Tennessee Valley Authority Form 10-K December 16, 2008

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549	
FORM 10-K	
(MARK ONE) x ANNUAL REPORT PURSUANT TO SECTION 13, 15(d), O SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended September 30, 2008 OR o TRANSITION REPORT PURSUANT TO SECTION 13 OR THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from to	
Commission file number 000-52313	
TENNESSEE VALLEY AUTHORITY (Exact name of registrant as specified in its charter)	
A corporate agency of the United States created by an act of Congress	62-0474417
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
400 W. Summit Hill Drive Knoxville, Tennessee (Address of principal executive offices)	37902 (Zip Code)
(865) 632-21 Registrant's telephone number	
Securities registered pursuant to Sect	ion 12(b) of the Act: None
Securities registered pursuant to Sect	tion 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13, Section 15(d), or Section 37 of the Securities Exchange Act. Yes o No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13, 15(d), or 37 of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant

was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one): Large accelerated filer o Accelerated filer o Non-accelerated filer x Smaller reporting company o (Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act). Yes o No x

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#### FORWARD-LOOKING INFORMATION

This Annual Report on Form 10-K for the fiscal year ended September 30, 2008 ("Annual Report") contains forward-looking statements relating to future events and future performance. All statements other than those that are purely historical may be forward-looking statements.

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," "proba" "potential," or other similar expressions.

Examples of forward-looking statements include, but are not limited to:

Statements regarding strategic objectives;

Projections regarding potential rate actions;

Forecasts of costs of certain asset retirement obligations;

Estimates regarding power and energy forecasts;

Expectations about the adequacy of TVA's funding of its pension plans, nuclear decommissioning trust, and asset retirement trust;

- The anticipated results of TVA's Extended Power Uprate project at Browns Ferry Nuclear Plant;
- TVA's plan to reduce the growth in peak demand by up to 1,400 megawatts by the end of 2012;
  - TVA's plans to borrow under its credit facility with the U.S. Treasury during 2009;
    - TVA's plans to continue using short-term debt to meet current obligations; and
    - The anticipated cost and timetable for placing Watts Bar Unit 2 in service.

Although the Tennessee Valley Authority ("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:

TVA's protected service area,

The sole authority of the TVA board of directors to set power rates,

Various environmental matters including laws, regulations, and administrative orders restricting emissions and preferring certain fuels or generation sources over others,

The licensing, operation, and decommissioning of nuclear generating facilities;

TVA's management of the Tennessee River system,

## TVA's credit rating, and

TVA's debt ceiling;

Loss of customers;

Performance of TVA's generation and transmission assets;

Disruption of fuel supplies, which may result from, among other things, weather conditions, production or transportation difficulties, labor challenges, or environmental regulations affecting TVA's fuel suppliers; • Purchased power price volatility;

- Events at facilities not owned by TVA that affect the supply of water to TVA's generation facilities;
  - Compliance with existing or future environmental laws and regulations;
  - Significant delays or cost overruns in construction of generation and transmission assets;
     Inability to obtain regulatory approval for the construction of generation assets;

Significant changes in demand for electricity;

- Legal and administrative proceedings, including awards of damages and amounts paid in settlements; • Weather conditions, including drought;
  - Failure of TVA's transmission facilities or the transmission facilities of other utilities;

• Events at a nuclear facility, even one that is not operated by or licensed to TVA; Catastrophic events such as fires, earthquakes, floods, tornadoes, pandemics, wars, terrorist activities, and other similar events, especially if these events occur in or near TVA's service area;

• Reliability of purchased power providers, fuel suppliers, and other counterparties; Changes in the market price of commodities such as coal, uranium, natural gas, fuel oil, construction materials, electricity, and emission allowances;

• Changes in the prices of equity securities, debt securities, and other investments;

Changes in interest rates;

Creditworthiness of TVA, its counterparties, and its customers;

Rising pension costs and health care expenses;

• Increases in TVA's financial liability for decommissioning its nuclear facilities and retiring other assets; Unplanned contributions to TVA's pension or other postretirement benefit plans or to TVA's nuclear decommissioning trust;

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•	Limitations on TVA's ability to borrow money;
•	Changes in the economy;
• Ineffectiveness of TVA's disclosu	re controls and procedures and its internal control over financial reporting;
•	Changes in accounting standards;
•	The loss of TVA's ability to use regulatory accounting;
•	Problems attracting and retaining skilled workers;
•	Changes in technology;
Changes in T	'VA's plans for allocating its financial resources among projects;
Differences between estimate	es of revenues and expenses and actual revenues and expenses incurred;
•	Volatility in financial markets;
•	Changes in the market for TVA securities; and
•	Unforeseeable events.

