Grid ("PPRTG"). The PPRTG is a mechanism for public-power providers to participate in regional transmission arrangements consistent with the objectives of FERC Order No. 2000, while remaining within the framework of their public service missions. The PPRTG operates more than 25,000 miles of transmission lines within a ten-state region, and could grow with additional members. TVA currently provides reliability services for AECI, Big Rivers Corporation ("BREC"), East Kentucky Power Corporation ("EKPC"), and Electric Energy, Inc. ("EEI").

TVA also entered into memoranda of understanding with three other transmission providers, Southern Company, Entergy, the PJM Interconnection, and the Midwest Independent Transmission System Operator ("MISO"), to establish a framework for developing formal regional coordination agreements that will help provide seamless transmission services through a large portion of the eastern interconnected transmission grid. The memoranda facilitate creating broader solutions to regional transmission operations issues while preserving public power's unique public service mission.

# **Business Strategy**

TVA's Six Strategic Objectives

TVA's strategic objectives encompass excellence in operating performance, leadership in economic development, and sensitivity to its stakeholders' needs. Critical success factors have been developed and targets established to reach performance goals. TVA's Strategic Objectives are:

Improve life in the Tennessee Valley through integrated management of the river system and environmental stewardship. TVA is committed to environmental stewardship. TVA will improve the quality of life in the Valley by managing the Tennessee River system in accordance with a strategy that manages the diverse benefits of navigation, flood control, power production, water quality, and recreation for the greatest public good,

Meet customers' needs with affordable, reliable electric power. Electric power is the fuel of TVA's regional economy, and TVA's power system is growing and improving to keep pace with the ever-increasing demand. In step with America's energy policy for the 21st century, TVA is prepared to play a vital role as a public power provider, dedicated to public service and providing competitively priced electricity in an increasingly open energy marketplace,

Demonstrate leadership in sustainable economic development in the Valley. TVA will continue to work with the communities it serves in order to help attract and retain new and better jobs for the people of the Valley,

Continue the trend of debt reduction. TVA is committed to reducing its level of total financing obligations in order to create more financial flexibility for the future business environment,

Reduce TVA's delivered cost of power relative to the market. The bottom line for TVA is the creation of value for the public. TVA will be responsive to the marketplace through its initiatives for promoting innovation and continuous improvement. TVA will generate more for less for the good of many, and

Strengthen working relationships with all of TVA's stakeholders. TVA will strengthen its relationships with Valley residents, communities, and businesses; with customers and suppliers; and with leaders at all levels of government.

# Key Indicators and Objectives

	<b>↑</b> = Better than target	→ = On target	= Worse than target			
Measure	Strategic Objective	Indicator	Status as of September 30, 2004	2004 Actual	2004 Target	
Customer	Meet customers' needs with affordable, reliable electric power	Customer satisfaction on power reliability, billing reliability, product timeliness, competitive price (percent)	t	126.2	100.0	
	Demonstrate leadership in sustainable economic development in the Valley	Jobs added or retained in the Valley, capital investment leveraged, and quality-job measure (index)	t	120	100	
Operations	Meet customers' needs with affordable, reliable electric power	Asset availability (percent of actual to plan)	t	101	98	
	Improve life in the Valley through integrated management of the river system and environmental stewardship	Environmental impact on air quality, water quality, land, waste production, energy consumption (index of environmental factors	t	81	98	
Financial	Reduce TVA's delivered cost of power relative to the market	Operating costs including O&M, depreciation, tax equivalents, and external business (millions of \$)	t	3,581	3,644	
	Continue trend of improving financial flexibility	Financial Strength (net reduction in total financing obligations in millions of \$)	t	278	225	
	Meet customers' needs with affordable, reliable electric power	Productivity (kWh/\$)	t	156.1	147.8	
People	Strengthen working relationship with all of TVA's stakeholders	All injury rate (injuries/hours worked)	t	2.33	2.41	

# Strategic Plan

To prepare for a more competitive electricity market, TVA has implemented a strategic planning process that analyzes how the new market may function, what competitive pressures TVA will face, and how TVA must prepare now for success in the future. More specifically, the process focuses on what TVA needs to do in order to preserve TVA's core mission of providing low-cost power, promoting economic prosperity in the Tennessee Valley, and exercising stewardship while remaining financially viable in a competitive market.

These challenges are not unique to TVA. Fiscally and strategically, the federal government, corporations, and the utility industry are dealing with cost pressures, competition for customers, the need to develop new technologies, and the need to efficiently manage all resources.

TVA's strategic plan is based on an analysis of possible market conditions and gives a qualitative basis for better decision-making as TVA moves into a world where laws restricting competition will be modified. The plan is based on the most thorough analysis of possible future market conditions that TVA has ever done.

TVA believes that wholesale competitive markets are going to continue to evolve and bring four fundamental changes to the business environment:

First, the wholesale electricity markets that border TVA to the North either already have or are expected to include the following core features:

- Independent, real-time operation of the regional transmission system, integrated with
- Voluntary day-ahead and real-time energy markets,
- Locational marginal pricing to reflect locational differences in generation costs caused by transmission constraints, and
- Financial congestion revenue rights to allow buyers and sellers to hedge the cost of energy delivered to a particular location.

Efforts to develop independently administered, structured spot markets in the South are stalled for the time being. Thus, markets in the South are expected to remain bilateral in nature for the foreseeable future.

Second, current law restricts TVA's ability to sell outside the TVA region and restricts the ability of other suppliers to sell power inside the TVA region. TVA must begin to prepare for a future where the laws restricting competition are modified, allowing distributors to choose other suppliers for all or part of their energy needs and allowing TVA to sell surplus power outside the region.

Third, TVA's historic monopoly on power sales in its service area appears likely to change, although market share is protected for the near term by existing contracts requiring at least five-year notice of termination. If other suppliers can provide services to distributors, TVA's planning, pricing, and financial structure must adapt to the potential reality that investments in long-lived facilities will face market risk.

Fourth, the cyclical and capital-intensive nature of unregulated power generation poses significant financial risk and will require a more liquid and secure financial structure than the 80 to 100 percent debt financing tested by merchant generators in the early phases of deregulation. TVA must reduce its debt and develop an approach to financing that is more flexible than it has needed in the past.

TVA's Strategic Plan was adopted by the Board in January 2004. The plan identifies a number of steps that TVA needs to take to begin to prepare for a more competitive future. Specifically, over the next several years, TVA needs to concentrate on four specific areas:

- (1) Developing new, more highly differentiated prices, services, and contract terms that more closely tie the cost and the risk of the product to its terms and pricing.
- (2) Addressing the range of issues related to wholesale market design and transmission pricing, including how TVA will interface with the markets that are expected to surround us, as well as how TVA will price transmission services within the TVA's power service area when distributors can choose other suppliers.
- (3) Increasing cash flow through cost reductions or rate increases in order to accelerate reduction in total financing obligations and to provide the financial flexibility needed to tolerate the higher levels of revenue and cost volatility associated with a more competitive market.
- (4) Maintaining and operating its generation and transmission assets so that it continues to fulfill its supply obligations in a safe and reliable manner.

According to the plan, preparing for a more competitive market requires TVA to begin working with distributors to develop new, more highly differentiated prices for power, unbundled services, and new contract terms. TVA also will assess the way it provides and prices transmission service to its customers and decide whether to integrate its transmission system into a larger regional market.

The plan recommends a reduction target of at least \$3 billion to \$5 billion in debt over the next ten to 12 years but notes that debt-reduction targets will be updated annually depending on TVA priorities and changing market conditions. TVA anticipates that accelerated debt reduction can be achieved through continued emphasis on cost reduction, increased productivity, asset improvements to increase performance, further limiting capital projects where appropriate, and rate adjustments and rate changes consistent with market and power-supply conditions.

Because the plan is a "living" document, it will continue to evolve, providing a framework for TVA to respond to future market challenges.

#### **Environmental Matters**

TVA's activities are subjected to certain federal, state, and local environmental statutes and regulations. Major areas of regulation affecting TVA's activities include air quality control, water quality control, and management and disposal of solid and hazardous wastes.

TVA has incurred and continues to incur substantial capital and operating costs in order to comply with evolving environmental requirements. Many of these costs are associated with the operation of TVA's 59 coal-fired generating units. It is not possible to predict with any precision how these evolving requirements will impact the operation of existing and new fossil-fuel generating units. It is virtually certain that environmental requirements placed on the operation of fossil-fuel generating units will become more restrictive. Litigation over emissions from coal-fired generating units is growing, including litigation against TVA (see "Legal Proceedings" in Part I).

A number of existing regulatory programs have been and are being made more stringent in their application to fossil-fuel units and additional regulatory programs potentially affecting fossil-fuel units have been proposed. The total cost of future compliance with nitrogen oxide ("NOx"), sulfur dioxide ("SO₂"), and mercury emission reduction requirements cannot reasonably be determined with precision at this time because of the uncertainties surrounding emerging EPA regulations, resultant compliance strategies, potential for the development of new emission control technologies, court litigation, and future amendments to the Clean Air Act ("CAA"). However, total costs could exceed \$4.0 billion through 2020, exclusive of the costs of the currently planned installation of SCRs and scrubbers as described below. Expenditures related to the clean air projects during 2004 and 2003 were approximately \$400 million and \$500 million, respectively. The total cost of the planned SCR program is now estimated to be \$1.4 billion. Projects exceeding \$1.3 billion had been completed by the end of 2004, with approximately \$130 million of the total program remaining. The cost of the planned installation of five scrubbers is estimated to be \$1.5 billion (including the \$300 million scrubber for Paradise Unit 3). In addition to these costs, there could be other substantial costs if reductions of carbon dioxide ("CO₂") are mandated (discussed in more detail below). Even more so than the future regulation of other substances, predicting how and when carbon dioxide may be regulated is very uncertain. TVA will continue to monitor this issue and will assess and respond to potential financial impacts as they become more certain.

## Clean Air Developments

Air quality in the United States has significantly improved since the enactment of the modern CAA in 1970. These air quality improvements are expected to continue as the CAA and its implementing programs evolve through legislative and regulatory changes. Three substances emitted from coal-fired units have historically been the focus of emission reduction regulatory programs: SO<sub>2</sub>, NOx, and particulates. TVA has already spent \$4.0 billion to reduce its emissions of these three substances and to complete the reductions outlined above- has plans to spend about another \$2.0 billion. Recently, attention has been given to two other substances emitted by coal fired units: mercury and CO<sub>2</sub>. Increasingly stringent regulation of some or all of these substances will continue to result in significant capital and operating costs for coal-fired generating units, including those operated by TVA.

# Sulfur Dioxide

Coal-fired utilities have historically emitted large amounts of SO<sub>2</sub>. Utility SO<sub>2</sub> emissions are extensively regulated and will be regulated further under state programs to achieve and maintain EPA's National Ambient Air Quality Standard for SO<sub>2</sub>, the acid rain control program, and - depending on when units commenced operation and their effect on sensitive areas - the regional haze program. EPA's new, stringent fine particle national standard is expected to result in additional significant reductions of utility SO<sub>2</sub> emissions because SO<sub>2</sub> can transform into sulfates, and sulfates are a major component of fine particles in the eastern United States. Since 1976, TVA has reduced its SO<sub>2</sub> emissions by approximately 75 percent. It has done this by switching to lower-sulfur coals and by the installation of flue gas desulphurization technology ("scrubbers") on six of its largest units. TVA has announced plans to install five more scrubbers on its system to further reduce SO<sub>2</sub> emissions from 12 more of its units, achieving a total SO<sub>2</sub> emission reduction of 85 percent. TVA also has switched or plans to switch to lower sulfur coal on several additional units in the next few years. These plans may change depending on the timing and severity of new SO<sub>2</sub> emission reductions that have been proposed but not yet finally promulgated by EPA to address the new fine particle standard, and implementation of these requirements by the states. The State of North Carolina has also petitioned EPA under Section 126 of the Clean Air Act to impose additional emission reductions requirements for SO<sub>2</sub> and NOx emitted by coal-fired

power plants in 13 states, including Kentucky, Tennessee, and Alabama where TVA's coal-fired power plants are located. The reduction requirements that EPA establishes to address the fine particle standard are expected to also address and satisfy the North Carolina petition.

# Nitrogen Oxide

Utility NOx emissions are extensively regulated and will be regulated further under state programs to achieve and maintain EPA's national ambient air quality standard for ozone (NOx combines with volatile organic compounds in the presence of sunlight to produce ozone under certain meteorological conditions), the acid rain control program, and - depending on when units commenced operation and their effect on sensitive areas - the regional haze program. EPA's new, more stringent eight-hour ozone and fine particle national ambient air quality standards could result in requirements to further reduce NOx emissions from coal-fired power plants and other fossil-fuel generation such as combustion turbines. (NOx emissions can transform into nitrates, another component of fine particles.) Since 1995, TVA has reduced its NOx emissions during the summer (when ozone levels increase) by approximately 62 percent. It has done this by switching to low-NOx burners, using over-fired air, and/or optimizing boilers at 58 of its 59 coal fired units. TVA has also installed selective catalytic reduction technology ("SCRs") on 18 of its units and is in the process of installing SCRs or other NOx controls on seven or more of its units. When these additional controls are installed, TVA's total ozone season NOx emissions will be reduced by at least 75 percent since 1995. These plans may change depending on the timing and severity of new NOx emission requirements that have been proposed but not yet finally promulgated by EPA to address the new fine particle standard and implementation of these requirements by the states. The State of North Carolina has also petitioned EPA to establish additional emission reductions requirements for SO<sub>2</sub> and NOx emitted by coal-fired power plants in 13 states, including Kentucky, Tennessee, and Alabama where TVA's coal-fired power plants are located. The reduction requirements that EPA establishes to address the fine particle standard are expected to also address and satisfy this petition.

#### Particulates/Opacity

Larger particulates (fly ash), as opposed to fine particles discussed above, have long been regulated by states to meet EPA's national particulate standard (this has evolved into the new fine particle standard). TVA's coal fired units have been equipped with mechanical collectors, electrostatic precipitators, scrubbers, or baghouses, and particulates on the TVA system have been reduced by more than 99 percent. Additional controls for larger particulates are not expected. Issues about utility compliance with state opacity requirements, however, are increasing. Opacity measures the denseness (or color) of power plant plumes and has traditionally been used by states as a means of monitoring good maintenance and operation of particulate control equipment. Retrofitting a unit with additional equipment to better control  $SO_2$  and NOx emissions can adversely affect opacity performance, and TVA and other utilities are now addressing this issue. There are also disputes with special interest groups over the role of continuous opacity monitors in determining compliance with opacity limitations.

#### Mercury

The EPA has issued a proposed rule to regulate mercury emissions from coal-fired generating units under the CAA. The form, schedule, and severity of this regulation are not yet known, but it could require utilities, including TVA, to begin reducing emissions before the end of this decade. The compliance costs of any mandatory reductions cannot be reasonably determined at this time because of the uncertainties surrounding emerging EPA regulations, resultant compliance strategies, potential for the development of new control technologies, and the potential for litigation arising from this final rule. However, the costs could be substantial if additional controls are required to meet the mandatory reductions.

## Carbon Dioxide

The existence, cause, and importance of global warming continue to be widely debated. CO<sub>2</sub> is a greenhouse gas and is believed by some to contribute to global warming. Legislation has been introduced in Congress to require reductions of CO<sub>2</sub>, and if enacted, could result in significant additional costs for TVA and other coal-fired utilities. The Bush Administration has proposed a voluntary initiative that established a goal of reducing the greenhouse gas intensity of the U.S. economy by 18 percent and has asked the electric utility sector and other industry sectors to support this initiative. TVA is supporting this effort in cooperation with electric utility industry trade associations and the Department of Energy. The last administration also asked utilities to voluntary participate in an effort to reduce, sequester, or avoid greenhouse gases. Under that program, TVA reduced, sequestered, or avoided more than 260 million tons of CO<sub>2</sub> from 1990 through 2003, as reported under Section 1605b of the Energy Policy Act. TVA has also

brought on line 4,500 megawatts of non CO<sub>2</sub>-emitting generation since 1990, and is in the process of adding another 2,000 megawatts of non CO<sub>2</sub>-emitting generation.

# Clean Water Developments

In the second phase of a three-part rulemaking to minimize the adverse impacts on fish and other aquatic life from cooling water intake structures, as required under Section 316(b) of the Clean Water Act, EPA promulgated a final rule for existing power producing facilities that became effective on September 7, 2004. The new rule requires all those facilities to reduce the number of organisms pinned against and/or drawn into the cooling systems, or to compensate for those impacts by restoring habitat or pursuing other options for the affected species. Several States and environmental groups have challenged the new regulation, and especially the compliance flexibility it offers, in federal court.

All of TVA's existing coal fired and nuclear generating facilities will be affected by this rule as the respective requirements are incorporated in their water permits. TVA is evaluating the impact of the new rule on each generating facility, and assessing the available compliance options. That assessment, however, is complicated by the uncertainty created by the pending legal action challenging EPA's rule. Compliance with the new rule will require new assessments at all generating plants, and will likely involve some level of capital and/or operating expenditures related to some or all generating facilities. However, since TVA's generating facilities are located in areas which are not particularly sensitive to the effects of intake structures, and its only identified intake related adverse impact has been previously mitigated, the costs are not expected to have a significant impact on TVA's financial position, or impact the operation of the generating plants.

As is the case across the utility industry and in other industrial sectors, TVA is facing more stringent requirements related to protection of wetlands, reductions in storm water impacts from construction activities, water quality degradation and criteria, and laboratory analytical methods. TVA is also following litigation related to the use of herbicides, water transfers, and releases from dams.

#### Hazardous Substances

Liability for releases and cleanup of hazardous substances is regulated by the federal Comprehensive Environmental Response, Compensation, and Liability Act, among others, and similar state statutes. In a manner similar to many other industries and power systems, TVA has generated or used hazardous substances over the years. TVA is aware of hazardous-substance releases at ten offsite areas for which it may have some liability. TVA's potential liabilities for its share of cleanup costs at these sites are uncertain but are not expected to have a significant financial impact on TVA or TVA operations. In addition, TVA operations at some TVA-owned facilities have resulted in releases of oil and/or hazardous substances which require cleanup and/or remediation. Costs associated with these cleanup activities are not expected to be significant.

At September 30, 2004, and 2003 TVA's estimated liability for environmental cleanup was \$29 million and \$31 million, respectively, and was included in Other liabilities on the Balance Sheet.

# **Legal Proceedings**

For a discussion of TVA's current legal proceedings and anticipated outcomes, see "Legal Proceedings" in Part I.

# **Other Matters**

#### Financial Guarantees

TVA has entered into a contract which required it to secure its payment obligations on a letter of credit. The letter of credit was issued by a commercial institution in the amount of \$1.2 million on March 7, 2003. The letter of credit will expire on December 31, 2004, but may be renewed if the project associated with the letter of credit is not complete. As of September 30, 2004, the remaining amount due on this project is \$1.2 million. The project is scheduled to be completed in May 2005. TVA's liability associated with this was less than \$1 million at September 30, 2004.

#### Related Parties

TVA is a wholly-owned corporate agency of the federal government, and because of this relationship, TVA's revenues and expenses are included as part of the federal budget. TVA's purpose and responsibilities as an agency are described under the "Other Agencies" section of the federal budget. TVA's debt is not guaranteed by the federal government, but it is included in the federal budget. TVA's debt is supported solely as an obligation of the TVA power system.

TVA receives no appropriations from the government and funds its business using internally generated power system revenues, power financings, and other revenues. TVA is actually a source of cash to the federal government. Each year since TVA's power system became self-financing in 1959, TVA has repaid a portion of the government's investment in the TVA power system and has also paid a return on this investment (see "Liquidity and Capital Resources" — "Capital Structure").

In the normal course of business, TVA contracts with other federal agencies for sales of electricity and other services. Transactions with agencies of the federal government were as follows:

#### **Related Party Transactions**

(in millions)		2004		2003		2002	
Sales of electricity services	\$	153	\$	141	\$	116	
Other revenues		16		_		11	
Other expenses		202		254		191	
Receivables at September 30		18		22		19	
Payables at September 30		203		211		204	
Return on appropriation investment (note 5)		18		22		30	
Return of appropriation investment (note 5)		20		20		20	

#### Cash Balance Benefit Plans

On July 31, 2003, the United States District Court for the Southern District of Illinois held that the formula used in IBM's cash balance pension plan violated the age discrimination provisions of the Employee Retirement Income Security Act of 1974. The IBM decision, however, conflicts with the decisions from two other district courts and with the proposed regulations for cash balance plans issued by the IRS in December 2002. In September 2004, IBM announced an agreement in principle settling several of the claims involved in this litigation. This settlement, which must be approved by the district court, does not settle the age discrimination claim made with respect to the IBM cash balance pension plan. IBM has announced that it will appeal the age discrimination part of the district court's decision to the U.S. Circuit Court of Appeals for the Seventh Circuit. The TVARS cash balance benefit plan is similar in some respects to the IBM plan. It is unclear at this time whether the IBM decision will have any effect on the TVARS cash balance benefit plan.

# **Subsequent Events**

#### Resignations

Oswald J. Zeringue, TVA's President and Chief Operating Officer, has announced his intention to retire from TVA at the end of calendar year 2005. Mr. Zeringue has served in his current position since April 1998. TVA is in the process of finding a person to succeed Mr. Zeringue.

#### Legislative

On November 20, 2004, Congress passed H.R. 4818, an "omnibus" appropriations bill for fiscal year 2005 which affects TVA in several ways.

The legislation restructures the Board by increasing the number of directors from three full-time members to nine part-time members, at least seven of whom must be legal residents of the TVA service area. As with the current Board, future Board members will be appointed by the President and confirmed by the Senate, but will serve five-year terms rather than the current nine-year term. The Board's role will continue to be, among other things, to develop

long-term plans and strategies for TVA, approve annual budgets and an employee compensation plan for TVA, and have general responsibility for TVA policies. The Board will also create an audit committee consisting of members of the Board "independent of the management" to review reports from TVA's external auditors and Inspector General and make recommendations to the full Board. Congress also reaffirmed the authority of the Board to set electric rates charged by TVA. These provisions will go into effect on the date when the Board has a quorum of five members or on May 18, 2005, whichever date is the later. The members of the Board will select a member to serve as Chairman.

The legislation also creates the position of Chief Executive Officer ("CEO") for TVA. The CEO will be appointed by the Board and will be responsible for development and implementation of TVA's strategic direction. The CEO will serve at the pleasure of the Board.

The "omnibus" appropriations legislation also amends the Securities Exchange Act of 1934 to provide that beginning with its annual report for fiscal year 2006, TVA must file annual reports (10-Ks), quarterly reports (10-Qs), and current reports (8-Ks) with the U.S. Securities and Exchange Commission. Also, TVA will be deemed an issuer for some of the audit-related provisions of section 10A of the Securities Exchange Act of 1934 but not for those provisions of section 10A that are inconsistent with TVA's structure under the TVA Act. The legislation does not require TVA to register securities under either the Securities Act of 1933 or the Securities Exchange Act of 1934. The legislation provides that TVA securities are "government securities" under the Securities Exchange Act of 1934, and that nothing in the amendment interferes with or affects the Board's authority to carry out its statutory functions under the TVA Act.

The American Jobs Creation Act, H.R. 4520, sometimes referred to as the corporate tax bill, became law in October 2004. It contains provisions designed to limit the use of sale/leasebacks and lease/leasebacks by tax-exempt entities, such as TVA. TVA has used lease/leasebacks recently and obtained a more favorable financing rate than it would have obtained by issuing bonds. These provisions of H.R. 4520 will reduce or eliminate the attractiveness of using lease/leaseback transactions as a financing alternative for TVA in the future.

# Transmission Interconnection

East Kentucky Power Cooperative ("EKPC") has filed an application with FERC ostensibly seeking an order requiring EKPC to be interconnected with TVA's transmission system. If this interconnection is granted, EKPC would be able to use TVA's transmission system to provide power to Warren Rural Electric Cooperative Corporation ("WRECC") when WRECC's contract with TVA terminates in April 2008. TVA has submitted a response to FERC stating that if FERC grants the requested relief, the actual effect would be to require TVA to provide free transmission service across TVA's transmission system in violation of the Anti-Cherrypicking Provision of the Federal Power Act.

# Nuclear Fuel Contracts

At its October 27, 2004 Board Meeting, the Board approved a contract to Global Nuclear Fuel – Americas LLC for the design, fabrication, and supply of nuclear fuel and fuel-related engineering services for Browns Ferry Nuclear Plant Unit 1. This action also approved a supplement to a contract with United States Enrichment Corporation to supply natural uranium for the Browns Ferry Unit 1 restart core. Total expenditures from the two contracts are estimated at \$125 million.

#### Sale of Office Building

TVA has received an offer from a prospective buyer for the East Tower of its Knoxville Office Complex. In accordance with the Act, TVA conducted a public auction on November 24, 2004. TVA awarded the successful bidder an option to purchase the East Tower for \$12 million, and the option will be valid for 90 days from the date of the auction. If the option is exercised, the TVA employees in the East Tower will be relocated to the West Tower of TVA's Knoxville Office Complex in phases, over a six-month period after the date of the closing. TVA will be required to recognize a loss on the sale of the East Tower of approximately \$10 million if the option is exercised.

# Legal Proceedings

On November 10, 2004, North Carolina sent the EPA a Notice of Intent to Sue TVA for violations of the Clean Air Act (the "Notice"). North Carolina may file a lawsuit in federal court 60 days after November 15, the date TVA received the Notice. North Carolina alleges that TVA violated the New Source Review ("NSR") requirements of the Clean Air Act (among other state and federal regulations) by modifying nine fossil plants located in Alabama, Kentucky, and Tennessee, without having these modifications reviewed by the EPA or the states to determine if new emission

controls or technologies needed to be put in place. North Carolina asserts that these actions have contributed to the degradation of air quality in North Carolina. These allegations are similar to those involved in the EPA's administrative order dismissed by the Court of Appeals for the Eleventh Circuit. See "Legal Proceedings" in Part I of this Statement.

# **Forward-Looking Information**

This Statement contains forward-looking statements relating to future events and future performance. Any statements regarding expectations, beliefs, plans, projections, estimates, objectives, intentions, assumptions, or otherwise relating to future events or performance may be forward-looking.

In certain cases, forward-looking statements can be identified by the use of words such as "may," "will," "should," "expect," "anticipate," "believe," "intend," "project," "plan," "predict," "assume," "estimate," "forecast," "objective," "possible," "potential," or other similar expressions.

Some examples of forward-looking statements include statements regarding TVA's projections of forecasts and future power and energy requirements; future costs related to environmental compliance; impacts of potential legislation on TVA and the likelihood of enactment of such legislation; strategic objectives; debt reduction targets; anticipated availability of nuclear waste storage facilities; projections of nuclear decommissioning costs; projections regarding the cost and timetable for restarting Browns Ferry Unit 1; planned construction expenditures for property, plant, and equipment additions; and impacts of pending litigation and various administrative orders which have been or may be issued.

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 the forward-looking statements. These factors include, among other things, new laws, regulations, and administrative orders, especially those related to the restructuring of the electric power industry and various environmental matters; increased competition among electric utilities; changes in the ability of the Board to set TVA's rates as specified in the TVA Act; changes in the structure of the Board; legal and administrative proceedings affecting TVA; the financial and economic environment, including changes in interest rates, foreign currency exchange rates, equity market prices, and commodity prices; changes in the rating of TVA's rated securities; performance of TVA's generation and transmission assets; fuel prices; demand for electricity; changes in technology; changes in the price of power; loss of any significant customers or suppliers; creditworthiness of counterparties; weather conditions and other natural phenomena; damage to power production or transmission facilities or systems due to accidental events or terrorist activity; changes in accounting standards; and unforeseeable events. New factors emerge from time to time, and it is not possible for management to predict all such factors or to assess the extent to which any factor or combination of factors may impact TVA's business or cause results to differ materially from those contained in any forward-looking statement.

TVA undertakes no obligation to update any forward-looking statement to reflect developments that occur after the statement is made.

# QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

Due to the strengthened role of the TVA Management Committee and Board for enterprise-wide risk, the Board disbanded the Risk Management Committee. A more narrowly-focused Portfolio Risk Management Committee ("PRMC") has been created to establish overall risk tolerances and portfolio hedging guidelines related to commodities. Portfolio risks that qualify as enterprise-level risk issues will be communicated by the PRMC to the Management Committee and Board as appropriate.

Through the normal course of its business, TVA does not engage in wholesale trading operations for the purposes of speculation. Rather, when necessary in order to balance TVA's load obligation, TVA will engage in some aspects of physical trading. Further, TVA employs commodity-based instruments which include forwards and option contracts to manage risks associated with market fluctuations in the price and transportation costs of certain commodities and fuels including, but not limited to, coal, natural gas, and electricity.

TVA is exposed to market risks, including changes in interest rates, foreign currency exchange rates in association with TVA bonds, volatility of energy related commodities (electricity, natural gas, and coal), equity market

prices, and losses in the event of counterparties' nonperformance. To manage the volatility attributed to certain of these exposures, TVA has entered into various nontrading derivative transactions, principally an interest rate swap agreement, foreign currency swap contracts, swaptions, coal contracts, power purchase contracts, and natural gas contracts. Additionally, to manage volatility in the emission allowance markets, TVA has obtained options related to SO<sub>2</sub> allowances (see note 6—*Commodity Contracts*). The exposure to losses in the event of the counterparties' nonperformance has been mitigated through controls to determine the creditworthiness of counterparties before transactions take place.

#### Cash Flow at Risk

Cash Flow at Risk ("CFaR") is the probability that the company will meet its cash flow targets. At TVA, CFaR is evaluated using two different computer models for short-term and medium term. The short term framework forecasts one week to reflect operating margins only. A one-year projection is developed to examine enterprise-wide free cash flow.

CFaR is used to simulate future financial statements, taking as its input the projected values of the financial prices relevant to TVA. Its purpose is to build a probabilistic picture of the impact of various risks on the cash flow or profitability in much the same way as Value at Risk ("VaR") is used to find the probability of losses on a portfolio of assets. TVA measures the operating margin portion of CFaR on a weekly basis.

At the beginning of 2005, TVA estimated its expected annual 2005 free cash flow available to pay down its financing obligations. This value includes not only short-term operating margins but also costs associated with capital investments and financing agreements. Based on data available at the end of September 2004, TVA expects that its 2005 total enterprise free cash flow could range between \$14 million and \$685 million. This range reflects modeling results for the tenth percentile and ninetieth percentile in free cash flow. Estimated enterprise Cash Flow at Risk for 2005 is \$211 million.

TVA manages its daily cash needs through issuance of Discount Notes and other short-term borrowings. These borrowings expose TVA to fluctuations in short-term interest rates. A near-term one percentage point change in interest rates would not have a material impact on TVA's financial position or results of operations.

#### Value at Risk

The commodity market risk exposure is measured through TVA's VaR calculation. VaR is a single summary statistic of possible portfolio losses due to normal market movements for a given confidence level over a selected period of time. TVA measures VaR on a daily basis. TVA's VaR exposure for the electricity, natural gas, and other commodities in which TVA has market positions, assuming a ten-day holding period and a one-day holding period, is described below:

# Electricity

# Electricity Value at Risk Associated with Energy Trading Contracts and Related Energy Derivative Contracts For the Year Ended September 30, 2004

	Company Wide VaR (in millions)		
95% Confidence level, ten-day holding period, two-tailed			
For the year ended September 30, 2004	\$	19.8	
Average for the period		10.5	
High		26.4	
Low		1.7	
99% Confidence level, one-day holding period, two-tailed			
For the year ended September 30, 2004	\$	8.1	
Average for the period		4.3	
High		10.8	
Low		0.7	

The VaR calculations are for the TVA 5x16 electricity portfolio for 2004. The calculations are for the rolling forward 12-month portfolio

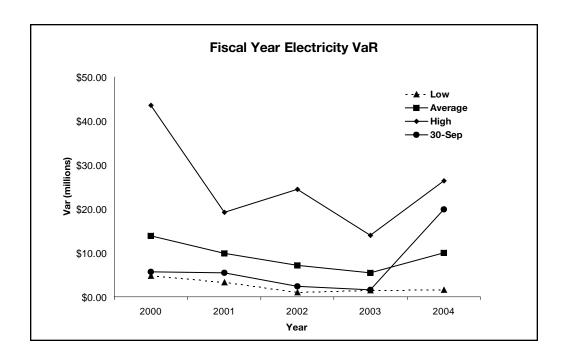
The VaR method used is the parametric variance/covariance method accepted as an industry standard.

From the table above, given a 95 percent confidence level at September 30, 2004, there is a 2.5 percent probability TVA's electricity portfolio could lose more than \$19.8 million over the next ten days. The average VaR for the entire year for the ten-day holding period is \$10.5 million. Further, given a 99 percent confidence level at September 30, 2004, there is a 0.5 percent probability that TVA's electricity portfolio could lose more than \$8.1 million over the next day. The average VaR for the entire year for the one-day holding period is \$4.3 million.

Back-testing of the VaR calculation is done using a statistical procedure called the chi-square test. TVA performs back-tests of the actual daily Mark-to-Market ("MTM") fluctuations for three-month, six-month, and 12-month periods. The chi-square test measures how well the actual distribution of mark-to-market fluctuations matches the ideal distribution. The chi-square value for the electricity portfolio is not within the selected significance level indicating that the variation of actual MTM fluctuations does not effectively match the ideal distribution. The procedure for calculating VaR has been reviewed and will be adjusted going forward to reduce the variations. For example, some of the input variables for the VaR calculation will be updated more frequently to improve results.

TVA has no merchant capacity assets or transactions which expose TVA to market risk. TVA does have long-term transactions, the energy supplied under which will serve native load requirements (see note 10—*Commitments—Power Purchase Obligations*). The market risk associated with the structure of these transactions is captured in the VaR estimates above.

As indicated by the chart, TVA's electricity market risk exposure decreased from 2000 to 2003 and then increased from 2003 to 2004. The increase is small relative to the portfolio's MTM valuation and is largely due to increased volatility in the electricity markets.



# Natural Gas Value at Risk Associated with Energy Trading Contracts and Related Energy Derivative Contracts For the Year Ended September 30, 2004

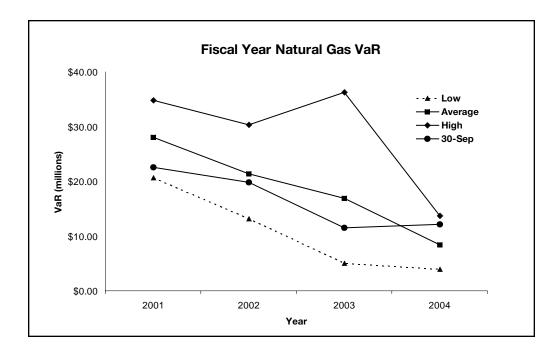
	Company Wide VaR (in millions)	
95% Confidence level, ten-day holding period, two-tailed	Φ.	40.0
For the year ended September 30, 2004	\$	12.2
Average for the period		8.4
High		13.7
Low		3.9
99% Confidence level, one-day holding period, two-tailed	_	
For the year ended September 30, 2004	\$	5.0
Average for the period		3.4
High		5.6
Low		1.6

Notes

The VaR calculations are for the TVA natural gas portfolio for 2004. The calculations are for the rolling forward 12-month portfolio. The VaR method used is the parametric variance/covariance method accepted as an industry standard.

Back-testing of the VaR calculation is done using a statistical procedure called the chi-square test. TVA performs back-tests of the actual daily MTM profit and loss fluctuations for three-month, six-month, and 12-month periods. The chi-square value for the period is within the selected significance level indicating a valid VaR calculation.

The historical performance of TVA's natural gas VaR calculation is represented in the following graph:



TVA has tracked natural gas VaR exposure since 2001. As shown in the graph above, the natural gas VaR has decreased since 2001 in large part because TVA's expected natural gas needs have decreased.

#### Fuel Oil

TVA purchases fuel oil as a substitute fuel source for TVA's gas turbine fleet. TVA's hedge against market risk for fuel oil is the use of natural gas and is captured in the natural gas VaR. TVA monitors the spread between fuel oil

and natural gas for hedging purposes. During 2004, natural gas had a significant advantage over fuel oil for most of the year. Therefore, TVA's fuel oil position was not materially affected by market risk.

#### Coal

TVA's contracts with coal suppliers have specified rates and volumetric flexibility which limit TVA's exposure to market risk. Given TVA's contract mix, TVA is approximately 98 percent hedged to coal market risk exposure. Because of issues concerning coal's lack of fungibility and market transparency, TVA does not currently maintain a coal VaR calculation.

Sulfur Dioxide (SO2) Allowances

# SO<sub>2</sub> Allowance Value at Risk Associated with Energy Trading Contracts and Related Energy Derivative Contracts For the Year Ended September 30, 2004

	Company Wide VaR (in millions)	
95% Confidence level, ten-day holding period, two-tailed		
For the year ended September 30, 2004	\$	3.0
Average for the period		2.3
High		5.8
Low		0.6
99% Confidence level, one-day holding period, two-tailed		
For the year ended September 30, 2004	\$	1.2
Average for the period		0.9
High		2.4
Low		0.3

#### Notes

The VaR calculations are for the TVA SO<sub>2</sub> allowance portfolio for 2004. The calculations are for the rolling forward nine-year portfolio. The VaR method used is the parametric variance/covariance method accepted as an industry standard.

Back-testing of the VaR calculation is done using a statistical procedure called the chi-square test. TVA performs back-tests of the actual daily MTM profit and loss fluctuations for three-month, six-month, and 12-month periods. The chi-square test measures how well the actual distribution of mark-to-market fluctuations matches the ideal distribution. The chi-square value for the SO<sub>2</sub> portfolio is not within the selected significance level indicating that the variation of actual mark-to-market fluctuations does not effectively match the ideal distribution. The SO<sub>2</sub> allowance market is a developing market with limited trading beyond one year and this adversely affects the back testing results.

Nitrogen Oxides (NO<sub>x</sub>) Allowances

# NO<sub>X</sub> Allowance Value at Risk Associated with Energy Trading Contracts and Related Energy Derivative Contracts For the Year Ended September 30, 2004

	Company Wide VaR	
95% Confidence level, ten-day holding period, two-tailed	(	,
For the year ended September 30, 2004	\$	5.4
Average for the period		4.3
High		13.2
Low		2.1
99% Confidence level, one-day holding period, two-tailed		
For the year ended September 30, 2004	\$	2.2
Average for the period		1.7
High		5.4
Low		0.9

The VaR calculations are for the TVA NOx allowance portfolio for 2004. The calculations are for the rolling forward nine-year portfolio. The VaR method used is the parametric variance/covariance method accepted as an industry standard.

Back-testing of the VaR calculation is done using a statistical procedure called the chi-square test. TVA performs back-tests of the actual daily MTM fluctuations for three-month, six-month, and 12-month periods. The chi-square test measures how well the actual distribution of mark-to-market fluctuations matches the ideal distribution. The chi-square value for the NOx portfolio is not within the selected significance level indicating the variation of actual mark-to-market fluctuations does not effectively match the ideal distribution. The NOx allowance market is a developing market with limited trading beyond two years and this adversely affects the back testing results.

#### Mark-to-Market Valuation

Sensitivity analyses are performed on a daily and weekly basis to determine the market price impact on TVA's electricity portfolio when the market price moves beyond TVA's projections.

TVA also monitors the mark-to-market ("MTM") fair value of electricity assets in future years. MTM accounting reports contracts at their "fair value," (the value a willing third party would pay for the particular contract at the time a valuation is made). These transactions include, but are not limited to, native system load contracts, energy forwards, energy options, and other energy derivative instruments for unit specific generation units. Due to the public service nature of its business, TVA historically values its resource positions for the year ahead.

When available, quoted market prices are used to record a contract's fair value. However, market values for energy trading contracts may not be readily determinable because the duration of the contracts exceeds the liquid activity in a particular market. If no active trading market exists for a commodity, holders of these contracts must calculate fair value using pricing models based on contracts with similar terms and risks.

Based on September 30, 2004, closing prices, the MTM value of TVA's electricity portfolio for 2005 is \$3.9 billion. The fair value calculation determines a profit or loss for each source of fair value, e.g. load, based on market prices. For example, instead of using accrual accounting to calculate load revenue, the MTM calculation compares the load revenue from selling the generation to customers to the load revenue from selling the generation into the market. The difference is the MTM value. Market prices for electricity have a small impact on TVA margins because only a small portion of TVA's energy needs are bought or sold in the market.

# Credit Risk

Credit risk is the exposure to economic loss that would occur as a result of a counterparty's nonperformance of its contractual obligations.

The majority of TVA's credit risk is limited to trade accounts receivable from delivered power sales to municipal and cooperative distributors, all located in the seven-state Tennessee Valley region. To a lesser extent, TVA is exposed to credit risk from industries and federal agencies directly served and from exchange power arrangements with a small number of investor-owned regional utilities related to either delivered power or the replacement of open positions of longer-term purchased power or fuel agreements.

Where exposed to credit risk, TVA analyzes the counterparty's financial condition prior to entering into an agreement, establishes credit limits, monitors the appropriateness of those limits on an ongoing basis, and employs credit mitigation measures, such as collateral or prepayment arrangements and master purchase and sale agreements, to mitigate credit risk.

The table below summarizes TVA's counterparty credit risk exposure as of September 30, 2004:

# Counterparty Credit Risk Exposure (in millions)

#### Trade Accounts Receivable: (1) Municipalities & Cooperative Distributors Investment Grade ..... 608 316 Industries & Federal Agencies Directly Served Investment Grade ..... 27 Non-investment Grade (2) 21 8 10 **Exchange Power Arrangements** Investment Grade ..... 9 Non-investment Grade ..... 1 1 1,001 Subtotal ..... Other Accounts Receivable: Miscellaneous Accounts ..... 41 (8) 33 Total ..... 1,034

#### Notes

- (1) Includes unbilled power receivables of \$713 million.
- (2) Includes receivable of \$12 million from one customer rated "Ba3" by Moody's Investor Service and "BB-" by Standard and Poor's

TVA has concentrations of accounts receivable from seven customers that represented 35.6 percent of total accounts receivable as of September 30, 2004.

# **Rating Triggers**

As of September 30, 2004, TVA was a party to five swap contracts, one swaption contract, and 21 power purchase agreements that contained rating triggers. TVA's primary triggers in its power purchase agreements are based on the Edison Electric Institute standard contract agreement. Under most of these rating triggers, the amount of collateral that TVA will have to post under certain circumstances will increase if TVA's rated bonds are downgraded. So long as TVA maintains an investment grade credit rating, the requirement to post collateral under any of these contracts, if triggered, would not have a material effect on TVA's financial condition.

#### **Derivatives**

To manage the volatility attributable to its various risk exposures, TVA has entered into various nontrading derivative transactions. TVA risk management policies provide for the use of derivative financial instruments to manage financial exposures but prohibit the use of these instruments for speculative trading purposes. TVA accounts for these derivative instruments in accordance with the provisions of SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, as amended by SFAS No. 138, Accounting for Certain Derivative Instruments and Certain Hedging Activities, and SFAS No. 149, Amendment of Statement 133 on Derivative Instruments and Hedging Activities.

Derivative contracts utilized by TVA include currency and interest rate swap agreements, swaptions and option contracts on various commodities, and emission allowances. 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 6—Foreign Currency and Interest Rate Swaps). Based on TVA's overall interest rate exposure at September 30, 2004, including derivative and other interest rate sensitive instruments, a near-term one percentage point change in interest rates would not have a material impact on TVA's financial position or results of operations.

#### **Forward Contracts**

TVA enters into electricity forward contracts for the sole purpose of limiting or otherwise hedging its economic risks directly associated with meeting its power supply obligations in the Tennessee Valley region. During 2004, TVA supplied approximately 6.25 percent of system requirements with power purchased under electricity forward contracts. These contracts qualify for normal purchase and normal sale accounting under SFAS No. 133, as interpreted by DIG Issue C15 (see "Management's Discussion and Analysis of Financial Condition and Results of Operations" — "Critical Accounting Policies" — "Normal Purchases and Normal Sales Special Exemption"). At September 30, 2004, management does not anticipate a materially adverse effect on TVA's financial position or results of operations as a result of market fluctuations.

## **Financial Trading Pilot Program**

A financial trading pilot program to reduce TVA's economic risk exposure associated with TVA's physical electric generation, purchases, and sales was approved by the Board on September 11, 2003. The program enables TVA to trade certain futures contracts and options on futures contracts for the purpose of managing risks associated with the cost of natural gas and fuel oil for TVA's power generation operations and risks under power purchase or sale arrangements where the energy price varies based upon a fuel index. Trading of authorized futures contracts and options on futures contracts is limited solely to those transactions that hedge or otherwise limit economic risks directly associated with TVA's fuel requirements for power generation or with the aforementioned type of power purchase or sale arrangement. Transactions are limited to trading of NYMEX futures contracts and options on futures contracts related to natural gas and fuel oil. Trading is not authorized for speculative purposes. The pilot program extends through August 31, 2005. Trading under this pilot program commenced on May 26, 2004, and trades are being executed routinely. TVA monitors the program's status on a daily basis by tracking the program's financial positions and Value at Risk. See note 6—*Pilot Program*.

At September 30, 2004, TVA had no derivative instruments outstanding under this pilot program. The hedge pilot allowed TVA to effectively hedge the price risk associated with a portion of its power purchases during Summer 2004 and the hedge positions were effective for meeting the target price of the associated power purchase agreements. TVA realized losses of approximately \$0.7 million which were included in the purchased power expense for the year ended September 30, 2004. The losses on the positions were less than five percent of the total natural gas expense for the period.