Additionally, other risks that may cause actual results to differ materially from the predicted results are set forth in Item 1A, Risk Factors, and Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations. 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.

#### GENERAL INFORMATION

Fiscal Year

Unless otherwise indicated, years (2008, 2007, etc.) in this Annual Report refer to TVA's fiscal years ended September 30. References to years in the biographical information about directors and executive officers in Item 10, Directors, Executive Officers and Corporate Governance are to calendar years.

#### Notes

References to "Notes" are to the Notes to Financial Statements contained in Item 8, Financial Statements and Supplementary Data in this Annual Report.

#### Available Information

TVA's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and all amendments to those reports are made available on TVA's web site, free of charge, as soon as reasonably practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission ("SEC"). TVA's web site is www.tva.gov. Information contained on TVA's web site shall not be deemed to be incorporated into, or to be a part of, this Annual Report. In addition, the public may read and copy any reports or other information that TVA files with the SEC at the SEC's Public Reference Room at 100 F Street N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. TVA's SEC reports are also available to the public without charge from the web site maintained by the SEC at www.sec.gov.

### PART I

#### ITEM 1. BUSINESS

#### The Corporation

In 1933, President Franklin D. Roosevelt proposed and the U.S. Congress created the Tennessee Valley Authority ("TVA"), a government corporation. TVA was created, among other things, to improve navigation on the Tennessee River, reduce the damage from destructive flood waters within the Tennessee River System and downstream on the lower Ohio and Mississippi Rivers, further the economic development of TVA's service area in the southeastern United States, and sell the electricity generated at the facilities TVA operates.

Today, TVA operates the nation's largest public power system and supplies power in most of Tennessee, northern Alabama, northeastern Mississippi, and southwestern Kentucky and in portions of northern Georgia, western North Carolina, and southwestern Virginia to a population of nearly nine million people. In 2008, the revenues from TVA's power program were \$10.4 billion and accounted for virtually all of TVA's revenues.

TVA also manages the Tennessee River and its tributaries — the United States' fifth largest river system — to provide, among other things, year-round navigation, flood damage reduction, and affordable and reliable electricity. Consistent with these primary purposes, TVA also manages the river system to provide recreational opportunities, adequate water supply, improved water quality, and economic development. TVA's management of the Tennessee River and its tributaries will sometimes be referred to as TVA's "stewardship" program in this Annual Report.

Initially, all TVA operations were funded by federal appropriations. Direct appropriations for the TVA power program ended in 1959, and appropriations for TVA's stewardship, economic development, and multipurpose activities ended in 1999. Since 1999, TVA has funded all of its operations almost entirely from the sale of electricity and power system financings.

#### Strategy

On May 31, 2007, the TVA Board of Directors ("TVA Board") approved the 2007 Strategic Plan ("Strategic Plan"). The Strategic Plan focuses on TVA's performance in the following five broad areas and establishes general guidelines for each area:

Customers:	Maintain power reliability	, provide competitive rates, and build trust with TVA's customers;
	People:	Build pride in TVA's performance and reputation;
Financial:	Adhere to a set of sound f	nancial guiding principles to improve TVA's fiscal performance;
Assets	:: Use TVA's as	ssets to meet market demand and deliver public value; and
Ope	rations: Impr	ove performance to be recognized as an industry leader.

See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations – Executive Summary — 2008 Performance Indicators for a discussion of the corporate-level metrics that TVA used during 2008 to monitor its progress toward successful implementation of the Strategic Plan.