# Financial Trading Pilot Activity For the Year ended September 30, 2004

_	Notional Amount (in mmBtu)	
Futures position at beginning of year  Futures purchased  Futures sold  Loss realized	. 1,250,000 . (1,250,000)	\$ - 8 (7) (1)
Futures position at end of year	. <u> </u>	<u> </u>

# FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

# STATEMENTS OF INCOME

# For the years ended September 30 (in millions)

(			
	2004	2003	2002
Operating revenues			
Sales of electricity			
Municipalities and cooperatives	\$ 6,457	\$ 5,974	\$ 5,856
Industries directly served	842	781	732
Federal agencies and other	140	120	120
Other revenue	94	78	90
Total operating revenues	7,533	6,953	6,798
Operating expenses			
Fuel and purchased power	2,081	1,957	1.877
Operating and maintenance	2,319	2,039	1,861
Depreciation and accretion (note 1)	1,115	1.073	1,037
Tax-equivalents	338	329	328
Loss on project/plant cancellation	20	529	154
		_	66
Accelerated amortization			
Total operating expenses	5,873	5,398	5,323
Operating income (note 12)	1,660	1,555	1,475
Other income, net	37	29	17
Unrealized losses on derivative contracts, net	(7)	(7)	-
Interest expense			
Interest on debt	1.379	1.396	1,468
Amortization of debt discount, issue, and reacquisition costs, net	24	28	22
Allowance for funds used during construction	(99)	(74)	(61)
Net interest expense	1,304	1,350	1,429
Income before cumulative effects of accounting changes	386	227	63
Cumulative effect of change in accounting for unbilled revenue	_	412	_
Cumulative effect of change in accounting for asset retirement		(105)	
obligations		(195)	
Net income	\$ 386	\$ 444	\$ 63
Pro-forma net income assuming accounting changes are			
applied retroactively (note 1)			<u>\$ 134</u>

The accompanying notes are an integral part of these financial statements.

# BALANCE SHEETS At September 30 (in millions)

# **ASSETS**

		2004		2003
Current assets Cash and cash equivalents Short-term investments, net Accounts receivable, net Inventories at average cost and other	\$	519 335 1,034	\$	533 267 994
Fuel Other Total current assets		193 305 2,386		219 308 2,321
Property, plant, and equipment Completed plant Less accumulated depreciation Net completed plant Construction in progress Nuclear fuel and capital leases Total property, plant, and equipment, net	_	34,786 (13,424) 21,362 1,923 504 23,789		33,637 (12,568) 21,069 1,619 530 23,218
Deferred nuclear generating units (notes 1 and 2)		3,909		4,110
Investment funds		744		638
Deferred charges and other assets  Loans and other long-term receivables, net  Reacquisition costs  Other deferred charges  Regulatory assets (note 1)  Total deferred charges and other assets		144 277 974 2,057 3,452	_	191 241 531 1,861 2,824
Total assets	\$	34,280	\$	33,111
LIABILITIES AND PROPRIETARY CA		L	<del></del>	,
Accounts payable Accrued liabilities Accrued interest Current portion of lease/leaseback obligations Current portion of energy prepayment obligations Short-term debt, net Current maturities of long-term debt Total current liabilities	<b>\$</b>	761 284 402 35 105 1,924 2,000 5,511	\$ 	777 232 404 68 5 2,080 2,336 5,902
Other liabilities Deferred liabilities Asset retirement obligations Lease/leaseback obligations Energy prepayment obligations (note 1) Total other liabilities		2,893 1,782 1,143 1,350 7,168		2,177 1,725 1,170 42 5,114
Long-term debt Public bonds		19,326 11 19,337 32,016		20,459 (258) 20,201 31,217
Commitments and contingencies (note 10)				
Proprietary capital Appropriation investment Retained earnings Accumulated other comprehensive loss Accumulated net expense of nonpower programs Total proprietary capital	_	4,803 1,162 (52) (3,649) 2,264		4,823 783 (74) (3,638) 1,894
Total liabilities and proprietary capital	\$	34,280	\$	33,111

The accompanying notes are an integral part of these financial statements.

## STATEMENTS OF CASH FLOWS For the years ended September 30 (in millions)

	2004	2003	2002
Cash flows from operating activities			
Net income	\$ 386	\$ 444	\$ 63
Items not requiring (providing) cash	,	,	,
Depreciation, amortization, and accretion	1,239	1,140	1,093
Accelerated amortization	_	_	66
Allowance for funds used during construction	(99)	(74)	(61)
Nuclear fuel amortization	132	127	142
Loss on project/plant cancellation	20	_	154
Cumulative effects of accounting changes	_	(217)	_
Other, net	132	101	(26)
Changes in current assets and liabilities			` ,
Short-term investments, net	(68)	(118)	(30)
Accounts receivable, net	(41)	` 78 <sup>°</sup>	`66 <sup>°</sup>
Inventories and other	10	(65)	(49)
Accounts payable and accrued liabilities	26	149	(5)
Accrued interest	(5)	2	7
Proceeds from energy prepayments	1,504	51	_
Refueling outage costs	(86)	(93)	(96)
Other	(27)	(14)	(10)
Net cash provided by operating activities	3,123	1,511	1,314
The second secon	-,	-, <b>-</b>	.,
Cash flows from investing activities			
Construction expenditures	(1,552)	(1,693)	(1,230)
Proceeds from project cancellation settlement (note 1)	15	_	_
Allowance for funds used during construction	99	74	61
Nuclear fuel expenditures	(119)	(187)	(146)
Loans and other receivables			
Advances	(17)	(33)	(25)
Repayments	22	24	23
Other, net	1	(9)	3
Net cash used in investing activities	(1,551)	(1,824)	(1,314)
Cash flows from financing activities			
Long-term debt			
Issues	772	2,309	2,120
Redemptions and repurchases	(2,251)	(1,285)	(2,720)
Short-term (redemptions) borrowings, net	(157)	(1,412)	476
Proceeds from call monetizations	` _	256	_
Proceeds from equipment financing	_	389	_
Proceeds from combustion turbine financing	_	325	320
Bond premium received	97	_	_
Proceeds from swap receivable monetization	55	_	_
Payments on combustion turbine financing	(32)	(36)	(31)
Payments on equipment financing	(29)	_	_
Financing costs, net	(3)	(58)	(58)
Payments to U.S. Treasury	(38)	(42)	(50)
Net cash (used in) provided by financing activities	(1,586)	446	57
Not about in each and each amiliarity	(4.4)	400	F-7
Net change in cash and cash equivalents	(14)	133	57
Cash and cash equivalents at beginning of period	533	400	343_
Cash and cash equivalents at end of period	<u>\$ 519</u>	\$ 533	\$ 400

The accompanying notes are an integral part of these financial statements.

## STATEMENTS OF CHANGES IN PROPRIETARY CAPITAL

# For the years ended September 30 (in millions)

	Appropriation Investment	Retained Earnings	Accumulated Other Comprehensive Loss	Accumulated Net Expense of Nonpower Programs	Total	Comprehensive Income
Balance at September 30, 2001	_	\$ 306 73	\$ (106) -	\$ (3,616) (10)	\$ 1,447 63	\$ – 63
Return on appropriation investment	-	(30)	(44) —	- - -	(30) (44) (20)	(44) —
Balance at September 30, 2002  Net income (loss)  Return on appropriation investment  Other comprehensive income (note 5)  Return of appropriation investment	- - -	\$ 349 456 (22) -	\$ (150) - - 76	\$ (3,626) (12) - -	\$ 1,416 444 (22) 76 (20)	\$ 19 444 - 76 -
Balance at September 30, 2003  Net income (loss)  Return on appropriation investment  Other comprehensive income (note 5)  Return of appropriation investment	, - -	783 397 (18) –	(74) - - 22 -	(3,638) (11) - -	1,894 386 (18) 22 (20)	\$ 520 386 22 ————
Balance at September 30, 2004	\$ 4,803	\$ 1,162	\$ (52)	\$ (3,649)	\$ 2,264	\$ 408

The accompanying notes are an integral part of these financial statements.

#### NOTES TO FINANCIAL STATEMENTS

## 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 includes parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina, and Virginia.

TVA's operations have historically been divided into two types of activities, the power program and the non-power 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 power financings, such as proceeds from the issuance of debt. Although TVA no longer receives congressional appropriations, it is required to make annual payments to the United States Treasury in repayment of, and as a return on, the government's appropriation investment in TVA power facilities. Until 2000, most of the funding for TVA's nonpower programs was provided by congressional appropriations. These programs are now funded largely with power funds. Certain nonpower activities are also funded with various revenues and user fees. Prior to 2004, TVA presented information separately on its power program and nonpower programs in its financial statements. Because of the change in funding explained above, beginning with the fourth quarter of 2004, TVA is presenting consolidated financial statements which include both power and nonpower activities. See notes 3 and 11 for information related to TVA's power and nonpower programs.

Power rates are established by the TVA Board of Directors ("Board") 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 and counties in lieu of taxes; and debt service on outstanding indebtedness. Rates set by the Board are not subject to review or approval by any state or federal regulatory body. In a future restructured electric power industry, it is possible, however, that the ability of the Board to set TVA's rates as specified in the TVA Act could be adversely affected by legislative changes or by competitive pressures.

TVA prepares its financial statements in conformity with generally accepted accounting principles in the United States of America applied on a consistent basis and, in some cases, TVA's financial statements reflect amounts based on the best estimates and judgment of management.

## Fiscal Year

Unless otherwise indicated, years (2004, 2003, etc.) refer to TVA's fiscal years ended September 30.

## Cost-Based Regulation

Although TVA's power rates are not subject to regulation through a public service commission or other similar agency, its Board of Directors receives authority from the TVA Act to maintain and operate the property of TVA and to set binding rates for power sold to its customers in accordance with the provisions of the TVA Act. The rate-setting authority vested in the TVA Board by the TVA Act meets the "self-regulated" 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 regulated ratemaking process that would not be recorded under generally accepted accounting principles ("GAAP") for non-regulated entities. Regulatory assets generally represent incurred costs that have been deferred because such costs are probable of future recovery in customer rates. Regulatory liabilities generally represent obligations to make refunds to customers for previous collections for costs that are not likely to be incurred. Management continually assesses whether the regulatory assets are probable of future recovery by considering factors such as applicable regulatory changes, potential legislation, and changes in technology. Based on this continual assessment, management believes the existing regulatory assets are probable of recovery. This determination reflects the current regulatory and political environment and is subject to change in the future. If future recovery of regulatory assets ceases to be probable, TVA would be required to write-off these costs under the provisions of SFAS No. 101, *Regulated Enterprises—Accounting for the Discontinuation of Application of FASB Statement No. 71*. The asset write-offs would

be required to be recognized in earnings in the period in which regulatory accounting under SFAS No. 71 ceased to apply.

Regulatory assets capitalized under the provisions of SFAS No. 71 are shown as Regulatory ASSETS, REACQUISITION COSTS, and DEFERRED NUCLEAR GENERATING UNITS on the Balance Sheet. These assets consist of certain charges related to the closure and removal of nuclear units, unrealized losses related to mark-to-market valuations of certain derivative contracts, and an adjustment related to the minimum pension liability. The year-end balances of TVA's regulatory and deferred nuclear assets included on the Balance Sheets are as follows:

	At Sept	tember 30	
(in millions)	2004	2	2003
Decommissioning costs	\$ 755	\$	783
Changes in fair value of derivative contracts	59		50
Adjustment to accrue minimum pension liability (see note 10)			
Tennessee Valley Authority Retirement System	1,235		1,028
Supplement Executive Retirement Plan	 8		_
Subtotal	2,057		1,861
Reacquisition costs	277		241
Deferred nuclear generating units	 3,909		4,110
	\$ 6,243	\$	6,212

Reacquisition expenses, call premiums, and other related costs, such as unamortized debt issue costs associated with redeemed bond issues, are deferred under the provisions of the Federal Energy Regulatory Commission's Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act. These costs are amortized (accreted) on a pooled straight-line basis over the weighted average life of TVA's debt portfolio. The unamortized balances of such debt issue and reacquisition costs at September 30, 2004, and 2003 were \$277 million and \$241 million, respectively.

In addition, TVA has approximately \$3.9 billion of deferred nuclear units as of September 30, 2004, (see note 2). In the event that restructuring of the utility industry changes the application of SFAS No. 71, TVA would be required to evaluate its regulatory assets and deferred nuclear units under the provisions of SFAS No. 101, *Accounting for the Discontinuation of Application of SFAS No. 71*. SFAS No. 101 establishes reporting criteria for an enterprise that ceases to meet the criteria for application of SFAS No. 71.

Regulatory liabilities accounted for under provisions of SFAS No. 71 consist of mark-to-market valuation gains on certain derivative contracts and other regulatory liabilities. The year-end balances of TVA's regulatory liabilities at September 30, 2004 and 2003, were \$478 million and \$46 million, respectively, and are included in Deferred Liabilities on the Balance Sheet.

#### 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 these estimates.

## Reclassifications

In 2003, TVA changed its method for recording interdivisional sales, displacement sales, and limestone used for production of electricity. The net effect of the reclassifications of interdivisional sales and displacement sales on Sales of Electricity was a decrease of \$39 million in 2002. The reclassifications also resulted in a corresponding decrease in Fuel and purchased power of \$35 million in 2002 and a decrease of \$4 million in Operating and Maintenance ("O&M"). The reclassification of limestone from Fuel and purchased power to O&M resulted in a decrease in Fuel and purchased power and a corresponding increase in O&M of \$13 million for 2002. These modifications had no effect on operating income, net income, or operating cash flows for the periods reclassified.

## Cash and Cash Equivalents

Cash and cash equivalents include the cash available in TVA's commercial bank accounts and Treasury accounts, as well as short-term securities held for the primary purpose of general liquidity. Such securities mature within three months from the date of acquisition.

#### Accounts Receivable

Accounts receivable primarily consist of amounts due from customers for power sales. The table below summarizes the types and amounts of receivables:

	At September 30					
(in millions)	2004	2003				
Power receivables billed Power receivables unbilled Total power receivables	\$ 288 	\$ 304 655 959				
Other receivables Allowance for uncollectible accounts Net accounts receivable	41 (8) \$ 1,034	43 (8) \$ 994				

#### Inventories

Coal, oil, limestone, tire-based fuel inventories, and materials and supplies inventories are valued at the lower of cost or market using an average unit cost method. A new average cost is computed after each transaction, and inventory issuances are priced at the latest moving weighted average unit cost.

## 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 construction. The cost of current repairs and minor replacements is charged to operating expense. Nuclear fuel inventories, which are included in Property, Plant, and Equipment, are valued 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 to allocate the cost of completed multipurpose 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 straight-line 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 3.32 percent for 2004 and 2003, and 3.33 percent for 2002. Depreciation rates (percent) by asset class are as follows:

Asset Class	2004	2003	2002
Nuclear	3.37	3.36	3.34
Coal-Fired	3.51	3.48	3.53
Hydro	1.72	1.70	1.70
Combustion turbine/diesel generators	4.41	4.63	4.30
Transmission	2.53	2.53	2.50
Other	6.07	6.26	6.64

#### Nuclear Fuel and Refueling Outage Costs

TVA's investment in the fuel used in the Sequoyah, Watts Bar, and Browns Ferry nuclear units is being amortized and accounted for as a component of fuel expense (see note 2). Nuclear refueling outage and maintenance costs are deferred and amortized on a straight-line basis over the estimated period until the next refueling outage. The amounts of deferred outage costs for the years ended September 30, 2004, 2003, and 2002 were \$86 million, \$100 million, and \$85 million, respectively.

### Investment Funds

Investment funds consist primarily of trust funds designated to fund nuclear decommissioning requirements (see note 10—*Contingencies*—*Decommissioning Costs*). Decommissioning funds, which are classified as trading, are invested in portfolios of securities generally designed to earn returns in line with overall equity market performance.

## **Energy Prepayment Obligations**

During October 2002, TVA introduced an energy prepayment program, the Discounted Energy Units ("DEU")

program. Under this program, TVA customers may purchase DEU generally in \$1 million increments, which entitles them to a \$0.025 dollar/kilowatt-hour discount on a specified quantity of firm power over a period of years (five, ten, 15, or 20) for each kilowatt-hour in the prepaid block. The remainder of the price of the kilowatt-hours delivered to the customer is due upon billing.

As of September 30, 2004, TVA had entered into sales agreements for 47.25 DEU totaling \$47.25 million for the 2003 program and sales agreements of 7.25 DEU totaling \$7.25 million for the 2004 program. TVA is accounting for the prepayment proceeds as unearned revenue and is reporting the obligations to deliver power as Energy prepayment obligations and Current portion of energy prepayment obligations on the September 30, 2004 Balance Sheets. TVA recognizes revenue as electricity is delivered to customers, based on the ratio of units of kilowatt-hours delivered to total units of kilowatt-hours under contract. As of September 30, 2004, over \$9.0 million has been applied against power billings on a cumulative basis during the life of the program, of which over \$5.5 million was recognized as revenue during 2004.

During 2004, TVA and its largest customer, Memphis Light, Gas & Water ("MLGW"), entered into an energy prepayment agreement under which MLGW prepaid TVA \$1.5 billion for the costs of electricity to be delivered by TVA to MLGW over a period of 180 months. In exchange for this prepayment, MLGW receives a credit on its monthly bills during this period. The City of Memphis issued bonds with net proceeds of \$1.5 billion, which were used to fund this prepay arrangement. The principal and interest on the bonds will be payable from MLGW's pledged revenues. The bonds are not obligations of TVA and are not secured by any TVA revenues or property. TVA received proceeds of \$1.5 billion from this transaction in December 2003, accounted for these proceeds as unearned revenue, and is reporting the obligation to deliver power as Energy prepayment obligations and Current portion of energy prepayment obligations on the September 30, 2004 Balance Sheets. TVA recognizes revenue as electricity is delivered to customers based on the ratio of units of kilowatt-hours delivered to total units of kilowatt-hours under contract. During the year ended September 30, 2004, over \$90.3 million was recognized as revenue.

#### Revenues

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's end.

Off-system sales are presented in the accompanying Statements of Income as a component of SALES OF ELECTRICITY—FEDERAL AGENCIES AND OTHER. Off-system sales are sales of excess power after meeting TVA native load and direct served requirements.

#### Insurance

TVA generally does not purchase commercial general liability, auto liability, workers' compensation, accidental property damage, and business interruption insurance. Additionally, although TVA uses private companies to administer its health-care plans for eligible active and retired employees not covered by Medicare, TVA does not purchase health insurance. Consulting actuaries assist TVA in determining certain liabilities for self-assumed claims. TVA recovers the costs of losses through power rates.

TVA maintains nuclear liability insurance and nuclear property, decommissioning, and decontamination insurance with an outside party (see note 10—Contingencies—Nuclear Insurance).

On September 23, 2004, the TVA Board approved the purchase of accidental outage (business interruption) insurance for TVA's nuclear sites from Nuclear Electric Insurance Limited ("NEIL"). In the event that an accident covered by the policy takes a nuclear unit offline or keeps a nuclear unit offline, NEIL will pay TVA, after a deductible waiting period, an indemnity (a set dollar amount per week) up to a maximum indemnity of \$490 million per unit. The policies went into effect in October 2004.

The Federal Employees' Compensation Act governs liability for service-connected injuries to employees.

#### Accelerated Amortization

Prior to 2003, annual provisions for amortization of deferred charges were adjusted as necessary in order to achieve certain earnings levels. Such earnings levels were set forth in resolutions adopted annually by the TVA Board in connection with the rate review process. The targeted earnings levels were based on the requirements of the TVA Act and the Basic Tennessee Valley Authority Power Bond Resolution (the "Basic Resolution") (see note 7—*Borrowing Authority*). As a result of surplus earnings levels in 2002, TVA accelerated amortization of certain regulatory assets by \$66 million.

#### Asset Retirement Obligations

In accordance with the provisions of SFAS No. 143, *Accounting for Asset Retirement Obligations*, TVA recognizes legal obligations associated with the future retirement of certain tangible long-lived assets. TVA only records estimates of such disposal costs at the time the legal obligation arises or costs are actually incurred. See note 4.

### Decommissioning Costs

TVA recognizes as incurred all obligations related to closure and removal of its nuclear units. TVA measures the liability for closure at the present value of the weighted estimated cash flows required to satisfy the related obligation, discounted at the credit adjusted rate of interest in effect at the time the liability was actually incurred or originally accrued, and subsequently modified to comply with the prevailing accounting provisions. Earnings from decommissioning investments, amortization of the decommissioning regulatory asset, and interest expense on the decommissioning liability are deferred (see note 10—*Contingencies—Decommissioning Costs*). Beginning in 2003, TVA evaluated the nature and scope of its decommissioning policy as it relates to all electric plant. The evaluation was used to determine the need for recognition of additional asset retirement obligations as described in SFAS No. 143, *Accounting for Asset Retirement Obligations*. SFAS No. 143, which became effective for TVA at the beginning of 2003 (see note 4).

## 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.

### Tax Equivalents

The TVA Act requires TVA to make payments to states and local governments where the power operations of the corporation are conducted and in which TVA has acquired properties previously subject to state and local taxation. The amount is five percent of gross receipts from the prior year's sale of power, excluding sales or deliveries to other federal agencies and off-system sales with other utilities, with a provision for minimum payments under certain circumstances.

## Project/Plant Cancellation

In December 2003, TVA was notified that Regenesys Technologies Limited ("RTL") would not proceed with manufacturing of the fuel cells to be installed in the partially completed Regenesys energy storage plant in Columbus, Mississippi. TVA had invested approximately \$35 million in the Regenesys project. RTL reimbursed TVA for early termination of the contract in the amount of \$15 million, which reduced the net loss to \$20 million on the cancellation of the Regenesys project.

Due to changes in the market forecast, TVA elected during 2002 not to complete a gas-fired combined-cycle plant that would have provided 510 megawatts of power in 2004. Accumulated costs of the project totaled approximately \$154 million, which TVA recognized as a loss on plant cancellation in 2002.

## Impairment of Assets

TVA evaluates long-lived assets for impairment in accordance with the provisions of SFAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets, when events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. For long-lived assets to be held and used, TVA bases its evaluation on impairment indicators such as the nature of the assets, the future economic benefit of the assets, any historical or future profitability measurements, and other external market conditions or factors that may be present. If

such impairment indicators are present or other factors exist that indicate that the carrying amount of the asset may not be recoverable, TVA determines whether an impairment has occurred based on an estimate of undiscounted cash flows attributable to the assets, as compared with the carrying value of the assets. If an impairment has occurred, the amount of the impairment recognized is measured as the excess of the asset's carrying value over its fair value.

#### Reduction in Workforce

During 2004, organizations within TVA performed program and staffing reviews to identify surplus staffing situations. In areas where surplus staffing exists, TVA asked for employees to apply for voluntary resignations beginning in February 2004. To the extent there are not enough volunteers, TVA is conducting an involuntary Reduction in Force ("RIF"). As of September 30, 2004, there were 690 employees impacted by this change, and TVA has recognized total expense in the amount of \$36 million for termination costs incurred through September 30, 2004. Payout of benefits occur as employees retire from TVA. Substantially all affected employees will have retired by the end of 2005.