#### Service Area

The area in which TVA sells power, its service area, is defined by two pieces of Congressional legislation: the Tennessee Valley Authority Act of 1933, as amended, 16 U.S.C. §§ 831-831ee (as amended, the "TVA Act") and an amendment to the Federal Power Act ("FPA") known as the "anti-cherrypicking provision."

Under the TVA Act, subject to certain minor exceptions, TVA may not, without specific authorization from the U.S. Congress, enter into contracts which would have the effect of making it, or the distributor customers of its power, a source of power supply outside the area for which TVA or its distributor customers were the primary source of power supply on July 1, 1957. This provision is referred to as the "fence" because it bounds TVA's sales activities, essentially limiting TVA to power sales within a defined service area.

Correspondingly, the FPA, primarily through the anti-cherrypicking provision, prevents the Federal Energy Regulatory Commission ("FERC") from ordering TVA to provide access to its transmission lines to others for the purpose of using TVA's transmission lines to deliver power to customers within substantially all of TVA's defined service area. As a result, the anti-cherrypicking provision reduces TVA's exposure to loss of revenue.

Sales of electricity accounted for substantially all of TVA's operating revenues in 2008, 2007, and 2006, amounting to \$10.3 billion, \$9.2 billion, and \$8.8 billion, respectively. TVA's revenues by state for the last three years are detailed in the table below.

	For the yea	rs ended (in millio	otember	30	
		2008	2007		2006
Alabama	\$	1,410	\$ 1,264	\$	1,239
Georgia		238	206		226
Kentucky		1,192	1,084		902
Mississippi		923	804		798
North Carolina		50	58		36
Tennessee		6,389	5,740		5,621
Virginia		37	7		5
Subtotal		10,239	9,163		8,827
Sale for resale		13	17		13
Subtotal		10,252	9,180		8,840
Other revenues		130	146		143
Operating revenues	\$	10,382	\$ 9,326	\$	8,983

Electricity Sales Revenues by State For the years ended September 30 (in millions)

#### TVA SERVICE AREA

#### Customers

TVA is primarily a wholesaler of power. TVA sells power at wholesale to distributor customers, consisting of municipalities and cooperatives that resell the power to their customers at a retail rate. TVA also sells power to (1) directly served customers, consisting primarily of federal agencies and customers with large or unusual loads, and (2) exchange power customers (electric systems that border TVA's service area) with which TVA has entered into exchange power arrangements.

Operating revenues by customer type for each of the last three years are set forth in the table below. In this table, sales to industries directly served are included in Industries directly served, and sales to federal agencies directly served and to exchange power customers are included in Federal agencies and other.

Operating Revenues by Customer Type For the years ended September 30							
For the	•	n millions)	nember	50	)		
	× ×	,					
		2008			2007		2006
Municipalities and cooperatives	\$	8,659	9	\$	7,847	\$	7,659
Industries directly served		1,472			1,221		1,065
Federal agencies and other							
Federal agencies directly served		108			95		103
Off-system sales		13			17		13
Subtotal		10,252			9,180		8,840
Other revenues		130			146		143
Operating revenues	\$	10,382		\$	9,326	\$	8,983

Municipalities and Cooperatives

Revenues from distributor customers accounted for 83.4 percent of TVA's total operating revenues in 2008. At September 30, 2008, TVA had wholesale power contracts with 159 municipalities and cooperatives. All of these contracts require distributor customers to purchase all of their electric power and energy requirements from TVA.

All distributor customers purchase power under one of three basic termination notice arrangements:

•	Contracts that require five years' notice to terminate;
•	Contracts that require 10 years' notice to terminate; and
•	Contracts that require 15 years' notice to terminate.

The number of distributor customers with the contract arrangements described above, the revenues derived from such arrangements in 2008, and the percentage of TVA's 2008 total operating revenues represented by these revenues are summarized in the table below.

	713 01 Septe	moer se	, 2000			
	Number of Distributor		D	Sales to Distributor Istomers in	Percentage of Total Operating Revenues in	
Contract Arrangement	Customers			2008 n millions)	2008	
15-Year termination notice	5		\$	93	0.9	%
10-Year termination notice	48			2,865	27.6	%
5-Year termination notice *	103			5,645	54.4	%
Notice given - less than 5 years						
remaining *	3	**		56	0.5	%
Total	159		\$	8,659	83.4	%

## TVA Distributor Customer Contracts As of September 30, 2008

\*Ordinarily the distributor customer and TVA have the same termination notice period; however, in contracts with six of the distributor customers with five-year termination notices, TVA has a 10-year termination notice (which becomes a five-year termination notice if TVA loses its discretionary wholesale rate-setting authority). Also, under TVA's contract with Bristol Virginia Utilities, a five-year termination notice may not be given until January 2018.

\*\* One of these contracts, amounting to 0.1% of operating revenues, terminated on November 20, 2008.

TVA's two largest distributor customers — Memphis Light, Gas and Water Division ("MLGW") and Nashville Electric Service ("NES") — have contracts with five-year and 10-year termination notice periods, respectively. Although no single customer accounted for 10 percent or more of TVA's total operating revenues in 2008, sales to MLGW and NES accounted for 8.4 percent and 7.9 percent, respectively.

On January 1, 2008, Bristol Virginia Utilities ("BVU") again became a distributor customer of TVA power. TVA had provided wholesale power to BVU from 1945 to 1997. The contract has a minimum 15-year term, and a five-year termination notice may not be given until January 2018. The rates under this contract are intended to recover the cost of reintegrating BVU into TVA's power supply plan and serving its customer load.

The power contracts between TVA and the distributor customers provide for purchase of power by the distributor customers at the wholesale rates established by the TVA Board, which, beginning with 2007, are adjusted quarterly to reflect changing fuel and purchased power costs. See Item 1, Business — Rate Actions.

TVA has a role in regulating the distributor customers since most of the power contracts between TVA and the distributor customers specify the resale rates that distributor customers charge their power customers. These rates are revised from time to time, subject to TVA approval, to reflect changes in costs, including changes in the wholesale cost of power, and are designed to conform to the TVA Act's objective of providing an adequate supply of power at the lowest feasible rates. The distributor customers' resale rates are divided into the classifications of residential, general power, and manufacturing. The general power and manufacturing classifications are further divided into subclassifications according to their load size. In addition, TVA seeks to ensure that the electric system revenues of the distributor customers are used for electric system purposes.

#### Other Customers

Revenues from industrial customers directly served accounted for 14.2 percent of TVA's total operating revenues in 2008. In 2008, contracts for customers directly served were generally for terms ranging from five to 10 years. 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.

The United States Enrichment Corporation ("USEC") is TVA's largest industrial customer directly served. Sales to USEC for its Paducah, Kentucky, facility represented 5.3 percent of TVA's total operating revenues in 2008. TVA's current contract with USEC expires on May 31, 2012. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Management Activities — Credit Risk. In January 2004, USEC announced its decision to construct a new commercial centrifuge facility in Piketon, Ohio, which is outside TVA's service area. TVA continues to plan for USEC's announced intention to reduce its electricity purchases and believes USEC will reduce its electricity purchases at the Paducah, Kentucky, facility from about 2,000 megawatts at its peak to less than 50 megawatts. Since TVA's need to buy purchased power will decrease with USEC's departure, TVA does not expect its results of operation or cash flows to be to be adversely effected.

#### Rate Authority

TVA is self-regulated with respect to rates, and the TVA Act gives the TVA Board sole responsibility for establishing the rates TVA charges for power. These rates are not subject to judicial review or to review or approval by any state or federal regulatory body.

Under the TVA Act, TVA is required to 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 ("tax equivalents");

Debt service on outstanding indebtedness;

Payments to the U.S. Treasury in repayment of and as a return on the government's appropriation investment in TVA's power facilities (the "Power Facilities Appropriation Investment"); and

Such additional margin as the TVA Board may consider desirable for investment in power system assets, retirement of outstanding bonds, notes, or other evidences of indebtedness ("Bonds") in advance of maturity, additional reduction of the Power Facilities Appropriation Investment, and other purposes connected with TVA's power business.

In setting TVA's rates, the TVA Board is charged by the TVA Act to have due regard for the primary objectives of the TVA Act, including the objective that power shall be sold at rates as low as are feasible. See Note 1 — General.