Changes in the associated liability are as follows:

(in millions)	For the year	r ended September 30 2004
Termination benefit liability at beginning of year		36
Actual severance benefits paid  Estimated medical benefits paid  Termination benefit liability at end of year		

### Impact of New Accounting Standards and Interpretations

Variable Interest Entities. In January 2003, the FASB published Interpretation No. 46, Consolidation of Variable Interest Entities, which was revised by Interpretation No. 46R ("46R") in December 2003. This interpretation explains how to identify variable interest entities ("VIEs") and how an enterprise assesses its interests in a VIE to decide whether to consolidate that entity. It also clarifies the application of Accounting Research Bulletin No. 51, Consolidated Financial Statements, to certain entities in which equity investors do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. The interpretation applies to nonpublic enterprises, and it becomes effective for TVA beginning October 1, 2005, for VIEs created on or before December 31, 2003, and immediately for VIEs created after December 31, 2003.

TVA has not identified any material VIEs created, or interests in VIEs obtained, after December 31, 2003, which require consolidation or disclosure under FIN 46(R). TVA continues to assess the existence of any interests in VIEs created on or prior to December 31, 2003, which may or may not be material to its results of operations or financial position.

Pension and Other Postretirement Benefit Disclosures. In December 2003, the FASB issued SFAS No. 132 (revised), Employers' Disclosures about Pensions and Other Postretirement Benefits, which is designed to improve financial statement disclosures for defined benefit plans and replaces existing FASB disclosure requirements for pensions. TVA adopted the nonpublic disclosure requirements of this standard for the quarter beginning January 1, 2004, (see note 9).

In May 2004, the FASB issued Staff Position ("FSP") FAS 106-2, Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003. This FSP provides accounting guidance for employers that sponsor defined benefit postretirement health care plans that provide prescription drug benefits, and requires those employers to provide certain disclosures regarding the effect of the federal subsidy provided by this act. TVA adopted the nonpublic disclosure requirements of the FSP for reporting periods beginning after June 30, 2004, (see note 9).

Accounting for Energy Trading Contracts. Effective October 1, 2002, TVA adopted Emerging Issues Task Force ("EITF") Issue 02-3, Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities, and reached two general conclusions:

- Energy trading contracts that do not meet the definition of a derivative under SFAS No. 133 should not be marked to fair market value, and
- Revenues should be shown in the income statement net of costs associated with trading activities, whether or not the trades are physically settled, if the derivative instruments are held for trading purposes. In addition, entities may simply choose to designate and report transactions on a net basis for ease of administration even though such transactions do not meet the strict definition of trading activities.

As a matter of policy and practice, TVA does not engage in trading activities as defined by the EITF as "active and frequent buying and selling...with the objective of generating profits on short-term differences in price." Rather, TVA makes purchases and sales decisions based on projected TVA system demand and supply positions. Under certain circumstances, TVA may find that it has purchased power commitments from others that turn out to be in excess of TVA system needs due to changing operating conditions (such as weather, TVA plant availability, transmission constraints, etc.) or changing economic conditions, and TVA ultimately sells that surplus power to exchange power customers. Conversely, TVA also may need to purchase power from others to meet pre-existing sales commitments to others due to similar changing operating or economic conditions that impact the availability or deliverability of TVA system resources.

TVA does not differentiate between those transactions that are entered into based on changing operating conditions and those entered into based on changing market conditions. Accordingly, TVA refers to all of these types of transactions as "displacement purchases and sales." These displacement purchases and sales are usually transacted within days or hours of each other. In very limited situations, a purchase and sale transaction might be entered into at essentially the same time for the same quantity and for the same delivery time. For instance, at the time that a sales transaction is made from system resources at a certain price based upon an expected system cost projection, a purchase opportunity from the market for the system might also be immediately available that is priced less than or equal to the expected system cost. In that situation, the purchase transaction might be made to immediately support the system in meeting the initial sales commitment to mitigate the risk exposure due to the uncertainly in predicting the expected system cost.

TVA reports its displacement purchases and sales on a net basis on the Income Statements. During 2004, 2003 and 2002, TVA had net gains from displacement transactions of \$2.8 million, \$7.0 million, and \$5.7 million, respectively. In addition, the total volume of displacement transactions during 2004, 2003, and 2002 was 407,636, megawatt-hours, 1,240,325 megawatt-hours, and 1,357,836 megawatt-hours, respectively. As a result of adopting this new standard, revenue and purchased power expense in prior periods have been restated to conform to the current year presentation. There was no impact on net income in any period. The adoption of this new standard reduced revenue and purchased power expense by \$36 million and \$35 million for the years ended September 30, 2003, and 2002, respectively.

## Accounting Changes

Effective October 1, 2002, the Board approved a change in the methodology for estimating unbilled revenue from electricity sales. The change in calculating unbilled revenue was from a method using cumulative generation to a method that uses only generation for the current billing period. The impact of this change resulted in an increase in accounts receivable of \$412 million with a corresponding cumulative effect gain for the change in accounting for unbilled revenue.

In addition, adoption of SFAS No. 143, *Accounting for Asset Retirement Obligations*, in 2002 resulted in a cumulative effect charge to income of \$195 million, a corresponding additional long-term liability of \$734 million, an increase in assets of \$745 million, and an increase in accumulated depreciation of \$206 million.

Pro-forma net income for 2002, assuming that the changes in accounting had been applied retroactively, is as follows:

(in millions)	For the year ended September 3 2002						
Historical net income		\$	63				
Unbilled revenue			81				
Adoption of SFAS No. 143			(10)				
Pro-Forma net income		\$	134				

#### 2. Nuclear Power Program

The nuclear power program at September 30, 2004, consisted of nine units—five operating, three deferred, and one in recovery at four locations, with investments in property, plant, and equipment, and deferred nuclear generating units as follows and in the status indicated:

	Operating Units	Installed Capacity (MW)	mpleted ant, Net	 struction Progress	Def	erred	Fuel estment
(in millions)			 	 			 
Browns Ferry*	2	2,380	\$ 2,284	\$ 970	\$	_	\$ 130
Sequoyah	2	2,442	1,873	23		_	99
Watts Bar	1	1,270	5,661	61		_	40
Bellefonte	_	_	_	_		3,909	_
Raw materials	_	_	_	_		_	96
Total	5	6,092	\$ 9,818	\$ 1,054	\$	3,909	\$ 365

Note

Browns Ferry Unit 1 was taken offline in 1985 for modifications and improvements and will continue to remain in an inoperative status until recovered. In May 2002, the TVA Board initiated activities for the return of Unit 1 to service in order to meet long-term power requirements. The decision was made upon completion of the Detailed Scoping, Estimating and Planning project and the Final Supplemental Environmental Impact Statement, which demonstrated that Unit 1 can be returned to safe operation in a controlled manner and that operating the unit will have no significant, adverse impacts on the environment. TVA has determined that restarting Unit 1 is the best alternative currently available among the mix of generation options. It is anticipated the Unit 1 recovery project will add approximately 1,280 megawatts of generation at a cost of approximately \$1.8 billion, exclusive of AFUDC. Unit 1 is expected to return to service in 2007, and the additional generating capacity is expected to lower the average cost of power and provide additional cash flow. The undepreciated cost of Unit 1 of \$32 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. At September 30, 2004, TVA had incurred approximately \$848 million of costs, including AFUDC of \$44 million, on the restart project, and the project was approximately 50 percent complete.

TVA has three units for which construction has been deferred. In 1988, TVA suspended construction activities on Watts Bar Unit 2 and the unit is currently in lay-up. Bellefonte Units 1 and 2 were deferred in 1988 and 1985, respectively. Upon review, it was determined that certain assets at the Bellefonte site have achieved a usable state such as the diesel generators, training facilities, transmission structures, etc. Consequently, during the fourth quarter of 2004, the Board approved the reclassification of \$203 million of Bellefonte assets from Deferred Nuclear Generating Units to Completed Plant. Estimated 2005 expenditures for the remaining three deferred units are limited to lay-up, maintenance, and ensuring that options for the use of the units remain viable.

In December 1994, TVA determined that it would not, by itself, complete Bellefonte Unit 1 and Unit 2 and Watts Bar Unit 2 as nuclear plants. Bellefonte remains in a deferred status; however, TVA continues to evaluate options for Bellefonte. Options for conversion of Bellefonte to a fossil-fired plant (e.g., natural gas or gasified coal) have been evaluated. TVA is currently leading a team conducting a cost and schedule study on building an Advanced Boiling Water Reactor ("ABWR") on the Bellefonte site. Other members of the team doing this study, which is being performed under the Department of Energy's ("DOE's") Nuclear Power 2010 program, include Toshiba Corp., General Electric Corp., Bechtel Corp., USEC, and Global Nuclear Fuel—Americas. The ABWR has been design-certified in the United States by the Nuclear Regulatory Commission ("NRC"). The study will verify the costs of building a new ABWR plant, which could provide another option for utilities interested in preserving the nuclear option for the future.

<sup>\*</sup> Browns Ferry Unit 1, a unit in recovery, is discussed below.

In December 2003, TVA submitted an application to the NRC for a 20-year extension of the operating licenses for three reactors at Browns Ferry Nuclear Plant. Current expiration dates for the Browns Ferry units are:

Browns Ferry Unit 1								 			.2013	
Browns Ferry Unit 2								 			.2014	
Browns Ferry Unit 3								 			.2016	

The original 40-year term on licenses per the Atomic Energy Act and the NRC regulations was based on economic and antitrust considerations-not on limitations of technology. If the NRC approves the application, it will allow TVA to continue production of power from the facility until 2033, 2034, and 2036 for units 1, 2, and 3, respectively.

## 3. Completed Plant

Completed plant consists of the following at September 30:

			2004			2003						
(in millions)	Co	st	 umulated reciation		Net		Cost			umulated reciation		Net
Power Program												
Fossil	\$	9,869	\$ 4,614	\$	5,255		\$	9,114	\$	4,394	\$	4,720
Combustion Turbine		1,171	393		778			1,168		345		823
Nuclear	1	5,441	5,623		9,818			15,397		5,143		10,254
Transmission		4,165	1,422		2,743			4,030		1,340		2,690
Hydro		1,823	616		1,207			1,751		588		1,163
Other		1,306	429		877			1,166		441		725
Total	3	33,775	13,097		20,678			32,626		12,251	_	20,375
Nonpower Program												
Multipurpose dams		963	318		645			963		309		654
Other		48	9		39			48		8		40
Total nonpower		1,011	327	_	684			1,011	_	317	_	694
	\$ 3	34,786	\$ 13,424	\$	21,362		\$	33,637	\$	12,568	\$	21,069

#### 4. Asset Retirement Obligations

Effective October 1, 2002, TVA adopted SFAS No. 143, *Accounting for Asset Retirement Obligations*, which requires the recognition of a liability, and capitalization of the associated asset retirement cost as part of the carrying amount of the long-lived asset, for legal obligations associated with the retirement of long-lived assets that result from the acquisition, construction, development, and/or normal operation of long-lived assets. TVA identified and reviewed all relevant information in the determination of its potential asset retirement obligations ("AROs"). TVA identified three categories of AROs which represent legal obligations of TVA under the requirements set forth in the standard. Costs associated with retirement of coal-fired (including ash/waste ponds) and gas/oil turbine generating plants are being expensed as period costs while costs associated with retirement of nuclear generating plants are receiving SFAS No. 71, *Accounting for the Effects of Certain Types of Regulation*, treatment based on the partially funded status of the nuclear decommissioning obligation (see note 1—*Cost-Based Regulation*).

Nuclear Generating Plants. In prior years, TVA had recognized a decommissioning liability related to its nuclear generating plants in accordance with NRC requirements. This previously recorded liability represents the pre-SFAS No. 143 obligation for TVA's nuclear plant AROs, which amounted to \$891 million at September 30, 2002. The adoption of SFAS No. 143 resulted in a change in the methodology of quantifying this nuclear decommissioning obligation in accordance with the new accounting standard. TVA has increased the nuclear decommissioning liability on the balance sheet to reflect the new methodology, which amounted to \$1,421 million at September 30, 2002, but has retained its regulatory accounting treatment of capturing all changes in the liability, investment funds, and certain other deferred charges as changes in the regulatory asset instead of recording these items on the income statement. This nuclear decommissioning liability is reported as ASSET RETIREMENT OBLIGATIONS on the 2004 and 2003 Balance Sheets.

Coal-Fired Generating Plants. The activities associated with coal plant retirement include plant shutdown, securing the physical property, closure of storage and/or waste areas (including ash/waste ponds), maintenance of

stack lights, security patrols, and measures to contain asbestos and other hazardous materials from release into the environment. The estimated costs of these activities have been included in the calculation of TVA's coal plant AROs. Certain ash ponds and waste areas have estimated useful lives that are independent of the lives of the coal plants themselves. Accordingly, these specific ash/waste pond areas were quantified as separate AROs based on their specific estimated useful lives.

Gas/Oil Turbine Generating Plants. The activities associated with gas and oil turbine plant retirement include annual operating costs for site security, lighting, powerhouse and grounds maintenance, containment of asbestos, paint, and other materials, and groundwater monitoring. The estimated costs of these activities have been identified to be included in the calculation of TVA's combustion turbine plant AROs.

For each ARO identified, TVA calculated the net present value of the obligation as of the current period, the original and incremental cost of the long-lived asset at the time of initial operation, the cumulative effect of depreciation on the adjusted asset base, and accretion of the liability from the date of initial operation to the current period. The following table summarizes for each ARO category the original asset cost, the current ARO liabilities, the current fair market value of any assets legally restricted for purposes of settling the obligation (see "Management's Discussion and Analysis of Financial Condition and Results of Operations" — "Critical Accounting Policies" — "Nuclear Decommissioning Costs" and note 8—Investment Funds), and the estimated future liability at the time of closure.

ARO Category		riginal set Cost	•	tember 30 2004 bligation	•	tember30 2003 bligation	Va	Market alue of assets	Estimated Future Liability		
(in millions)											
Nuclear Plants	\$	470	\$	1,555	\$	1,510	\$	720	\$	10,212	
Coal-Fired Plants Gas/Oil Turbine Plants		19		225		214		N/A		1,021	
Total	•	490	•	1,782	•	1,725	•	<u>N/A</u> 720	•	46 11,279	
Total	Ψ	490	Ψ	1,702	φ	1,725	Ψ	720	φ	11,219	

During 2003, an ARO layer was added to the nuclear plant ARO category in connection with the steam generator replacement project at the Sequoyah plant. The result was an increase to the original cost of nuclear plant assets of \$9 million and a corresponding increase in nuclear plant retirement obligation of \$9 million at September 30, 2003. In September 2004, an additional ARO layer was added to the gas/oil turbine plants ARO category due to certain assets placed in service. The result was an increase to the original cost of the gas/oil assets of \$0.7 million and a corresponding increase in gas/oil retirement obligation of \$3.9 million at September 30, 2004.

In February 2004, TVA made revisions to the amount and timing of certain cash flow estimates related to its nuclear asset retirement obligations. The revisions in cost were based on new engineering studies performed annually in accordance with requirements of the NRC. The effect of the changes in estimates produced obligations that were less than the amounts originally recorded on an accreted basis. Accordingly, TVA made adjustments in the recorded amounts to properly reflect such revised balances based on the latest cost estimates. The adjustments resulted in an aggregate decrease of \$40 million in the asset retirement obligation, a \$12 million reduction in the asset base, a \$5 million reduction in accumulated depreciation, and a decrease of \$33 million in the originally recorded regulatory asset which TVA created in accordance with SFAS No. 71, Accounting for the Effects of Certain Types of Regulation. Therefore, the result of the change described did not impact net income for the year ended September 30, 2004.

TVA's total ARO liability increased \$101 million during 2003 due to accretion expense of \$92 million in addition to the new layer of \$9 million for the Sequoyah Nuclear Plant. The nuclear accretion expense of \$80 million was deferred and charged to a regulatory asset in accordance with SFAS No. 71. The remaining accretion expense of \$12 million, related to coal-fired and gas/oil plants, was expensed in 2003. For 2004, TVA's total ARO liability increased \$57 million due to accretion expense of \$97 million offset by the \$40 million revision to the nuclear ARO described above. The nuclear accretion expense of \$85 million was deferred and charged to a regulatory asset in accordance with SFAS No. 71. The remaining accretion expense of \$12 million, related to coal-fired and gas/oil plants, was expensed during 2004.

## **Reconciliation of Asset Retirement Obligation Liability**

	Year ended September 30							
(in millions)	2004	2003						
Balance at beginning of year	\$ 1,725	\$ 1,624						
Liabilities settled	-	_						
Accretion expense		92						
Revisions in estimated cash flows	(40)	9						
Balance at end of year	\$ 1,782	\$ 1,725						

## 5. Proprietary Capital

#### Appropriation Investment

The TVA Act requires TVA to make annual payments to the 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. TVA paid \$20 million each year for 2004, 2003, and 2002 as a repayment of the appropriation investment. In addition, TVA paid the Treasury \$18 million in 2004, \$22 million in 2003, and \$30 million in 2002 as a return on the appropriation investment. The return is based on the appropriation investment as of the beginning of the year and on the computed average interest rate payable by the Treasury on its total marketable public obligations as of the same date. These rates were 3.82 percent, 4.63 percent, and 5.82 percent at September 30, 2004, 2003, and 2002, respectively. Cumulative repayments and return on investment paid by TVA's power program to the Treasury approximate \$3.5 billion on the government's appropriation investment of \$1.4 billion, approximately \$995 million of which TVA has repaid.

## Accumulated Other Comprehensive Loss

SFAS No. 130, *Reporting Comprehensive Income*, requires the disclosure of comprehensive income or loss to reflect changes in capital that result from transactions and economic events from nonowner sources. The items included in accumulated other comprehensive loss consist of market valuation adjustments for certain derivative instruments (see note 6). The accumulated other comprehensive loss as of September 30, 2004, 2003, and 2002, was \$52 million, \$74 million, and \$150 million, respectively.

## Total Other Comprehensive Income (Loss) Activity (in millions)

Accumulated other comprehensive loss, September 30, 2001	\$ (106)
Changes in fair value: Interest rate swap Foreign currency swaps Accumulated other comprehensive loss, September 30, 2002	 10 (54) (150)
Changes in fair value: Interest rate swap Foreign currency swaps Accumulated other comprehensive loss, September 30, 2003	 13 63 (74)
Changes in fair value: Interest rate swaps Foreign currency swaps Accumulated other comprehensive loss, September 30, 2004	\$ 4 18 (52)

## 6. Risk Management Activities and Derivative Transactions

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 nontrading derivative transactions, principally interest rate swap agreements, foreign currency swap contracts, swaptions, and option contracts on various commodities.

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 credit risk.

With respect to hedging activities, TVA risk management policies provide for the use of derivative financial instruments to manage financial exposures but prohibit the use of these instruments for speculative or trading purposes. Prior to October 1, 2000, TVA accounted for hedging activities using the deferral method, and gains and losses were recognized in the financial statements when the related hedged transaction occurred. During 2001, TVA adopted SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, as amended by SFAS No. 138, Accounting for Certain Derivative Instruments and Certain Hedging Activities, and SFAS No. 149, Amendment of Statement 133 on Derivative Instruments and Hedging Activities.

The recorded amounts of these derivative financial instruments are as follows:

## Mark-to-Market Values of TVA Derivatives at September 30

		t/(Liability)	2004 Notional	Year of
200	04 Balance	2003 Balance	Amount	Expiration
Interest rate evene	(in	millions)		
Interest rate swaps: Inflation bond issue\$476 million bond issue	,	\$ 42 -	\$300 million \$476 million	2007 2044
Currency swaps:  Deutschemark Sterling	( - /	(149) (9)	DM1.5 billion GBP200 million	2006 2021
Sterling Sterling		44 11	GBP250 million GBP150 million	2032 2043
Swaptions: Call provision on \$1 billion bond issue Call provision on \$476 million bond issue	` ,	(207) (111)	\$1 billion	2042
Debt-embedded calls: Call provision on \$1 billion bond issue		169 91	\$1 billion	2042
Emission allowance call options	. 6	-	20,000 allowances	2005
Coal contracts-volume options	. 478	45	69 million tons	2017
Purchase power contracts	. (59)	(50)	500 MW for a 16 hour period each day from October 1, 2004 through May 31, 2007 plus a capacity charge of \$2.975 million per month for 32 months	2007

In accordance with SFAS No. 133, certain interest rate swaps and foreign currency swap contracts are accounted for on a mark-to-market basis and resulted in a gain/(loss) of \$22 million, \$76 million, and \$(44) million for 2004, 2003, and 2002, respectively. Since such contracts represent cash flow hedges of certain commodity and debt transactions, the gains/(losses) have been recognized in accumulated other comprehensive loss. Because of the highly effective nature of its hedging transactions, TVA was not required to recognize gains/(losses) in the Statements of Income. If any loss/(gain) were to be incurred as a result of the early termination of an interest rate swap contract,

any resulting charge/(income) would be amortized over the remaining life of the associated bond as a component of interest expense.

## Summary of Hedging Derivative Instruments as of September 30, 2004

Derivative Hedging Instrument	Hedged Item	Purpose of Hedge Transaction	Type of Hedge- Fair Value (FV) or Cash Flow (CF)	Accounting for Derivative Hedging Instrument	Accounting for the Hedged Item
Inflation Swap	Variable-principal debt	To fix the debt's variable cash flows to a fixed flow	CF	Cumulative gains and losses are recorded in other comprehensive income to the extent they are offset by cumulative gains and losses on the hedged transaction.	No adjustment is made to the basis of the hedged item.
Currency Swaps	Anticipated payment denominated in a foreign currency	To protect against changes in cash flows caused by changes in foreign-currency exchange rates	CF	Cumulative gains and losses are recorded in other comprehensive income to the extent they are offset by cumulative gains and losses on the hedged transaction.	No adjustment is made to the basis of the hedged item.
Swaption	Embedded call	To protect against a decreases in value of the embedded call	FV	All gains and losses on the derivative are recorded in earnings.	All gains and losses on the derivative are recorded in earnings as interest expense.

## Summary of Non-Hedging Derivative Instruments as of September 30, 2004

Derivative Type	Purpose of Derivative	Accounting for Derivative Instrument
Interest Rate Swap	To fix the debt's variable cash flows to a fixed rate	Gains and losses are recorded in earnings as interest expense.
Coal Contracts–Volume Options	To protect against fluctuations in market prices of the item to be purchased	Gains and losses are recorded as regulatory assets or liabilities until settlement at which time they are recognized in fuel and purchased power expense.
Purchase Power Contracts	To protect against fluctuations in market prices of the item to be purchased	Gains and losses are recorded as regulatory assets or liabilities until settlement at which time they are recognized in fuel and purchased power expense.
Emission Allowance Call Options	To protect against fluctuations in market prices	Gains and losses are recorded in earnings as unrealized gains/losses on derivative contracts.

## Commodity Contracts

TVA enters into contracts that hedge cash flow exposures to market fluctuations in the price and delivery of certain commodities including coal, natural gas, and electricity. TVA expects to take or make delivery, as appropriate, under these forward contracts. Accordingly, these contracts qualify for normal purchases and normal sales accounting under SFAS No. 133, as interpreted by Derivative Implementation Group Issue C15, which describes the criteria that must be met in order for such contracts to qualify for the use of normal purchases and normal sales accounting.