#### **Revenue Requirements**

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In setting rates to cover the costs set out in the TVA Act, TVA uses a debt-service coverage ("DSC") methodology to derive annual revenue requirements in a manner similar to that used by other public power entities that also use the DSC rate methodology. The DSC method is essentially a measure of an organization's ability to cover its operating costs and to satisfy its obligations to pay principal and interest on debt. TVA believes this method is appropriate because of TVA's debt-intensive capital structure. This ratemaking approach is particularly suitable for use by highly leveraged enterprises (i.e., enterprises financed primarily, if not entirely, by debt capital).

The revenue requirements (or projected costs) are calculated under the DSC method as the sum of the following components:

•	Fuel and purchased power costs;
•	Operating and maintenance costs;
•	Tax equivalents; and
•	Debt service coverage.

Once the revenue requirements (or projected costs) are determined, this amount is compared to the projected revenues for the year in question, at existing rates, to arrive at the shortfall or surplus of revenues as compared to the projected costs. Subject to TVA Board approval, power rates would be adjusted to a level sufficient to produce revenues approximately equal to projected costs. This methodology reflects the cause-and-effect relationship between a regulated entity's costs and the corresponding rates the entity charges for its regulated products and services.

#### Rate Actions

On August 20, 2008, the TVA Board approved a base rate increase effective October 1, 2008. The increase is related to rising fuel costs that are not recovered by the fuel cost adjustment ("FCA"), continuing effects from drought conditions, as well as TVA's continuing need for investment in generation and transmission facilities, clean air technology, energy efficiency and peak reduction initiatives, and information technology systems. It is anticipated that the increase of the base charges will produce approximately \$310 million of additional accrued revenue in 2009, which is expected to have an estimated \$275 million cash impact during 2009. The increase, combined with the FCA increase that became effective at the same time, results in an average total increase in wholesale charges of 20 percent from the previously effective charges. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Challenges During 2008.

Fuel Cost Adjustment. As of September 30, 2008, TVA had recognized a regulatory asset of \$4 million and a current receivable of \$24 million representing deferred fuel and purchased power costs to be recovered through the FCA in future periods. Under TVA's FCA methodology, adjustments to rates are based on the difference between forecasted and baseline (budgeted) costs for the upcoming quarter. Because the FCA adjustments are forward-looking, there is typically a difference between what is collected in rates and FCA-eligible expenses that are actually incurred over the course of the quarter. This difference is added to or deducted from certain accounts on TVA's balance sheet. The higher or lower costs added to or deducted from the balance sheet accounts are then amortized to expense in the periods in which they are to be collected in revenues. This methodology allows better matching of the revenues with associated expenses, although TVA's cash flow can be negatively impacted by this process due to timing of collection of revenues and payments related to fuel and purchased power. The FCA amount implemented in October 2008 was 1.806 cents per kilowatt-hour and was expected to produce an estimated \$669 million in revenue during the first quarter of 2009. See Note 1 — Cost-Based Regulation and Accounts Receivable.

#### Load and Energy Forecasts

TVA produces a range of forecasts of future load and energy requirements using multiple models driven by historical TVA loads and regional economic forecasts of employment, population, and electricity and gas prices. Numerous factors, such as weather conditions and the health of the regional economy, could cause actual results to differ materially from TVA's forecasts. See Forward-Looking Information. TVA believes that new generation sources will be needed to meet load growth under most likely scenarios. See Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Future Challenges.

#### Power Supply

#### General

Power generating facilities operated by TVA at September 30, 2008, included 29 conventional hydroelectric sites, one pumped storage hydroelectric site, 11 coal-fired sites, three nuclear sites, 11 combustion turbine sites, two diesel generator sites, one wind energy site, one digester gas site, one biomass cofiring site, and 15 solar energy sites. In addition, TVA acquires power under power purchase agreements of varying duration as well as short-term contracts of less than 24-hour duration ("spot market").