Gains and losses on cash flow hedges are deferred in Other comprehensive income and recognized as adjustments to the carrying amount of the items hedged. Deferral of the gains and losses continues until the items hedged are recognized in income. Gains and losses on derivatives not qualifying for hedge accounting are deferred in accordance with SFAS No. 71.

## Foreign Currency and Interest Rate Swaps

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 entered into a currency swap to hedge fluctuations in the DM exchange rate. The overall effective cost to TVA of these bonds and the associated swap was 7.13 percent. TVA also entered into currency swap contracts during 2003, 2001, and 1999 as hedges for sterling-denominated debt transactions in which TVA issued £150 million, £250 million, and £200 million of bonds, respectively. The overall effective costs to TVA of these bonds and the associated swaps were 4.96 percent, 6.59 percent, and 5.81 percent, respectively. 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, 2004, and 2003, the currency transactions had resulted in net translation losses of \$113 million and gains of \$35 million, respectively, which are included in the account Unamortized discount and other adjustments. However, the net translation gains were offset by corresponding losses on the swap contracts, which are reported as a deferred liability.

Additionally, in 1997 TVA issued \$300 million of inflation-indexed accreting principal bonds. The ten-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 receive-floating, pay-fixed interest rate swap agreement. The overall effective cost to TVA of these bonds and the associated swap was 6.64 percent. On September 21, 2004, TVA received a payment of \$55 million from the swap counterparty representing the present value of the accretion as of that date. The present value of the accretion is recorded as a Long-term receivable on the Balance Sheet. At the termination of the swap, instead of receiving the entire accreted balance from the counterparty, TVA will receive only the additional accretion from September 22, 2004, through the end of the swap.

#### Call Monetizations

During the second quarter of 2002, TVA monetized the call provisions on a \$1 billion public bond issue by entering into a swaption agreement with a third party in exchange for \$175 million. In the fourth quarter of 2003, TVA monetized the call provisions on a second public bond issue of \$476 million by entering into a swaption agreement with a third party in exchange for \$81 million. A swaption essentially grants a third party the right to exercise the embedded call provision of the applicable bond while TVA continues to pay the holders of the swaption pursuant to the original bond issuance. In February 2004, the counterparty to the second swaption transaction exercised its option to enter into a swap with TVA, effective April 10, 2004, requiring TVA to make fixed rate payments to the counterparty of 6.875 percent and the counterparty to make floating payments to TVA based on London Interbank Offered Rate ("LIBOR"). These payments are based on a notional principal amount of \$476 million, and the parties began making these payments on June 15, 2004. The remaining swaption is recorded in Other Liabilities on the September 30, 2004 Balance Sheet and is designated as a hedge of future changes in the fair value of the original call provisions. Under SFAS No. 133, TVA records the changes in market value of both the swaption and the embedded call. These values historically have been highly correlated; however, to the extent that the values do not perfectly offset, any differences will be recognized currently through earnings. These differences (including those for the second swaption prior to it being exercised in February 2004) amounted to a nearly \$10 million noncash gain for the year ended September 30, 2004. The swap is also recorded in Other Liabilities on the September 30, 2004 Balance Sheet, and the changes in market value are recognized currently in earnings. These changes amounted to a \$23 million noncash loss for the year ended September 30, 2004.

### Emission Allowance Call Options

In 2002, TVA purchased six call options for sulfur dioxide emissions allowances which expire in 2005. Each call option gives TVA the right, but not the obligation, to purchase 20,000 allowances.

### Pilot Hedging Program

A financial trading pilot program to reduce TVA's economic risk exposure associated with TVA's physical electricity generation, purchases and sales was approved by the Board on September 11, 2003. The program enables TVA to trade certain futures contracts and options on futures contracts for the purpose of managing risks associated with the cost of natural gas and fuel oil for TVA's power generation operations and risks under power purchase or sale arrangements where the energy price varies based upon a fuel index. Trading of authorized futures contracts and options on futures contracts is limited solely to those transactions that hedge or otherwise limit economic risks directly associated with TVA's fuel requirements for power generation or with the aforementioned type of power purchase or sale arrangement. Transactions are limited to trading of the NYMEX futures contracts and options on futures contracts related to natural gas and fuel oil. Trading is not authorized for speculative purposes. The pilot program extends through August 31, 2005. Trading under this pilot program commenced on May 26, 2004, and trades are being executed routinely. TVA monitors the program's status on a daily basis by tracking the program's financial positions and Value at Risk.

At September 30, 2004, TVA had no derivative instruments outstanding under this pilot program. The hedge pilot allowed TVA to effectively hedge the price risk associated with a portion of its power purchases during the summer of 2004, and the hedge positions were effective for meeting the target price of the associated power purchase agreements. TVA realized losses of approximately \$0.7 million which were included in the purchased power expense for the year ended September 30, 2004. The losses on the positions were less than five percent of the total natural gas expense for the period.

## Financial Trading Pilot Activity For the Year ended September 30, 2004

	Notional Amount (in mmBtu)	Contract Value (in millions)
Futures position at beginning of year	. 1,250,000	\$ – 8
Loss realized  Futures position at end of year	· — —	(7) (1) \$ -

## 7. 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 financial tests that are contained in the TVA Act and the Basic Resolution. Debt service on these obligations, which is payable solely from TVA's net power proceeds, has precedence over payments to the Treasury (see note 5—Appropriation Investment).

#### Short-Term Debt

The weighted average rates applicable to short-term debt outstanding in the public market as of September 30, 2004, 2003, and 2002, were 1.70 percent, 1.00 percent, and 1.74 percent, respectively. During 2004, 2003, and 2002, the maximum outstanding balances of short-term borrowings held by the public were \$2,093 million, \$3,425 million, and \$3,497 million, respectively. For these same years, the average amounts (and weighted average interest rates) of short-term borrowings were approximately \$859 million (1.15 percent), \$2,818 million (1.28 percent), and \$2,290 million (1.95 percent), respectively.

TVA also has access to financing arrangements with the Treasury whereby it is authorized to accept a short-term note with the maturity of one year in an amount not to exceed \$150 million. TVA may draw any portion of the authorized \$150 million during the year. Interest is accrued daily and paid quarterly at a rate determined by the Secretary of the Treasury each month based on the average rate on outstanding marketable obligations of the United States with maturities of one year or less. During 2004, 2003, and 2002, the daily average amounts outstanding (and average interest rates) were approximately \$35 million (1.06 percent), \$12 million (1.33 percent), and \$5 million (2.23 percent), respectively.

### Put and Call Options

Bond issues of \$2.4 billion held by the public are redeemable in whole or in part, at TVA's option, on call dates ranging from the present to 2020 and at call prices ranging from 100 percent to 106 percent of the principal amount. Additionally, TVA has bond issues of \$2.2 billion held by the public that are redeemable in whole or in part at the option of the respective bondholders, as follows: one bond issue totaling \$121 million, which matures in April 2036, is redeemable in 2006 by the bondholders; a second issue totaling \$1.5 billion, which matures in April 2036, is redeemable in 2006 at the option of the bondholders; and a third issue totaling \$600 million, which matures in December 2016, is redeemable in 2007 at the option of the bondholders. Each of these issues is reported in the debt schedule with maturity dates corresponding to the earliest redemption dates. Fifty-two issues totaling \$1.3 billion, with maturity dates ranging from 2008 to 2030, include a "survivor's option," which allows for right of redemption upon the death of a beneficial owner in certain specified circumstances. There is no accounting difference between a "survivor's option" put and a "regular" put on a put bond.

Additionally, TVA has two issues of Putable Automatic Rate Reset Securities ("PARRS") outstanding. After a fixed-rate period of five years, the coupon rate on the PARRS may automatically be reset downward under certain market conditions on an annual basis. Investors have the option to redeem the bonds at par if and when the interest rate is reset. One PARRS issue totals \$552 million, matures in June 2028, and had its first potential reset date in June 2003. The rate reset to 5.95 percent from 6.75 percent and \$23 million of the original \$575 million 1998 series D PARRS were redeemed at par. The second issue of PARRS totals \$410 million, matures in May 2029, and had its first potential rate reset date in May 2004. The rate reset to 5.62 percent from 6.50 percent and \$115 million of the original \$525 million 1999 Series A PARRS were redeemed at par. If the potential reset rate is less than the current coupon on the bond, the bond automatically resets to the lower rate. If the coupon rate is reset, the bondholders have the option to put their bonds back to TVA.

## Debt Securities Activity

The table below summarizes TVA's debt securities activity for the period from October 1, 2003, to September 30, 2004.

## Activity from October 1, 2003 to September 30, 2004

(in millions)	Princip	al Amount
Redemptions/Maturities:		
0.000.0000	\$	15
First quarter	· · · · ·	30
Second quarter		73
Third quarter		73 82
Fourth quarter		400
2000C QUINTS		25
2000D QUINTS		25 476
1999 Series A		115
2003 Series C		10
2001 Series C		1,000
	\$	2,251
Issues		
electronotes®		
First quarter	\$	93
Second quarter		114
Third quarter		15
2002 Series A (reopening)		550
· · · · · · · · · · · · · · · · · · ·		772
Inflation-indexed bond accretion		10
	\$	782
	=	

## Debt Outstanding

Debt outstanding at September 30, 2004 and 2003, consisted of the following:

(in millions)	2004	2003
Short-term debt		
Discount notes (net of discount)	\$ 1,924	\$ 2,080
Current maturities of long-term debt - 4.75% to 6.79%	2,000	2,336
Total short-term debt	3,924	4,416
Long-term debt		
Maturing in 2005 - 6.375%	_	2,000
Maturing in 2006 - 5.88% to 7.125%	2,621	2,621
Maturing in 2007 - 3.50% to 6.643%	959	975
Maturing in 2008 - 2.45% to 3.30%	91	91
Maturing in 2009 - 3.20% to 5.375%	2,031	2,000
Maturing in 2010	_	_
Maturing in 2011 through 2045 - 3.50% to 8.25%	13,624	12,772
Total long-term debt	19,326	20,459
Total indebtedness	\$ 23,250	\$ 24,875

The above table excludes net translation gains from currency transactions of \$113 million and \$35 million at September 30, 2004, and 2003, respectively, which are included in the account UNAMORTIZED DISCOUNT AND OTHER ADJUSTMENTS.

#### Interest and Capital Costs

Note

During 2004, 2003, and 2002, cash paid for interest on outstanding indebtedness (net of amount capitalized) was \$1,284 million, \$1,332 million, and \$1,414 million, respectively. In addition to paying interest on outstanding indebtedness, TVA is required by the TVA Act to make annual payments to the Treasury. The annual Treasury payments represent a repayment of the appropriation investment, along with a return on the appropriation investment (see note 5—Appropriation Investment).

## 8. Fair Value of Financial Instruments

TVA uses the methods and assumptions described below to estimate the fair value of each significant class of financial instrument. The fair market value of the financial instruments held at September 30, 2004, 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.

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

		2	2004	2003				
(in millions)		Carrying Amount		Fair Value		Carrying Amount		air alue
Cash and cash equivalents	\$	519	\$	519	\$	533	\$	533
Short-term investments		335		335		267		267
Investment funds		744		744		638		638
Loans and other long-term receivables		144		144		191		191
Short-term debt, net of discount		1,924		1,924		2,080		2,080
Long-term debt (including current portion), net of discount	2	1,337	2	3,249		22,537	2	4,958
Other financing obligations		1,178		1,178		1,238		1,238

Cash and Cash Equivalents, Short-Term Investments, and Short-Term Debt

Because of the short-term maturity of these instruments, the carrying amount approximates fair value.

#### Investment Funds

Information on investments by major type at September 30 is as follows:

(in millions)	2004		:	2003
Equity securities held as trading	\$	720	\$	632
Other		24		6
Total investment funds	\$	744	\$	638

Gains and losses on trading securities are recognized in current earnings and subsequently reclassified to a regulatory asset account in accordance with TVA's decommissioning accounting policy (see note 1— *Decommissioning Costs*). The decommissioning fund had unrealized gains of \$88 million in 2004, unrealized gains of \$129 million in 2003, and unrealized losses of \$97 million in 2002.

## 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 discounted rate equal to lending rates for similar loans made to borrowers with similar credit ratings and for the same remaining maturities. The carrying amount approximates fair value.

#### Long-Term Debt

Fair value of long-term debt traded in the public market is determined by multiplying the par value of the bonds by the market price at the balance sheet date.

## Other Financing Obligations

In 2003, 2002, and 2000, TVA received approximately \$325 million, \$320 million, and \$300 million, respectively, in proceeds by entering into lease/leaseback transactions for 24 new peaking combustion turbine units. TVA also received approximately \$389 million in proceeds by entering into a lease/leaseback transaction for qualified technological equipment in 2003. Due to the nature of the transactions, the carrying amount of the obligation and the fair market value are equal. At September 30, 2004, and 2003, the total balances of the obligations were \$1,178 million and \$1,238 million, respectively.

Due to TVA's continuing involvement in the operation and maintenance of the leased units and equipment, and its control over the distribution of power produced by the facilities during the leaseback term, TVA accounted for the respective lease proceeds of \$714 million, \$320 million, and \$300 million as financing obligations as required in accordance with SFAS No. 66, *Accounting for Sales of Real Estate*, and SFAS No. 98, *Accounting for Leases*. Accordingly, the outstanding lease/leaseback obligations of \$1,178 million at September 30, 2004, and \$1,238 million at September 30, 2003, are included in Current Portion of Lease/Leaseback obligations (\$35 million and \$68 million, respectively) and Lease/Leaseback obligations (\$1,143 million and \$1,170 million, respectively) in TVA's 2004 and 2003 year-end Balance Sheets.

#### 9. Benefit Plans

#### Pension and Other Postretirement Benefits

TVA sponsors defined benefit pension plans which cover substantially all employees. Additionally, TVA provides postretirement health care benefits for substantially all employees who reach retirement age while still working for TVA. TVA's reported costs of providing these benefits, as described herein, are impacted by numerous factors including the provisions of the plans, changing employee demographics, and various actuarial calculations, assumptions, and accounting mechanisms.

## Actuarial Assumptions

TVA utilizes professional actuaries to perform valuation services related to the areas of pension, postretirement, and postemployment benefits. Net periodic pension cost is determined using assumptions as of the beginning

of each year. Funded status is determined using assumptions as of the end of each year. The valuations performed at the end of 2004 were based on applications of actuarial assumptions that were consistent for all of TVA's benefit plans as can be seen in the disclosure tables that follow. For 2004, TVA recognized pension expense of \$178 million, postretirement benefit expense of \$36 million, which includes \$7 million in special termination cost and postemployment benefit expense of \$66 million. Comparable items of expense and/or (income) for prior years include, respectively, for 2003, pension expense of \$41 million, postretirement benefit expense of \$36 million, and postemployment benefit expense of \$90 million, and for 2002, pension (income) of (\$40 million), postretirement benefit expense of \$19 million, and postemployment benefit expense of \$64 million.

During 2003, TVA transitioned actuaries through a process in which both sets of actuaries performed calculations of the benefit obligations and other estimates inherent in the valuations for 2002. Since the 2002 valuations serve as the basis for amounts recorded in 2003, differences in actuarially calculated estimates were reconciled. Adjustments proposed by both predecessor and successor actuaries have been included in 2003 expense and reflected as amendments in the disclosure tables of the related pension and postretirement benefits obligations that follow.

### Pension Plans and Other Retirement Benefits

TVA has a defined benefit plan for most of its 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 by the TVA and TVARS boards of directors.

The pension benefit for a member participating in the Original Benefit Structure is based on the member's years of creditable service, the member's 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 the 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, with the provision that the rate may not be less than 6.0 percent or more than 10.0 percent. The actual change in the CPI for 2004 and 2003 was 1.7 percent and 1.5 percent, which resulted in interest rates of 6.0 percent and 6.0 percent, respectively.

Members of both the Original Benefit Structure and the Cash Balance Benefit Structure can also become eligible for a vested supplemental pension benefit, based on age and years of service, which is designed to help retirees offset the cost of medical insurance. TVARS also administers a defined contribution plan, a 401(k) plan to which TVA makes matching contributions of 25 cents on the dollar (up to 1.5 percent of pay) for members participating in the Original Benefit Structure and of 75 cents on the dollar (up to 4.5 percent of pay) for members participating in the Cash Balance Benefit Structure. TVA made matching contributions of about \$16 million to the plan during the year.

#### Certain Pension Plan Results

Effective for the September 30, 2004, measurement date and the calculation of funded status, the discount rate was reduced from 6.00 percent for 2003 to 5.81 percent for 2004. The cost of living rate remained at 2.30 percent to reflect current market and demographic conditions. Additionally, TVA continued to use its assumption related to mortality based on results of an experience study performed during the prior year which underlies the use of 1983 mortality tables. Based on the use of the assumptions described, the projected benefit obligation ("PBO") at September 30, 2004, increased by approximately \$804 million. The change in the PBO was comprised of an increase of \$199 million due to normal operation of the plan (in the form of service cost and interest accruals, etc.). The remaining \$605 million of the increase represents an actuarial loss. The actuarial loss has two main components with approximately 50 percent of the loss attributable to adjustments made to the valuation methodology of the fixed benefit fund, and 50 percent of the loss due to experience losses arising from more-than-assumed early retirements. The assumptions used in the 2004 end-of-year actuarial valuation process had no effect on pension costs for 2004, 2003, or 2002 but will increase pension expense for 2005 by approximately \$92 million compared to 2004. The accumulated benefit obligation at September 30, 2004, and 2003 was \$7,360 million and \$6,548 million, respectively.

### Other Postretirement Benefits

TVA sponsors an unfunded postretirement plan that provides for non-vested contributions toward the cost of certain retirees' medical coverage. This plan formerly covered all retirees participating in the TVA medical plan, and

TVA's contributions were a flat dollar amount based on the participants' ages and years of service and certain payments toward the plan costs. This plan now operates on a much more limited basis, covering only certain retirees and surviving dependents who do not qualify for TVARS benefits, including the vested supplemental pension benefit.

The initial annual assumed cost trend for covered benefits was 8.5 percent in 2004, decreasing by one-half percent per year to a level of 5.0 percent in 2011 and thereafter. For 2003 and 2002, annual trend rates of 8.5 percent and 8.5 percent, respectively, were assumed. The effect of the change in assumptions on 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, 2004, by \$54 million/(\$62 million) and the aggregated service and interest cost components of net periodic postretirement benefit cost for 2004 by \$4 million/(\$4 million). The weighted average discount rate used in determining the end-of-year APBO was 5.81 percent for 2004, 6.00 percent for 2003, and 7.05 percent for 2002. Any net unrecognized gain or loss resulting from experience different from that assumed or from changes in assumptions, and exceeding ten percent of the APBO, is amortized over the average remaining service period of active plan participants.

Based on the use of the assumptions described, the 2004 APBO for postretirement benefits increased approximately \$133 million. The change in the obligation was comprised of a \$6 million increase due to normal operation of the plan (in the form of service cost and interest accruals, etc.), an increase of about \$7 million due to the special termination benefit charge associated with a 2004 voluntary reduction in force, and an increase of \$120 million due to other actuarial and experience adjustments and losses. The \$120 million increase in the obligation is comprised of two components. The first component includes the loss of approximately \$28 million due to TVA's decision to reset its heath care cost trend rate assumption at the end of 2004 from what would have been about eight percent to nine percent. The second component of the loss is comprised of an actuarial loss of approximately \$92 million primarily related to an increase in retiree medical credit benefits (see next paragraph) available to TVA retirees to defray their out-of-pocket medical premiums. TVA not only bears the incremental funding requirement associated with these increased benefits but must recognize the funding costs as additional expense. TVA's exposure to further increases in these benefits will continue until such time as the cap established for this benefit is reached by all eligible retirees. The total payments made by TVA on behalf of its retirees increased by about 40 percent and the number of retirees receiving the medical credit increased by about 20 percent.

Effective July 1, 2002 (applied retroactively to January 1, 2002), TVA changed its retiree medical plan to provide an enhanced TVA contribution for certain retirees who retired with 20 or more years of service and are eligible for the supplemental pension benefit from TVARS. The benefit is in the form of a credit provided by TVA to eligible retirees to help offset the cost of medical premiums. The additional benefit increased the accumulated postretirement benefit obligation approximately \$97 million at the end of 2002. Pursuant to SFAS No. 106, *Employers' Accounting for Postretirement Benefits Other Than Pensions*, the increase in cost is combined with the existing net unrecognized prior service cost and amortized to expense over future periods. Expense for 2003 increased approximately \$17 million (from \$19 million in 2002 to \$36 million in 2003) due primarily to the additional prior service cost amortization and corresponding increases in service cost and interest cost coupled with changes in demographic information and actuarial assumptions.

## Medicare Prescription Drug Improvement and Modernization Act of 2003

On December 8, 2003, President Bush signed into law the Medicare Prescription Drug Improvement and Modernization Act of 2003 (the "2003 Act"). The 2003 Act expanded Medicare to include, for the first time, coverage for prescription drugs. TVA expects that this legislation will eventually reduce TVA's cost for its post-retirement medical plan. TVA has not yet taken any actions in response to the 2003 Act and therefore, TVA has not realized any reduction in its obligations or costs at this time. TVA will continue to analyze its options under the 2003 Act and expects to recognize the financial effect of this legislation during 2005. The financial impact of the alternative actions available to TVA is not known at this time.

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

ptember 30 were.	Other Postretirement Benefits						
(in millions)	2004	2003	2004	2003			
Change in benefit obligation  Benefit obligation at beginning of year  Service cost Interest cost Plan participants' contributions  Amendments, including special events  Actuarial (gain)/loss  Net transfers from variable fund/401(k) plan  Expenses paid  Benefit obligation at end of year	\$ 6,950 112 406 43 - 605 21 (5) (378) \$ 7,754	\$ 5,901 90 411 42 96 755 9 (4) (350) \$ 6,950	\$ 314 5 19 59 7 120 - (77) \$ 447	\$ 431 6 23 51 (102) (23) - (72) \$ 314			
Change in plan assets Fair value of plan assets at beginning of year Adjustment to reconcile to system asset value Actual return on plan assets Plan participants' contributions Net transfers from variable fund/401(k) plan Employer contributions Expenses paid Benefits paid Fair value of plan assets at end of year	\$ 5,930 - 781 43 21 23 (5) (378) \$ 6,415	\$ 5,087 - 1,145 42 10 - (4) (350) \$ 5,930	\$ - - 59 - 18 - (77) \$ -	\$ - - 51 - 21 - (72) \$ -			
Funded status .  Unrecognized net actuarial loss .  Unrecognized prior service cost .  Unrecognized transition obligations .  Prepaid (accrued) benefit cost	\$ (1,338) 1,628 347  \$ 637	\$ (1,020) 1,430 383 —————————————————————————————————	\$ (447) 156 49 ———————————————————————————————————	\$ (314) 37 54  \$ (223)			
Amount recognized in statement of financial position Prepaid benefit cost	\$ - (945) 347 1,235 \$ 637	\$ - (618) 383 1,028 \$ 793	\$ - (242) - - \$ (242)	\$ - (223) - - \$ (223)			
Projected benefit obligation Accumulated benefit obligation Fair value of plan assets	\$ 7,754 7,360 6,415	\$ 6,950 6,548 5,930	NA NA NA	NA NA NA			

Weighted average assumptions as of September 30	2004	2003	2004	2003
Discount rate	5.81%	6.00%	5.81%	6.00%
Expected return on plan assets	8.25%	8.50%	NA	NA
Rate of compensation increase	3.3% - 10.1%	3.3% - 10.1%	NA	NA
Initial health care trend rate	NA	NA	9.00%	8.50%
Ultimate health care trend rate	NA	NA	5.00%	5.00%
Ultimate trend rate is reached in year	NA	NA	2012	2011

	Pension Benefits					Other Postretirement Benefits							
(in millions)		2004		2003		2002	2	004	20	003	2(	002	
Components of net periodic benefit cost													
Service cost	\$	112	\$	90	\$	87	\$	5	\$	6	\$	4	
Interest cost		406		411		434		18		23		16	
Expected return on plan assets		(464)		(496)		(597)		NA		NA		NA	
Amortization of prior service cost		36		36		36		5		5		(4)	
Amortization of transition obligation		_		_		_		_		_		_	
Recognized net actuarial (gain)/loss		88						1		2		3_	
Net periodic benefit cost/(income)		178		41		(40)		29		36		19	
Special events								7		_			
Total benefits cost/(income)	\$	178	\$	41	\$	(40)	\$	36	\$	36	\$	19	

	Р	ension Benefit	Other Postretirement Benefits				
Weighted average assumptions used to determine expense	2004	2003	2002	2004	2003	2002	
Discount rate	6.00%	7.05%	7.50%	6.00%	7.05%	7.50%	
Expected return on plan assets	8.50%	8.50%	8.00%	NA	NA	NA	
Rate of compensation increase	3.3%-10.1%	3.3%-10.1%	3.3%-8.3%	NA	NA	NA	
Initial health care trend rate	NA	NA	NA	8.50%	8.50%	8.50%	
Ultimate health care trend rate	NA	NA	NA	5.00%	5.00%	5.00%	
Ultimate trend rate is reached in year	NA	NA	NA	2010	2009	2008	

## Sensitivity to the assumed health

care cost trend rates for 2004	1% Increase	1% Decrease
Effect on total of service and interest cost components	4	(4)
Effect on end-of-year postretirement benefit obligation	54	(62)

Estimated future employer benefit payments	Pension	Other
Fiscal Year 2005	\$ 458	\$ 15
Fiscal Year 2006	466	18
Fiscal Year 2007	483	20
Fiscal Year 2008	499	23
Fiscal Year 2009	519	25
Fiscal Years 2010-2014	2,869	149

## Plan assets

The percentage of total year-end market value of plan assets for the current and prior year

Investment Category	2004	2003
U.S. Equity Securities	44.1%	45.6%
Non U.S. Equity Securities	15.1%	13.1%
Fixed Income Securities	39.1%	34.1%
Other	1.7%_	7.2%
	100.0%	100.0%

Investments held in the TVA retirement plan are stated at fair value, which is determined by the Trustee of the fund.

The TVARS Board adopted the following revised asset allocation policy for investment of the TVARS's funds: 45 percent United States equities, of which five percent (as measured as a percentage of the total fund) may be private equity or other similar alternative investments but not to include holding title to real property; 40 percent fixed income, of which ten percent may be high yield (as measured as a percentage of the total fund); and 15 percent non-United States equities; with a permissible three percent deviation, either plus or minus, from these target allocations, including the target allocations for private equity and high yield fixed income. The TVARS Board also renewed the Executive Secretary's authority to take action, as appropriate, to rebalance the TVARS's assets consistent with this asset allocation policy.

#### **Expected Contributions**

TVA expects to contribute \$53 million to its qualified pension plans in 2005.

Other Non-Qualified Retirement and Deferred Compensation Plans

In 1995, TVA established a Supplemental Executive Retirement Plan ("SERP") to provide additional benefits to specified individuals that are not available under the qualified pension plan. TVA has historically funded the annual calculated expense and due to the immaterial nature of the amounts, TVA has not made financial statement disclosures related to this plan. As of and for the year ended September 30, 2004, TVA had recognized certain amounts related to the plan including plan assets in trust of \$18 million, a regulatory asset of \$8 million, an estimated accrued and minimum pension plan obligation of \$27 million, expense of \$4 million and current year earnings on plan assets of \$1 million. In addition, TVA made contributions of \$3 million to the plan and \$1 million in benefit payments were made from the plan during the year.

## Other Postemployment Benefits

Other postemployment benefits include workers' compensation provided to former or inactive employees and their beneficiaries and covered dependents for the period after employment but before retirement. TVA's workers' compensation program is administered through the Department of Labor by the Office of Workers' Compensation Programs ("OWCP") in accordance with the provisions of the Federal Employees' Compensation Act ("FECA"). FECA provides compensation benefits to federal employees for permanent and temporary disability due to employment-related injury or disease. TVA recognizes these costs as incurred.

Postemployment benefit cost estimates are revised to properly reflect changes in actuarial assumptions made at the end of the year. TVA modified certain of its assumptions based on information in existence at the end of 2004 and determined it appropriate to shorten slightly the period of time over which it expects to payout claims related to certain estimated losses. Accordingly, TVA lowered its discount rate assumption from 6.00 percent to 5.75 percent to better match the anticipated payout periods identified in the analysis of its assumption data. The use of a 5.75 percent discount rate resulted in annual expense of about \$61 million and an unpaid loss benefit obligation of approximately \$421 million at year end. However, TVA recorded expense of approximately \$66 million for the year, rather than the actuarially determined expense of \$61 million, in order to produce a recorded obligation more in line with overall actuarial estimates. TVA utilized a discount rate of 6.00 percent and 7.05 percent in 2003 and 2002 respectively. The changes in 2004 assumptions had no effect on postemployment benefits expense for 2003 or 2002.

## 10. Commitments and Contingencies

As of September 30, the amounts of contractual cash obligations maturing in each of the next five years and thereafter are shown below:

(in millions)	2005	2005 2006		2008	2009	Thereafter	Total
Debt	\$ 3,924	\$ 2,621	\$ 959	\$ 91	\$ 2,031	\$ 13,624	\$ 23,250
Leases	72	71	66	60	57	89	415
Lease/leaseback transactions	84	85	85	89	85	1,299	1,727
Power purchase obligations	173	165	156	130	130	3,610	4,364
Other obligations	642	460	265	149	60	68	1,644
Fuel purchase obligations	744	338	164	172	137	345	1,900
Pension contribution *	53						53
Total	\$ 5,692	\$ 3,740	<u>\$ 1,695</u>	<u>\$ 691</u>	\$ 2,500	\$ 19,035	\$ 33,353

#### Notes

In addition to the cash requirements above, TVA has contractual obligations, in the form of revenue discounts, related to energy prepayments discussed above.

(in millions)	2005		2006 2007		2008_		2009		Thereafter		Total			
Energy Prepayment Obligations	\$	105	\$	106	\$	106	\$	105	\$	105	\$	928	\$	1,455

#### Commitments

Leases. TVA leases certain property, plant, and equipment under agreements with terms ranging from one to 30 years. Obligations under capital lease agreements in effect at September 30, 2004, total \$52 million for 2005, \$54 million for 2006, \$56 million for 2007, \$54 million for 2008, \$54 million for 2009, and an aggregate of \$81 million thereafter, for a total commitment of \$351 million. Of this amount, \$90 million represents the cost of financing. Obligations under non-cancelable operating lease agreements in effect at September 30, 2004, total \$20 million for 2005, \$17 million for 2006, \$10 million for 2007, \$6 million for 2008, \$3 million for 2009, and \$8 million thereafter for a total commitment of \$64 million.

Lease/Leaseback Transactions. Obligations under combustion turbine and qualified technological equipment lease/leaseback transactions in effect at September 30, 2004, total \$84 million for 2005, \$85 million annually for 2006 and 2007, \$89 million for 2008, \$85 million for 2009, and an aggregate of \$1,299 million thereafter, for a total commitment of \$1,727 million. Of this amount, \$549 million represents the cost of financing.

Power Purchase Obligations. TVA has contracted with various independent power producers and power distributors for additional capacity to be made available to TVA. In total, these agreements constitute 1,934 megawatts of winter net dependable capacity. Approximately one-half of this total capacity is made available to TVA under power purchase agreements having terms of two years or less. The total financial obligation of these contracts is approximately \$4,261 million. Additionally, TVA has contracted with various other counterparties for the purchase of power from renewable sources (wind and methane gas technologies). These arrangements constitute approximately 33 megawatts of capacity. However, due to the nature of these sources, TVA does not consider them part of its net winter dependable capacity. TVA's financial obligation of these renewable resource power purchase agreements is \$103 million. In total, TVA's financial obligation for all of its power purchase agreements is approximately \$4,364 million. Costs under these contracts are included in the statements of Income for the years ended September 30, 2004, 2003, and 2002, as FUEL AND PURCHASED POWER EXPENSE and are expensed as incurred.

Under the Public Utility Regulatory Policies Act of 1978, TVA is obligated to purchase power from qualifying facilities. There are currently two independent power producers that qualify under this program, and as a result TVA could be required to take up to 1,600 megawatts of power during certain on-peak hours from these facilities, depending on the amount of power put on the system. Costs associated with these purchases are based on rates as specified in "Attachment A" of the *Dispersed Power Production Guidelines for TVA and the Distributors of TVA Power* as approved annually by the Board.

TVA also has an agreement with the Southeastern Power Administration to receive 405 megawatts of net dependable capacity from the Cumberland River Basin Projects for use in the TVA system. TVA receives a yearly energy allocation of 607,500 megawatt hours which is based on the reserved capacity. Once this allocation is exceeded, TVA is assessed an additional energy charge for the excess generation received based on rates as specified in the *Federal Register*.

Contributions beyond 2005 to be determined.

Other Obligations. Other obligations of \$1.6 billion consist of contracts and purchase orders negotiated as of September 30, 2004, for goods and services primarily related to capital projects as well as other major recurring operating costs. TVA has approximately \$1.1 billion in long-term construction commitments consisting primarily of the construction of generating assets (including Browns Ferry Unit 1), and emission control equipment. Terms of certain contracts extend into 2023. In addition to construction commitments, TVA is committed under various other contracts for recurring goods and services of \$506 million with terms extending into 2010.

Fuel Purchase Obligations. TVA has approximately \$784 million in long-term fuel purchase commitments ranging in terms of up to four years for the purchase and transportation of coal, and approximately \$1.1 billion of long-term commitments ranging in terms of up to 11 years for the purchase of enriched uranium and fabrication of nuclear fuel assemblies.

Tritium Production. In September 2002, the NRC issued an amendment to the Watts Bar Nuclear Plant operating license, allowing TVA to irradiate tritium-producing burnable absorber rods ("TPBARS") at the plant to provide tritium to the Department of Energy ("DOE"). TVA's license amendment currently allows operation with a maximum of 240 TPBARS in the Watts Bar reactor. A planned future license amendment will permit installation of up to 2,304 of the TPBARS. The TPBARS will be irradiated for a full cycle, which lasts about 18 months. TVA will then remove the irradiated TPBARS for shipment to DOE's tritium-extraction facility at the Savannah River Site near Aiken, South Carolina. TVA began tritium production at Watts Bar in the fall of 2003. Also in September 2002, the NRC issued a similar amendment to the Sequoyah Nuclear Plant operating license allowing tritium production. At this time, no tritium production has been scheduled at the Sequoyah Nuclear Plant. While producing tritium, TVA is able to operate the reactors for its program mission of producing electricity.

TVA has a long-term interagency agreement with DOE to utilize TVA's Sequoyah and Watts Bar Nuclear Plants to produce tritium. This agreement, ending in 2035, requires DOE to reimburse TVA for costs incurred plus a fee for TPBAR produced for irradiation services.

## Contingencies

Financial Guarantees. TVA has entered into a contract which required it to secure its payment obligations on a letter of credit. The letter of credit was issued by a commercial institution in the amount of \$1.2 million on March 7, 2003. The letter of credit will expire on December 31, 2004, but may be renewed if the project associated with the letter of credit is not complete. As of September 30, 2004, the remaining amount due on this project is \$1.2 million. The project is scheduled to be completed in May 2005. TVA's liability associated with this was less than \$1 million at September 30, 2004.

Concentration of Credit Risk. Seven customers, which represented an aggregate of 35 percent of TVA's total power sales in 2004, 35 percent for 2003, and 36 percent for 2002, purchased power from TVA under long-term contracts that require either five or ten years' notice to terminate. Outstanding accounts receivable for these customers at September 30, 2004, were \$368 million, or 35 percent, and at September 30, 2003, were \$369 million, or 37 percent, of total outstanding accounts receivable.

Nuclear Insurance. The Price-Anderson Act sets forth an indemnification and limitation of liability plan for the U.S. nuclear industry. All NRC nuclear plant licensees, including TVA, maintain nuclear liability insurance in the amount of \$300 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 \$100.59 million per reactor, but not more than \$10 million per reactor may be charged in any one year for each incident. With its six licensed units, TVA could be required to pay a maximum of \$603.54 million per nuclear incident, but it would have to pay no more than \$60 million per incident in any one year.

TVA carries property, decommissioning, and decontamination insurance of \$2.06 billion for its licensed nuclear plants to cover the cost of stabilizing or shutting down a reactor after an accident. Some of this insurance may require the payment of retrospective premiums up to a maximum of approximately \$65 million.

On September 23, 2004, the TVA Board approved the purchase of accidental outage (business interruption) insurance for TVA's nuclear sites from Nuclear Electric Insurance Limited ("NEIL"). In the event that an accident covered by this policy takes a nuclear unit offline or keeps a nuclear unit offline, NEIL will pay TVA, after a deductible waiting period, an indemnity (a set dollar amount per week) up to a maximum indemnity of \$490 million per unit. The policies went into effect on October 1, 2004.

Decommissioning Costs. Provision for decommissioning costs of nuclear generating units is based on options prescribed by NRC procedures to dismantle and decontaminate the facilities to meet NRC criteria for license termination.

TVA 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 weighted estimated cash flows required to satisfy the related obligation and discounted at the credit adjusted rate of interest in effect at the time the liability was actually incurred or originally accrued, and subsequently modified to comply with the prevailing accounting provisions. The charge to recognize the additional obligation is effected by adjusting the corresponding regulatory asset. 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, 2004, the present value of the estimated future decommissioning cost of \$1,555 million was included in Asset retirement obligations, and the unamortized regulatory asset of \$755 million was included in Regulatory assets. This decommissioning cost estimate is based on amounts prescribed by the NRC for removing a plant from service, releasing the property for unrestricted use, and terminating the operating license. The actual decommissioning costs may vary from the derived estimates because of changes in the assumed dates of decommissioning, changes in regulatory requirements, changes in technology, and changes in the cost of labor, materials, and equipment. Utilities that own and operate nuclear plants are required to use different procedures in calculating nuclear decommissioning costs under SFAS No. 143 than those that are used in calculating nuclear decommissioning costs when reporting to the NRC. Accordingly, the two sets of procedures produce different estimates for the costs of decommissioning.

TVA maintains a decommissioning trust fund to provide funding for the decommissioning of nuclear power plants. As of September 30, 2004, the decommissioning trust fund investments totaled \$720 million and were invested in securities designed to achieve a return in line with overall equity market performance.

Cost-Based Regulation. Regulatory assets for TVA total approximately \$2,057 million at September 30, 2004, along with approximately \$3.9 billion of deferred nuclear plant costs and \$277 million of debt issue and reacquisition costs. 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. (See note 1—Cost-Based Regulation.)

*Environmental Matters.* TVA's activities are subjected to certain federal, state, and local environmental statutes and regulations. Major areas of regulation affecting TVA's activities include air quality control, water quality control, and management and disposal of solid and hazardous wastes.

TVA has incurred and continues to incur substantial capital and operating costs in order to comply with evolving environmental requirements. Many of these costs are associated with the operation of TVA's 59 coal-fired generating units. It is not possible to predict with any precision how these evolving requirements will impact the operation of existing and new fossil-fuel generating units. It is virtually certain that environmental requirements placed on the operation of fossil-fuel generating units will become more restrictive. Litigation over emissions from coal-fired generating units is growing, including litigation against TVA (see "Legal Proceedings" in Part I).

A number of existing regulatory programs have been and are being made more stringent in their application to fossil-fuel units and additional regulatory programs potentially affecting fossil-fuel units have been proposed. The total cost of future compliance with nitrogen oxide ("NOx"), sulfur dioxide ("SO₂"), and mercury emission reduction requirements cannot reasonably be determined with precision at this time because of the uncertainties surrounding emerging EPA regulations, resultant compliance strategies, potential for the development of new emission control technologies, court litigation, and future amendments to the Clean Air Act ("CAA"). However, total costs could exceed \$4.0 billion through 2020, exclusive of the costs of the currently planned installation of SCRs and scrubbers as described below. Expenditures related to the clean air projects during 2004 and 2003 were approximately \$400 million and \$500 million, respectively. The total cost of the planned SCR program is now estimated to be \$1.4 billion. Projects exceeding \$1.3 billion had been completed by the end of 2004, with approximately \$130 million of the total program remaining. The cost of the planned installation of five scrubbers is estimated to be \$1.5 billion (including the \$300 million scrubber for Paradise Unit 3). In addition to these costs, there could be other substantial costs if reductions of carbon dioxide ("CO₂") are mandated (discussed in more detail below). Even more so than the future regulation of other substances, predicting how and when carbon dioxide may be regulated is very uncertain. TVA will continue to monitor this issue and will assess and respond to potential financial impacts as they become more certain.

Clean Air Developments. Air quality in the United States has significantly improved since the enactment of the modern Clean Air Act in 1970. These air quality improvements are expected to continue as the Clean Air Act and its implementing programs evolve through legislative and regulatory changes. Three substances emitted from coal-fired units have historically been the focus of emission reduction regulatory programs: SO<sub>2</sub>, NOx, and particulates. TVA has already spent \$4.0 billion to reduce its emissions of these three substances and to complete the reductions outlined above- has plans to spend about another \$2.0 billion. Recently, attention has been given to two other substances emitted by coal fired units: mercury and CO<sub>2</sub>. Increasingly stringent regulation of some or all of these substances will continue to result in significant capital and operating costs for coal-fired generating units, including those operated by TVA.

Sulfur Dioxide. Coal-fired utilities have historically emitted large amounts of SO2. Utility SO2 emissions are extensively regulated and will be regulated further under state programs to achieve and maintain EPA's National Ambient Air Quality Standard for SO<sub>2</sub>, the acid rain control program, and—depending on when units commenced operation and their effect on sensitive areas—the regional haze program. EPA's new, stringent fine particle national standard is expected to result in additional significant reductions of utility SO2 emissions because SO2 can transform into sulfates, and sulfates are a major component of fine particles in the East. Since 1976, TVA has reduced its SO2 emissions by approximately 75 percent. It has done this by switching to lower-sulfur coals and by the installation of flue gas desulphurization technology ("scrubbers") on six of its largest units. TVA has announced plans to install five more scrubbers on its system to further reduce SO<sub>2</sub> emissions from 12 more of its units, achieving a total SO<sub>2</sub> emission reduction of 85 percent. TVA also has switched or plans to switch to lower sulfur coal on several additional units in the next few years. These plans may change depending on the timing and severity of new SO<sub>2</sub> emission reductions that have been proposed but not yet finally promulgated by EPA to address the new fine particle standard, and implementation of these requirements by the states. The State of North Carolina has also petitioned EPA under Section 126 of the Clean Air Act to impose additional emission reductions requirements for SO2 and NOx emitted by coal-fired power plants in 13 states, including Kentucky, Tennessee, and Alabama where TVA's coal-fired power plants are located. The reduction requirements that EPA establishes to address the fine particle standard are expected to also address and satisfy the North Carolina petition.

Nitrogen Oxide. Utility NOx emissions are extensively regulated and will be regulated further under state programs to achieve and maintain EPA's national ambient air quality standard for ozone (NOx combines with volatile organic compounds in the presence of sunlight to produce ozone under certain meteorological conditions), the acid rain control program, and-depending on when units commenced operation and their effect on sensitive areas-the regional haze program. EPA's new, more stringent eight-hour ozone and fine particle national ambient air quality standards could result in requirements to further reduce NOx emissions from coal-fired power plants and other fossil-fuel generation such as combustion turbines. (NOx emissions can transform into nitrates, another component of fine particles.) Since 1995, TVA has reduced its NOx emissions during the summer (when ozone levels increase) by approximately 62 percent. It has done this by switching to low-NOx burners, using over-fired air, and/or optimizing boilers at 58 of its 59 coal fired units. TVA has also installed selective catalytic reduction technology ("SCRs") on 18 of its units and is in the process of installing SCRs or other NOx controls on seven or more of its units. When these additional controls are installed, TVA's total ozone season NOx emissions will be reduced by at least 75 percent since 1995. These plans may change depending on the timing and severity of new NOx emission requirements that have been proposed but not yet finally promulgated by EPA to address the new fine particle standard and implementation of these requirements by the states. The State of North Carolina has also petitioned EPA to establish additional emission reductions requirements for SO<sub>2</sub> and NOx emitted by coal-fired power plants in 13 states, including Kentucky, Tennessee, and Alabama where TVA's coal-fired power plants are located. The reduction requirements that EPA establishes to address the fine particle standard are expected to also address and satisfy this petition.

Particulates/Opacity. Larger particulates (fly ash), as opposed to fine particles discussed above, have long been regulated by states to meet EPA's national particulate standard (this has evolved into the new fine particle standard). TVA's coal fired units have been equipped with mechanical collectors, electrostatic precipitators, scrubbers, or baghouses, and particulates on the TVA system have been reduced by more than 99 percent. Additional controls for larger particulates are not expected. Issues about utility compliance with state opacity requirements, however, are increasing. Opacity measures the denseness (or color) of power plant plumes and has traditionally been used by states as a means of monitoring good maintenance and operation of particulate control equipment. Retrofitting a unit with additional equipment to better control SO<sub>2</sub> and NOx emissions can adversely affect opacity performance, and TVA and other utilities are now addressing this issue. There are also disputes with special interest groups over the role of continuous opacity monitors in determining compliance with opacity limitations.

*Mercury*. The EPA has issued a proposed rule to regulate mercury emissions from coal-fired generating units under the Clean Air Act. The form, schedule, and severity of this regulation are not yet known, but it could require util-

ities, including TVA, to begin reducing emissions before the end of this decade. The compliance costs of any mandatory reductions cannot be reasonably determined at this time because of the uncertainties surrounding emerging EPA regulations, resultant compliance strategies, potential for the development of new control technologies, and the potential for litigation arising from this final rule. However, the costs could be substantial if additional controls are required to meet the mandatory reductions.

Carbon Dioxide. The existence, cause, and importance of global warming continue to be widely debated. CO<sub>2</sub> is a greenhouse gas and is believed by some to contribute to global warming. Legislation has been introduced in Congress to require reductions of CO<sub>2</sub>, and if enacted, could result in significant additional costs for TVA and other coal-fired utilities. The Bush Administration has proposed a voluntary initiative that established a goal of reducing the greenhouse gas intensity of the U.S. economy by 18 percent and has asked the electric utility sector and other industry sectors to support this initiative. TVA is supporting this effort in cooperation with electric utility industry trade associations and the Department of Energy. The last administration also asked utilities to voluntary participate in an effort to reduce, sequester, or avoid greenhouse gases. Under that program, TVA reduced, sequestered, or avoided more than 260 million tons of CO<sub>2</sub> from 1990 through 2003, as reported under Section 1605b of the Energy Policy Act. TVA has also brought on line 4,500 megawatts of non CO<sub>2</sub> -emitting generation since 1990 and is in the process of adding another 2,000 megawatts of non CO<sub>2</sub> -emitting generation.

Clean Water Developments. In the second phase of a three-part rulemaking to minimize the adverse impacts on fish and other aquatic life from cooling water intake structures, as required under Section 316(b) of the Clean Water Act, EPA promulgated a final rule for existing power producing facilities that became effective on September 7, 2004. The new rule requires all those facilities to reduce the number of organisms pinned against and/or drawn into the cooling systems, or to compensate for those impacts by restoring habitat or pursuing other options for the affected species. Several States and environmental groups have challenged the new regulation, and especially the compliance flexibility it offers, in federal court.

All of TVA's existing coal fired and nuclear generating facilities will be affected by this rule as the respective requirements are incorporated in their water permits. TVA is evaluating the impact of the new rule on each generating facility, and assessing the available compliance options. That assessment, however, is complicated by the uncertainty created by the pending legal action challenging EPA's rule. Compliance with the new rule will require new assessments at all generating plants, and will likely involve some level of capital and/or operating expenditures related to some or all generating facilities. However, since TVA's generating facilities are located in areas which are not particularly sensitive to the effects of intake structures, and its only identified intake related adverse impact has been previously mitigated, the costs are not expected to have a significant impact on TVA's financial position, or impact the operation of the generating plants.

As is the case across the utility industry and in other industrial sectors, TVA is facing more stringent requirements related to protection of wetlands, reductions in storm water impacts from construction activities, water quality degradation and criteria, and laboratory analytical methods. TVA is also following litigation related to the use of herbicides, water transfers, and releases from dams.

Hazardous Substances. Liability for releases and cleanup of hazardous substances is regulated by the federal Comprehensive Environmental Response, Compensation, and Liability Act, among others, and similar state statutes. In a manner similar to many other industries and power systems, TVA has generated or used hazardous substances over the years. TVA is aware of hazardous-substance releases at ten offsite areas for which it may have some liability. TVA's potential liabilities for its share of cleanup costs at these sites are uncertain but are not expected to have a significant financial impact on TVA or TVA operations. In addition, TVA operations at some TVA-owned facilities have resulted in releases of oil and/or hazardous substances which require cleanup and/or remediation. Costs associated with these cleanup activities are not expected to be significant.

At September 30, 2004, and 2003 TVA's estimated liability for environmental cleanup was \$29 million and \$31 million, respectively, and was included in Other liabilities on the Balance Sheet.

Legal. In the fall of 1999, the Environmental Protection Agency ("EPA") commenced judicial or administrative actions against a number of utilities in the eastern United States, including TVA, alleging that they modified their coal-fired units without complying with the new source review ("NSR") requirements under the Clean Air Act ("CAA"). EPA issued an administrative order directing TVA to install additional pollution control equipment on 14 of its coal-fired units and evaluate whether more controls should be installed on other units. TVA challenged the validity of this order, and on June 24, 2003, the Eleventh Circuit Court of Appeals issued its decision in the case. Although the Eleventh Circuit did not rule on the merits of the case, the court held that the procedure used by EPA against TVA was uncon-

stitutional because it allowed EPA to decide that a regulated party like TVA violated the law and could be liable for severe penalties without ever allowing the regulated party to present evidence on whether the law was in fact violated. On May 3, 2004, the United States Supreme Court denied a petition for review filed on behalf of EPA, refusing to review the Eleventh Circuit's decision. EPA has taken no legal action against TVA on these allegations since this decision by the United States Supreme Court. In similar lawsuits filed by EPA and others against other utility companies, the rulings by the respective courts differ widely.

The National Parks Conservation Association ("NPCA") and the Sierra Club filed cases in two federal district courts in 2001 alleging similar NSR violations to those in EPA's administrative order at TVA's Bull Run Fossil Plant ("Bull Run") and Colbert Fossil Plant Unit 5 ("Colbert"). These cases had been stayed pending the Supreme Court's decision on the Eleventh Circuit's ruling, but in light of the Supreme Court's action, the stays have been lifted. Trial has been set in the Sierra Club's action in the Bull Run case for September 20, 2005, and the parties have each filed motions for summary judgment or partial summary judgment on various issues. In similar lawsuits filed by EPA and others against other utility companies, the rulings by the respective courts differ widely. In the Sierra Club's Colbert case, a final pretrial scheduling conference is scheduled for November 30, 2005, and trial is scheduled to begin four to eight weeks thereafter.

Environmental groups are taking legal action against TVA, as well as against other utilities across the country, for allegedly violating opacity limits and other environmental requirements applicable to coal-fired plants.

- The Alabama Environmental Council and the Sierra Club filed a lawsuit in federal district court in Florence, Alabama, alleging that TVA violated CAA opacity limits applicable to Colbert Fossil Plant between July 1, 1997, and June 30, 2002. The groups sought a court order that could require TVA to incur substantial costs, in addition to the costs TVA is already planning to incur for environmental controls, and pay civil penalties of up to approximately \$250 million. The court found that TVA had not violated the CAA, and the complaint was dismissed in its entirety. The plaintiffs have appealed the district court's decision to the Court of Appeals for the Eleventh Circuit.
- On July 25, 2003, TVA received a notice of intent to sue from Our Children's Earth Foundation ("OCE"). OCE contends that TVA violated the NSR requirements of the CAA by undertaking major modifications of TVA's Allen Unit 3, Bull Run, Cumberland Units 1 and 2, Kingston Units 6 and 8, John Sevier Unit 3, Paradise Units 1, 2, and 3, Shawnee Units 1 and 4, Colbert Unit 5, and Widows Creek Unit 5 without installing additional pollution control equipment. OCE also contends the CAA new source performance standards at Colbert Unit 5 and the operations at TVA's Johnsonville Fossil Plant have not met the applicable opacity requirements. This notice does not specify a monetary amount of TVA's claimed liability. OCE's allegations about Bull Run and Colbert Unit 5 are already the subject of litigation in federal district courts initiated by the NPCA and the Sierra Club. In 2004, OCE obtained the district court's permission to join as a plaintiff in the Bull Run NSR suit. It made a similar request in the Colbert NSR suit which the court denied as untimely.
- The Sierra Club gave notice in a September 26, 2002, letter that it intends to sue TVA for violating CAA opacity limits applicable to the John Sevier and Kingston Fossil Plants. The notice claims that TVA violated opacity standards at the two plants from July 1, 1997, to the present. The alleged opacity violations substantially overlap those that were challenged in a lawsuit filed by the NPCA four years ago in federal court in Knoxville, Tennessee. TVA ultimately prevailed in that lawsuit. The Sierra Club has not filed suit.

For a discussion of TVA's CAA activities, see "Environmental Matters" above.

On December 28, 2001, Bowater Incorporated and Bowater Newsprint South, Inc. (together, "Bowater") filed a lawsuit against TVA in federal court in Knoxville challenging TVA's charges for Economy Surplus Power ("ESP") and Testing and Restart Power ("TRP") for two Bowater plants. In its complaint, Bowater alleges that in violation of the contract provision which states that TVA will charge ESP and TRP customers based on TVA's actual hourly incremental cost of providing ESP (1) TVA included certain alleged non-incremental costs in the prices for ESP and TRP, and (2) when calculating such prices, TVA used the cost of providing the most expensive 100 megawatts of ESP sold during a given hour instead of the average cost in that hour of serving the entire ESP load. The complaint also alleges that TVA has been unjustly enriched as a result of these overcharges. The lawsuit seeks, among other things, compensatory damages of approximately \$45 million plus interest. The case is set for trial in January 2005. On August 30, 2004, the judge in the case granted TVA's partial summary judgment motion as to Bowater Newsprint South Inc. ("Newsprint"), on the issue of statute of limitations. The court held that Newsprint could only seek damages from December 29, 1995 forward, rather than 1990 as Newsprint had alleged. This ruling reduces Newsprint's potential damages claim by approximately \$8.3 million, plus interest. TVA has filed a similar motion with respect to Bowater, Inc.

On August 31, 1999, Birmingham Steel Corporation filed a lawsuit in the U.S. District Court for the Northern District of Alabama alleging that TVA overcharged for ESP during the summer of 1998. The lawsuit was filed as a class action on behalf of industrial customers who participated in TVA's ESP program. Under ESP contracts, the hourly ESP energy price is calculated using TVA's actual incremental cost of supplying the ESP load in each hour. The plaintiff alleges that TVA overcharged for ESP during the summer of 1998 by including in the price of ESP some costs that were added to TVA's incremental cost. The complaint seeks over \$100 million in damages on behalf of Birmingham Steel and the other class members. In September 2002, the district court decertified the class and then dismissed Birmingham Steel's individual claim without prejudice on a jurisdictional issue. The class lawyers appealed the ruling on class decertification, and in December 2003, the Court of Appeals for the Eleventh Circuit reversed that ruling and sent the case back to the district court to allow the class lawyers a reasonable time to find a new class representative. The class lawyers have identified two new proposed class representatives. On August 26, 2004, the district court granted the motion of Citation Camden Castings, Inc. (one of the substituted class representative) to withdraw as representative. The district court recently allowed the substitution of the other proposed representative (Johns Manville) and the class action is proceeding.

In April 2004, a lawsuit was filed against TVA and 22 electric cooperatives (which provide power to members/consumers across many counties in Tennessee) in federal district court in Nashville, Tennessee. The plaintiffs are Tennessee residents and customers of some of the cooperatives and are seeking class action status on behalf of all similarly situated customers. The plaintiffs allege a number of violations of federal and state law, including the antitrust laws and the Tennessee Consumer Protection Act. They claim that (1) TVA and the cooperatives have unreasonably restrained trade and have created and maintained artificially high power rates, (2) the cooperatives are required by Tennessee law to issue patronage refunds or reduce rates and have failed to do so, and (3) the cooperatives have breached the fiduciary duty owed to the plaintiffs by mismanaging assets, using the assets in an improper manner, and entering into contracts with TVA which precluded them from issuing patronage refunds or reducing rates as required by law. The plaintiffs have asked the court to issue an injunction barring TVA and the cooperatives from engaging in unfair competition practices and to award the plaintiffs actual and treble damages (based on the alleged violation of antitrust statutes), restitution, rescission, or any other appropriate remedy pursuant to the Tennessee Consumer Protection Act. The defendants moved to dismiss the complaint, after which the plaintiffs filed an amended complaint. Although the plaintiffs have only partially responded to the motion to dismiss, they recently asked the court to allow them to file a second amended complaint. TVA will respond to the complaint, as amended, after the court decides whether to allow the second amendment.

In July 2004, two lawsuits were filed against TVA in federal court in New York City alleging that global warming is a public nuisance and that carbon dioxide ("CO<sub>2</sub>") emissions from TVA's fossil-fired electric generating facilities should be ordered abated because they contribute to causing the nuisance. The first case was filed by the States of California, Connecticut, Iowa, New Jersey, New York, Rhode Island, Vermont, and Wisconsin and the City of New York against TVA, American Electric Power, Inc., American Electric Power Service Corporation, Southern Company, Xcel Energy, Inc., and Cinergy Corporation. The second case, which also alleges private nuisance, was filed against the same defendants by Open Space Institute, Inc., Open Space Conservancy, Inc., and the Audubon Society of New Hampshire. There are no CAA requirements limiting CO<sub>2</sub> emissions, and, accordingly, the suits do not involve allegations of regulatory noncompliance. The theory of the cases is that global warming constitutes a nuisance and defendants' CO<sub>2</sub> emissions are contributing to the nuisance. Plaintiffs do not seek monetary damages, but do seek injunctive relief. Specifically, plaintiffs seek a court order requiring each defendant to cap its CO<sub>2</sub> emissions and then reduce these emissions by a specified percentage each year for at least a decade. The defendants filed motions to dismiss as of September 30, 2004. A briefing schedule has been set with final submissions due in December 2004.

It is not possible to predict with certainty whether TVA will incur any liability or to estimate the damages, if any, that TVA might incur in connection with the law suits described above except as specifically noted.

### 11. Stewardship Responsibilities

During 2004, TVA continued to conduct certain nonpower programs, including maintaining navigable river channels, providing flood control, and overseeing certain recreation facilities. TVA's responsibilities include reservoir operations, navigation, dam safety, and the general stewardship of land, water, and wildlife resources.

Historically, nonpower programs were primarily funded with federal appropriations. Certain nonpower program activities have also been funded with user fees and outside services revenues. 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 revenues from TVA's power program and other TVA revenue sources in the event that there were insufficient appropriations to pay for such activities in any year.

Beginning in 2000, Congress stopped providing appropriations to TVA to fund essential stewardship activities. Consequently, in 2004, 2003, and 2002, TVA paid \$87 million, \$83 million, and \$83 million, respectively, for essential stewardship activities primarily with power revenues. In addition, administrative jurisdiction over Land Between The Lakes was transferred to the Secretary of Agriculture effective October 1, 1999. As part of the transfer, TVA assumed responsibility for certain transition expenses associated with the transfer and has paid \$10 million of transition expenses with the last payment of \$1 million being made in 2004. TVA retains responsibility for management of the remaining nonpower assets and settlement of nonpower obligations.

As of September 30, 2004, TVA had transferred \$56 million of property and equipment to the U.S. Forest Service. After this transfer, the completed plant of the nonpower programs consists only of multipurpose dams and other plant. At September 30, 2004, the net completed plant balances for multipurpose dams and other plant were \$645 million and \$39 million, respectively (see note 3). At September 30, 2003, the net completed plant balances for multipurpose dams and other plant were \$654 million and \$40 million, respectively.

## 12. Power and Nonpower Activities

Beginning in the fourth quarter of 2004, TVA reported its power and nonpower program activities on a consolidated basis in its financial statements. The table below details the separate results of operations of each program.

	2004					2003		2002										
		Power		Nonpower				Power		Nonpower			Power		Nonpower			
	Pro	ogram	Р	Program Total		_	Program	Р	rogram	Total	Program			Program		Total		
(in millions)																		
Operating revenues																		
Sales of electricity	\$	7,439	\$	_	\$	7,439		\$ 6,875	\$	_	\$ 6,875	\$	6,708	\$	_	\$	6,708	
Other revenue		94				94		77		1_	78_	_	88		2		90	
Total operating revenues		7,533		-		7,533		6,952		1	6,953		6,796		2		6,798	
Operating expenses																		
Fuel and purchased power		2,081		-		2,081		1,957		-	1,957		1,877		-		1,877	
Operating and maintenance		2,319		-		2,319		2,037		2	2,039		1,859		2		1,861	
Depreciation and accretion		1,104		11		1,115		1,062		11	1,073		1,027		10		1,037	
Tax-equivalents		338		_		338		329		_	329		328		_		328	
Loss on plant/project cancellation		20		-		20		-		-	-		154		-		154	
Accelerated amortization	_				_				_			_	66	_		_	66	
Total operating expenses		5,862	_	11		5,873		5,385		13	_ 5,398_	_	5,311		12		5,323	
Operating income (loss)	\$	1,671	\$	(11)	\$	1,660		\$ 1,567	\$	(12)	\$ <u>1,555</u>	\$	1,485	\$	(10)	\$_	1,475	

## 13. Unaudited Consolidated Quarterly Financial Information

A summary of the unaudited quarterly results of operations for the years 2004 and 2003 follows. It should be read in conjunction with the audited financial statements appearing herein. Results for interim periods may fluctuate as a result of seasonal weather conditions, changes in rates, and other factors.

	2004											
(in millions)	First	Second	Third	Fourth	Total							
Operating revenues Historical operating expenses Reclassification of MTM gains (1) Reclassification of lease expense (2) Operating expenses after reclassification Operating income Net income	\$ 1,777 1,378 - 2 1,380 397 \$ 68	\$ 1,879 1,443 - 3 1,446 433 \$ 118	\$ 1,857 1,463 (3) 2 1,462 395 \$ 108	\$ 2,020 1,582 - 3 1,585 435 \$ 92	\$ 7,533 5,866 (3) 10 5,873 1,660 \$ 386							
(in millions)	First	Second	2003 Third	Fourth	Total							
Historical operating revenues	\$ 1,693	\$ 1,803	\$ 1,637	\$ 1,860	\$ 6,993							
Interdivisional sales ( <i>note 1–Reclassifications</i> )	(1) (11)	(1) (10)	(1) (6)	(1) (9)	(4) (36)							
Operating revenues after reclassifications	1,681	1,792	1,630	1,850	6,953							
Historical operating expenses	1,244	1,372	1,311	1,461	5,388							
Reclassification of lease expense (2)	2	3	2	3	10							
Operating expenses after reclassification	1,246	1,375	1,313	1,464	5,398							
Operating income	435	417	317	386	1,555							
Cumulative effects of accounting changes (4)	217				217							
Net income (loss)	\$ 311	\$ 80	<u>\$ (18)</u>	\$ 71	\$ 444							

#### Notes

- (1) Mark-to-market gains of \$3 million on purchased emissions allowance options have been reclassified to Fuel and purchased power expense from OCI during the third quarter of 2004.
- (2) In 2004, TVA reclassified certain lease expenses from other expenses to OPERATING AND MAINTENANCE ("O&M"). The result was an increase in O&M expense of \$10 million and corresponding increase in OTHER INCOME, net of \$10 million for each year presented.
- (3) Effective October 1, 2002, TVA adopted Emerging Issues Task Force ("EITF") Issue 02-3, Issues Related to Accounting for Contracts Involved in Energy Trading and Risk Management Activities. During 2003, TVA had net gains from displacement transactions of \$7.0 million. As a result of adopting this new standard, operating revenue and purchase power expense were reduced by \$36 million for the year ended September 30, 2003.
- (4) During the fourth quarter of 2003, TVA restated the cumulative effect of adoption of SFAS No. 143 resulting in the recognition of an additional \$17 million charge as compared to the original \$178 million charge that was previously reported.

## 14. Subsequent Events

## Resignation

Oswald J. Zeringue, TVA's President and Chief Operating Officer, has announced his intention to retire from TVA at the end of calendar year 2005. Mr. Zeringue has served in his current position since April 1998. TVA is in the process of finding a person to succeed Mr. Zeringue.

## Legislative

On November 20, 2004, Congress passed H.R. 4818, an "omnibus" appropriations bill for fiscal year 2005 which affects TVA in several ways.

The legislation restructures the Board by increasing the number of directors from three full-time members to nine part-time members, at least seven of whom must be legal residents of the TVA service area. As with the current Board, future Board members will be appointed by the President and confirmed by the Senate, but will serve five-year terms rather than the current nine-year term. The Board's role will continue to be, among other things, to develop long-term plans and strategies for TVA, approve annual budgets and an employee compensation plan for TVA, and have general responsibility for TVA policies. The Board will also create an audit committee consisting of members of the Board "independent of the management" to review reports from TVA's external auditors and Inspector General and

make recommendations to the full Board. Congress also reaffirmed the authority of the Board to set electric rates charged by TVA. These provisions will go into effect on the date when the Board has a quorum of five members or on May 18, 2005, whichever date is the later. The members of the Board will select a member to serve as Chairman.

The legislation also creates the position of Chief Executive Officer ("CEO") for TVA. The CEO will be appointed by the Board and will be responsible for development and implementation of TVA's strategic direction. The CEO will serve at the pleasure of the Board.

The "omnibus" appropriations legislation also amends the Securities Exchange Act of 1934 to provide that beginning with its annual report for fiscal year 2006, TVA must file annual reports (10-Ks), quarterly reports (10-Qs), and current reports (8-Ks) with the U.S. Securities and Exchange Commission. Also, TVA will be deemed an issuer for some of the audit-related provisions of section 10A of the Securities Exchange Act of 1934 but not for those provisions of section 10A that are inconsistent with TVA's structure under the TVA Act. The legislation does not require TVA to register securities under either the Securities Act of 1933 or the Securities Exchange Act of 1934. The legislation provides that TVA securities are "government securities" under the Securities Exchange Act of 1934, and that nothing in the amendment interferes with or affects the Board's authority to carry out its statutory functions under the TVA Act.

The American Jobs Creation Act, H.R. 4520, sometimes referred to as the corporate tax bill, became law in October 2004. It contains provisions designed to limit the use of sale/leasebacks and lease/leasebacks by tax-exempt entities, such as TVA.

#### Transmission Interconnection

East Kentucky Power Cooperative ("EKPC") has filed an application with FERC ostensibly seeking an order requiring EKPC to be interconnected with TVA's transmission system. If this interconnection is granted, EKPC would be able to use TVA's transmission system to provide power to Warren Rural Electric Cooperative Corporation ("WRECC") when WRECC's contract with TVA terminates in April 2008. TVA has submitted a response to FERC stating that if FERC grants the requested relief, the actual effect would be to require TVA to provide free transmission service across TVA's transmission system in violation of the Anti-Cherrypicking Provision of the Federal Power Act.

## Nuclear Fuel Contracts

At its October 27, 2004 Board Meeting, the Board approved a contract to Global Nuclear Fuel — Americas, LLC for the design, fabrication and supply of nuclear fuel and fuel-related engineering services for Browns Ferry Nuclear Plant Unit 1. This action also approved a supplement to a contract with United States Enrichment Corporation to supply natural uranium for the Browns Ferry Unit 1 restart core. Total expenditures from the two contracts are estimated at \$125 million.

## Sale of Office Building

TVA has received an offer from a prospective buyer for the East Tower of its Knoxville Office Complex. In accordance with the Act, TVA conducted a public auction on November 24, 2004. TVA awarded the successful bidder an option to purchase the East Tower for \$12 million, and the option will be valid for 90 days from the date of the auction. If the option is exercised, the TVA employees in the East Tower will be relocated to the West Tower of TVA's Knoxville Office Complex in phases, over a six-month period after the date of the closing. TVA will be required to recognize a loss on the sale of the East Tower of approximately \$10 million if the option is exercised.

## Legal Proceedings

On November 10, 2004, North Carolina sent the EPA a Notice of Intent to Sue TVA for violations of the Clean Air Act (the "Notice"). North Carolina may file a lawsuit in federal court 60 days after November 15, the date TVA received the Notice. North Carolina alleges that TVA violated the New Source Review ("NSR") requirements of the Clean Air Act (among other state and federal regulations) by modifying nine fossil plants located in Alabama, Kentucky, and Tennessee, without having these modifications reviewed by the EPA or the states to determine if new emission controls or technologies needed to be put in place. North Carolina asserts that these actions have contributed to the degradation of air quality in North Carolina. These allegations are similar to those involved in the EPA's administrative order dismissed by the Eleventh Circuit. See "Legal Proceedings" in Part I of this Statement.

#### REPORT OF INDEPENDENT AUDITORS

To the Board of Directors of the Tennessee Valley Authority:

In our opinion, the accompanying balance sheets and the related statements of income, statements of cash flows, and statements of changes in proprietary capital present fairly, in all material respects, the financial position of the Tennessee Valley Authority at September 30, 2004, and 2003, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2004, in conformity with accounting principles generally accepted in the United States of America. 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 auditing standards generally accepted in the United States of America. Those standards 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 our opinion.

As discussed in note 1 to the financial statements, effective October 1, 2002, TVA changed the methodology for estimating unbilled revenue from electricity sales. As discussed in note 1 to the financial statements, effective October 1, 2002, TVA adopted Statement of Financial Accounting Standards No. 143, *Accounting for Asset Retirement Obligations*. As discussed in note 1 to the financial statements, effective October 1, 2002, TVA adopted Emerging Issues Task Force Issue No. 02-3, *Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities*.

PricewaterhouseCoopers LLP

Pricentulame Coopers CCB

Knoxville, Tennessee November 18, 2004

## 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 Information Statement. 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 Information Statement 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. TVA performed an assessment of its internal control system as of September 30, 2004, and determined that it's internal control over financial reporting was effective.

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 auditing standards generally accepted in the United States of America and *Government Auditing Standards* issued by the Comptroller General of the United States. 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 Auditors does not limit the responsibility of management for information contained in the financial statements and elsewhere in the Information Statement.

Michael E. Rescoe Chief Financial Officer

and Executive Vice President of Financial Services

#### REPORT OF INSPECTOR GENERAL

## To the Board of Directors of the Tennessee Valley Authority

The Tennessee Valley Authority ("TVA") contracted with the independent certified public accounting firm of PricewaterhouseCoopers LLP ("PricewaterhouseCoopers") to audit the balance sheets as of September 30, 2004 and 2003, and the related statements of income, changes in proprietary capital, and cash flows for each of the three years in the period ended September 30, 2004. The contract required the audit be done in accordance with generally accepted government auditing standards.

Under the Inspector General Act, the Inspector General ("IG") is responsible for taking appropriate steps to assure any work performed by nonfederal auditors, including PricewaterhouseCoopers, complies with generally accepted government auditing standards. The Chief Financial Officers Act also places responsibility on the IG regarding TVA's annual financial statement audit. In keeping with these statutory responsibilities, the TVA Office of Inspector General reviewed PricewaterhouseCoopers' reports and related audit documentation, interviewed their representatives, and performed such other procedures as we deemed appropriate in the circumstances to provide reasonable assurance the audit was performed in accordance with generally accepted government auditing standards.

The objective of our review was not intended to enable us to express, and we do not express, an opinion on TVA's financial statements or on management's conclusions about the effectiveness of its system of internal control. PricewaterhouseCoopers is responsible for the auditor's reports dated November 18, 2004, and the conclusions expressed in the reports. However, our review disclosed no instances where PricewaterhouseCoopers did not comply, in all material respects, with generally accepted government auditing standards. Our review was performed in accordance with generally accepted government auditing standards.

Richard W. Moore Inspector General

Dichow W. Marre

November 24, 2004

# CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

During 2004, there were no changes in or disagreements with TVA's independent auditors on accounting matters or financial disclosure.

## **CONTROLS AND PROCEDURES**

TVA's management, including the Chief Financial Officer and the members of the Board, have conducted an evaluation of the effectiveness of TVA's disclosure controls and procedures as of the end of the period covered by this Statement. Based on that evaluation, the members of the Board and the Chief Financial Officer concluded that the disclosure controls and procedures are effective in providing reasonable assurance that all material information necessary and appropriate in this Statement has been accumulated and communicated to them to allow timely decisions regarding disclosure.

During the fourth quarter of 2004, management identified a significant deficiency related to TVA's end use billing arrangements with wholesale power customers. Under these arrangements, TVA relies on the customers to calculate major components of their own power bills. Without some assurance of the adequacy of customer internal controls, TVA cannot be reasonably satisfied that internal control deficiencies within the customer control environments do not exist. TVA is still in the process of fully assessing the potential impacts of this deficiency and has retained a consultant to review and advise as to a plan of action.

TVA management has also identified a significant deficiency related to the mark-to-market valuation of coal contracts that contain volumetric optionality. Although key controls have been designed to facilitate the complete and accurate capture and processing of coal contract activities, many control activities are not standardized. As such, the reliability and effectiveness of these control processes are dependent on interpretation and execution by different coal contract administrators. In addition, certain coal contract activities are not adequately documented and have not been supported by formal training or communication of controls. In response to these control deficiencies, TVA performed a 100 percent review of coal contracts and corrected all assumptions in the valuation model to reflect the proper valuation as of September 30, 2004. This is not an optimal correction because of the manual nature and the time required to perform such reviews. Our longer term plans to address this internal control deficiency include standardized guidelines and procedures, formal training, and communications of controls and proper segregation of duties.

During the fourth quarter of 2004, TVA's accounting function was centralized to increase the oversight of financial statement information and improve the completeness of supporting documentation.

TVA management believes that a control system, no matter how well designed and operated, cannot provide absolute assurance that the objectives of the control system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company can be detected. TVA's controls and procedures can only provide reasonable, not absolute, assurance that the objectives will be met.

It should be noted that the design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote.

## **PART III**

#### **DIRECTORS AND EXECUTIVE OFFICERS**

TVA is administered by a board of directors ("Board") composed of three persons appointed by the President of the United States and confirmed by the Senate. TVA's management structure includes a Management Committee which works with the Board to determine TVA's strategic mission and future direction, as well as an Executive Committee which provides management oversight and ensures that policies of the Board are carried out. The Board and selected officers, their ages, their years of employment with TVA, and their principal occupations for recent years are as follows:

<u>Directors</u>	<u>Age</u>	Year Appointed	Year Term Expires
Glenn L. McCullough, Jr	49	1999	2005
Skila Harris	54	1999	2008
William W. Baxter	51	2001	2011

Mr. McCullough was appointed to the Board in November 1999, and previously served as the mayor of Tupelo, Mississippi, beginning in 1997. Prior to his election as mayor of Tupelo, he was the director of the Mississippi office of the Appalachian Regional Commission. Chairman McCullough also worked in the family business, McCullough Steel Products, for 12 years.

Ms. Harris was appointed to the Board in November 1999. Prior to her current position, she served at the Department of Energy ("DOE") as Executive Director of the Secretary of Energy Advisory Board. From 1993 until 1997, she was a Special Assistant to Vice President Gore and Mrs. Gore's Chief of Staff. She came to the White House from Steiner-Liff Iron and Metal Company in Nashville, Tennessee, where she was Vice President for Development and Compliance. Ms. Harris served as a project manager at the U.S. Synthetic Fuels Corporation, and she was with the DOE during the Carter Administration. She has also held positions with management and engineering consulting firms specializing in energy-related work.

Mr. Baxter was appointed to the Board in November 2001. Prior to joining the Board, Mr. Baxter was Chairman and Chief Executive Officer of Holston Gases Inc. of Knoxville, Tennessee. Before joining Holston Gases Inc. in 1981, Mr. Baxter was an attorney with Garrett, Coffee, McGee & Baxter in Knoxville. From December 1997 through December 2000, Mr. Baxter was Commissioner of the Department of Economic and Community Development for the State of Tennessee.

Executive Officers	<u>Age</u>	Year Employment <u>Commenced</u>
Oswald J. Zeringue* President and Chief Operating Officer	58	1989
Karl W. Singer	48	1993
Michael E. Rescoe* Chief Financial Officer & Executive Vice President of Financial Services	52	2003
Maureen H. Dunn*  Executive Vice President and General Counsel	55	1978
John E. Long, Jr.*	52	1980
Kenneth R. Breeden* Executive Vice President, Customer Service and Marketing	56	2004
Ellen Robinson* Executive Vice President, Communications and Government Relations	50	2001
D. LeAnne Stribley* Executive Vice President, Administration	50	1995
John Bradley*	44	2002
Theresa A. Flaim*	55	2002

\*Member of Management Committee

Mr. Zeringue was named President and Chief Operating Officer in April 1998. Prior to his current position, he served as Chief Nuclear Officer and Executive Vice President (1997-1998), as Senior Vice President, Nuclear Operations (1993-1997), as Browns Ferry Site Vice President (1989-1993), and as Plant Manager of Palo Verde Nuclear Station, Arizona Public Service Company (1987-1989).

Mr. Singer was named Chief Nuclear Officer and Executive Vice President, TVA Nuclear in June 2004. Prior to his current position, he served as Senior Vice President, Nuclear Operations (1999-2004), as Plant Manager of Browns Ferry Nuclear Plant (1997-1999), as TVA Nuclear Process Improvement and Total Quality Manager (1994-1996), and as Plant Project Engineer of Browns Ferry Nuclear Plant (1993-1994).

Mr. Rescoe was named Chief Financial Officer and Executive Vice President of Financial Services, in July 2003. Prior to his current position, he served as Senior Vice President of Finance and Planning and Chief Financial Officer with 3Com Corp., as Chief Financial Officer of Pacific Gas & Electric, and as an investment banker serving utility and energy sectors with the New York-based Bear Stearns and Kidder, Peabody.

Ms. Dunn joined TVA as an attorney in May 1978, assumed the position of Assistant General Counsel in September 1986, and assumed the position of Executive Vice President and General Counsel in January 2001.

Mr. Long was named Executive Vice President of Human Resources in October 2000. Since 1992, he has also served as a management appointee to the TVA Retirement System Board. Mr. Long joined TVA in 1980 as a Personnel Officer in the Engineering Division.

Mr. Breeden was named Executive Vice President of Customer Service and Marketing in August 2004. He has more than 20 years of utility-industry experience having served in officer positions at TXU Corp. in Dallas and at Entergy Services, Inc. in Little Rock, Arkansas. Before joining Entergy, Mr. Breeden worked for 11 years with South Central Bell in Nashville and Memphis and with AT&T in Nashville and New Jersey.

Ms. Robinson was named Executive Vice President of Communications and Government Relations in June 2001. She served as Senior Vice President of Communications and Government Affairs at CNH Global NV in Racine, Wisconsin and before that as Vice President of Communications and Government Affairs at Case Corporation. Ms. Robinson joined Case from Burson-Marsteller in New York, where she was a Vice President and a head of the business-to-business marketing unit.

Ms. Stribley was named Executive Vice President of Administration in December 2000. She joined TVA as Vice President of Finance in 1995 and assumed additional responsibilities as Controller in 1997. Before joining TVA, Ms. Stribley was Vice President and Chief Financial Officer at Travel Resources Management Group, Inc. Additionally, Ms. Stribley was Director of Corporate Finance at Ohio-based LTV Corporation from 1987 to 1994, and between 1981 to 1987 she worked as Assistant Treasurer for the Western Company of North America, an offshore-drilling and oil-services corporation.

Mr. Bradley was named Senior Vice President of Economic Development in August 2002. He is responsible for recruitment and retention of capital investment and job creation, business development, technical services, and community development. Mr. Bradley served as Senior Vice President for Economic Development for the Memphis Regional Chamber of Commerce from 1996 to 2002, and he worked in Memphis Light, Gas & Water's economic development department from 1980 to 1996.

Dr. Flaim was named as Senior Vice President of Strategic Planning and Analysis in June 2002. She is responsible for developing strategies related to the ongoing competitive restructuring of the electric-utility industry. She served for nine years as Vice President of Strategic Planning for Niagara Mohawk. Dr. Flaim also worked at the Solar Energy Research Institute and the Los Alamos National Laboratory.

# LABOR AGREEMENTS AND COMPENSATION

On September 30, 2004, TVA had 12,742 employees, of whom approximately 5,279 were trades and labor employees. Neither the federal labor relations laws covering most private sector employers nor those covering most federal agencies apply to TVA. However, the TVA Board has a long-standing policy of acknowledging and dealing with

recognized representatives of its employees, which policy is reflected in long-term agreements to recognize the unions (or their successors) that represent TVA employees. Federal law prohibits TVA employees from engaging in strikes against TVA.

Salaries of regular TVA employees are limited by a federal pay cap (at September 30, 2004, the Executive Level IV was \$136,900). The federal pay cap makes it a challenge for TVA to recruit and retain top management talent. In response, TVA has developed and implemented supplementary compensation arrangements to reduce the impact of the pay cap and to enhance TVA's ability to attract and retain the caliber of executive talent required to manage one of the largest power systems in the country. TVA believes the implementation of these arrangements is within its legal authority. In the past, the Government Accountability Office ("GAO") has expressed the opinion that some of TVA's compensation arrangements are not within TVA's legal authority. However, GAO has no authority to issue binding legal opinions on this matter or to stop any TVA payments. Congress has been aware of TVA's supplemental compensation arrangements and has not taken any action that would undermine TVA's position that the arrangements are within its legal authority.

In October 1995, the President issued an Executive Order requiring government corporations, including TVA, to submit information to Office of Management and Budget ("OMB") on bonuses paid to its senior executives. TVA submits information on these bonuses annually to OMB and also publicly disseminates this information. OMB approval of TVA's bonuses is not required.

#### **CODE OF ETHICS**

TVA has a Disclosure and Financial Ethics Code ("Ethics Code") that applies to all executive officers and directors of TVA as well as to all employees who certify information contained in quarterly reports, annual reports, or information statements or who have responsibility for internal control self-assessments. The Ethics Code includes provisions covering conflicts of interest, ethical conduct, compliance with applicable laws, rules and regulations, responsibility for full, fair, accurate, timely, and understandable disclosures, and accountability for adherence to the Ethics Code. The Ethics Code is posted on TVA's website at: www.tva.com. TVA will provide a current copy of the Ethics Code to any person, without charge, upon request. Requests may be made by calling 888-882-4975 or by sending an e-mail to: investor@tva.com. Any waivers of or changes to provisions of the Ethics Code will be promptly disclosed to the public, subject to limitations imposed by law.

#### PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table presents fees for professional services rendered by PricewaterhouseCoopers LLP for the years ended September 30, 2004 and 2003.

2003
\$ 608,743
112,030
40,086
\$ 760,859

- (1) Audit fees consist of professional services rendered for the audit of TVA's annual financial statements and the review of the financial statements included in TVA's Quarterly Reports.
- (2) Audit-related fees are fees for services which are usually performed by the auditor and consist primarily of accounting assistance on proposed transactions and accounting standards and accounting assistance related to the adoption of the Sarbanes-Oxley Act.
- (3) All other fees in 2004 and 2003 primarily relate to actuarial transition costs. Additionally in 2003, fees were paid for a benefit cost analysis of various plan designs and contribution options.

# **PART IV**

# STATISTICAL AND FINANCIAL SUMMARIES

STATISTICAL AND FINANCIAL SUMMARIES
For the years ended September 30
Unaudited

4,506 15,032 3,342 <u>2,264</u> 25,880 <u>736</u>	23,398	24,723	72% 14% 14%	1.34 5.45 1.10 1.31	110,643 1,120,868 1,450 129.40 10,131
4,489 15,032 3,342 2,232 25,831 25,831	25,496	24,676	71% 12% 17% NM	1.26 3.61 0.61	118,097 1,197,295 1,348 112.61 10,138
4,652 15,012 5,545 2,268 28,123 736	25,376	25,995	65% 11% 24% NM	1.23 4.54 0.56 1.06	131,898 1,338,157 1,395 104.22 10,145
4,648 15,014 5,625 2,394 28,417 736	26,661	26,670	61% 11% 28% NM	1.23 5.22 0.58 1.04	135,736 1,381,837 1,406 101.73 10,180
4,755 15,003 5,620 2,384 28,498 <u>736</u> 28,498	27,253	23,204	62% 10% 28% NM	1.25 4.01 0.71 1.10	139,727 1,426,151 1,538 107.81
4,756 15,049 2,729 2,232 28,502 736 28,502	28,295	26,388	63% 7% 30% NM	1.28 3.94 0.51 1.05	137,169 1,403,110 1,434 102.21 10,229
4,808 15,042 5,729 3,154 29,469 736 29,469	29,344	25,940	63% 6% 31% NM	1.27 6.22 0.49 1.05	143,224 1,470,452 1,504 102.29 10,267
4,941 15,050 5,715 3,923 30,365 736	27,368	27,163	64% 6% 29% 1%	1.32 6.07 0.44 1.08	146,806 1,505,504 1,588 105.47 10,255
4,924 15,023 5,751 4,643 30,341 1,176	29,052	26,061	63% 6% 30% 1%	1.39 4.65 0.41 1.11	141,272 1,458,367 1,564 107.25 10,323
5,022 15,029 5,776 4,655 30,482 1,176	28,530	29,866	60% 11% 29% NM	1.43 7.61 0.39 1.14	134,931 1,391,933 1,534 110.21
4,981 15,076 5,777 4,685 30,519 2,670	29,966	27,997	61% 9% 30% NM	1.48 9.01 0.39 1.14	140,890 1,446,284 1,602 110,75
Winter net dependable generating capacity (megawatt)* Hydro Fossil Nuclear units in service Combustion turbine and diesel generators (%) TVA facilities Other facilities Total long-term available capacity (%)	System peak load (megawatt) – summer	System peak load (megawatt) – winter	Percent gross generation by fuel source Fossil Hydro Nuclear Combustion turbine	Fuel cost per kWh (cents) Fossil Combustion turbine Nuclear ® Aggregate fuel cost per kWh net thermal generation	Fuel data  Net thermal generation (millions of kWh)  Billion Btu  Fuel expense (millions of dollars)  Cost per million Btu (cents)  Net heat rate, fossil only

See "Generating Resources" in Part I of the Information Statement.
As of September 30, 2004, includes twenty-four 85-megawaft units subject to lease/leaseback arrangements.
Total summer NDC for 2004, 2003, and 2002 was approximately 32,056 megawatts, 30,743 megawatts, 30,477 megawatts, respectively.
TVA changed its method of expensing the interest component of nuclear fuel expense in 1995.

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## INDEPENDENT ACCOUNTANTS

The financial statements of TVA at September 30, 2004 and 2003, and for each of the three fiscal years in the period ended September 30, 2004, included herein as part of this Statement, have been audited by PricewaterhouseCoopers LLP, independent accountants, as stated in their report, dated November 18, 2004, which report is also included herein.

\* \* \* \* \*

This Information Statement has been approved by duly authorized officers of the Tennessee Valley Authority.

Tennessee Valley Authority

By: /s/ MICHAEL E. RESCOE

Michael E. Rescoe Chief Financial Officer and Executive Vice President of Financial Services By: /s/ RANDY TRUSLEY

Randy Trusley
Vice President & Controller

#### CERTIFICATIONS OF THE BOARD OF DIRECTORS

Glenn L. McCullough, Jr., Skila Harris and Bill Baxter individually certify that:

- 1. I have reviewed this Information Statement ("Statement") of the Tennessee Valley Authority;
- 2. Based on my knowledge, this Statement does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the periods covered by this Statement;
- 3. Based on my knowledge, the financial statements and other financial information included in this Statement fairly present in all material respects the financial condition, results of operations, and cash flows of the Tennessee Valley Authority as of, and for, the periods presented in this Statement;
- 4. The other certifiers and I are responsible for establishing and maintaining disclosure controls and procedures for the Tennessee Valley Authority and have:
  - designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Tennessee Valley Authority is made known to us by others particularly during the period in which this Statement is being prepared;
  - b) evaluated the effectiveness of the Tennessee Valley Authority's disclosure controls and procedures and presented in this Statement our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Statement based on such evaluation; and
  - c) disclosed in this Statement any change in internal control over financial reporting that occurred during the fourth quarter ended September 30, 2004, that has materially affected, or is reasonably likely to materially affect, the Tennessee Valley Authority's internal control over financial reporting; and
- 5. The other certifiers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Tennessee Valley Authority's auditors and the Inspector General of the Tennessee Valley Authority:
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Tennessee Valley Authority's ability to record, process, summarize, and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Tennessee Valley Authority's internal control over financial reporting.

Date: November 24, 2004

Glenn L. McCullough, Jr. Chairman

Gen L. Mulbugh J.

Skila Harris Director

Shila Hamis

Bill Baxter Director

Rin Bakan

#### CERTIFICATION OF THE CHIEF FINANCIAL OFFICER

I, Michael E. Rescoe, certify that:

- 1. I have reviewed this Information Statement ("Statement") of the Tennessee Valley Authority;
- 2. Based on my knowledge, this Statement does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the periods covered by this Statement;
- 3. Based on my knowledge, the financial statements and other financial information included in this Statement fairly present in all material respects the financial condition, results of operations, and cash flows of the Tennessee Valley Authority as of, and for, the periods presented in this Statement;
- 4. The other certifiers and I are responsible for establishing and maintaining disclosure controls and procedures for the Tennessee Valley Authority and have:
  - designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Tennessee Valley Authority is made known to us by others particularly during the period in which this Statement is being prepared;
  - b) evaluated the effectiveness of the Tennessee Valley Authority's disclosure controls and procedures and presented in this Statement our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Statement based on such evaluation; and
  - c) disclosed in this Statement any change in internal control over financial reporting that occurred during the fourth quarter ended September 30, 2004, that has materially affected, or is reasonably likely to materially affect, the Tennessee Valley Authority's internal control over financial reporting; and
- 5. The other certifiers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Tennessee Valley Authority's auditors and the Inspector General of the Tennessee Valley Authority:
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Tennessee Valley Authority's ability to record, process, summarize, and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Tennessee Valley Authority's internal control over financial reporting.

Date: November 22, 2004

Michael E. Rescoe Chief Financial Officer

and Executive Vice President of Financial Services

# SUPPLEMENTAL SCHEDULE

# Valuation and Qualifying Accounts and Reserves

Description	Balance at Beginning of Yea	Additions Charged to Expense	Deductions	Balance at End of Year
		(in millions)		
For the year ended September 30, 2004 Allowance for doubtful accounts				
Receivables Loans	\$ 8 14	\$ – –	\$ – –	\$ 8 14
Allowance for inventory obsolescence	33	11	(8)	36_
Total allowances deducted from assets	<u>\$ 55</u>	<u>\$ 11</u>	\$ (8)	\$ 58
For the year ended September 30, 2003 Allowance for doubtful accounts Receivables	\$ 13	\$ –	\$ (5)	\$ 8
Loans	13	1	_	14
Allowance for inventory obsolescence	29	10	(6)	33_
Total allowances deducted from assets	\$ 55	<u>\$ 11</u>	<u>\$ (11)</u>	\$ 55
For the year ended September 30, 2002 Allowance for doubtful accounts				
Receivables Loans	\$ 12 13	\$ 1 1	\$ – (1)	\$ 13 13
Allowance for inventory obsolescence	47	<u>-</u>	(18)	29
Total allowances deducted from assets	<u>\$ 72</u>	<u>2</u>	<u>\$ (19)</u>	<u>\$ 55</u>