#### **Generation Facilities**

The following table summarizes TVA's net generation in millions of kilowatt-hours by generating source and the percentage of all electric power generated by TVA for the years indicated:

#### Power Supply from TVA-Operated Generation Facilities For the years ended September 30 (millions of kWh)

	2008	8		2007	,		2006	5		2005	5		2004	ŀ	
Coal-fired	98,752	62	%	100,169	64	%	99,598	64	%	98,361	62	%	94,618	61	%
Nuclear	51,371	33	%	46,441	30	%	45,313	29	%	45,156	28	%	46,003	30	%
Hydroelectric	6,685	4	%	9,047	6	%	9,961	6	%	15,723	10	%	13,916	9	%
Combustion turbine and															
diesel generators	1,386	1	%	705	<	1%	613	<	1%	595	<	1%	278	<	1%
Renewable															
resources *	39	<	1%	27	<	1%	36	<	1%	47	<	1%	35	<	1%
Total	158,233	100	) %	156,389	100	) %	155,521	100	) %	159,882	100	) %	154,850	100	%

#### Note:

\*Renewable resources for years 2004 through 2006 have been adjusted to remove renewable resources amounts that were acquired under purchased power agreements and included in this table in TVA's 2006 Annual Report on Forms 10-K as amended. These adjustments resulted in reductions in the amount of renewable resources by 13 million kWh for 2004, 14 million kWh for 2005, and 15 million kWh for 2006. Also, for years 2004 through 2006 the following amounts related to TVA's digester gas cofiring site have been reclassified from Coal-fired to Renewable resources: 30 million kWh for 2004, 43 million kWh for 2005, and 32 million kWh for 2006. Renewable resource facilities include a digester gas cofiring site, a biomass cofiring site, a wind energy site, and solar energy sites.

The following table indicates TVA's average fuel expense by generation-type for the years indicated:

## Fuel Expense Per kWh For the years ended September 30 (cents/kWh)

	2008	2007	2006	2005	2004
Coal	2.29	2.13	2.02	1.65	1.48
Natural gas and fuel oil	6.13	7.00	10.65	11.44	9.01
Nuclear	0.50	0.41	0.38	0.39	0.39
Average fuel cost per kWh net thermal					
generation from all sources	1.72	1.61	1.54	1.30	1.14

Coal-Fired. TVA has 11 coal-fired power sites consisting of 59 units. At September 30, 2008, these facilities accounted for 14,469 megawatts of summer net capability. Net capability is defined as the ability of an electric

system, generating unit, or other system component to carry or generate power for a specified time period. TVA's coal-fired units were placed in service between 1951 and 1973. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Challenges During 2008.

Nuclear. TVA has three nuclear sites consisting of six units in operation. At September 30, 2008, these facilities accounted for 6,671 megawatts of summer net capability. For a detailed discussion of TVA's nuclear power program, see Item 1, Business — Nuclear. For a discussion of challenges faced by TVA's nuclear power program during 2008, see Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Challenges During 2008.

Hydroelectric. TVA has 29 conventional hydroelectric sites consisting of 109 units. In addition, TVA has one pumped storage facility consisting of four units. At September 30, 2008, these facilities accounted for 5,503 megawatts of summer net capability. The amount of electricity that TVA is able to generate from its hydroelectric plants depends on a number of factors outside TVA's control, including the amount of precipitation, runoff, initial water levels, and the need for water for competing water management objectives. The amount of electricity generation is also dependent upon the availability of its hydroelectric generation plants, which is in TVA's control. When these factors are unfavorable, TVA must increase its reliance on more expensive generation plants and purchased power. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Challenges During 2008 — Weather Conditions.

Combustion Turbine Facilities. As of September 30, 2008, TVA operated 93 combustion turbine units, 87 of which are simple cycle and six of which are combined cycle. The simple cycle units provide a maximum of 5,706 megawatts of summer net capability. The six combined cycle units provide a maximum of 1,560 megawatts of summer net capability. Eighty of the simple cycle units are fueled by either natural gas or diesel fuel. The remaining seven simple cycle units as well as the six combined cycle units are fueled by natural gas only. Seventy-six of the simple cycle units are capable of quick-start response allowing full generation capability in approximately 10 minutes. As of September 30, 2008, 24 of the simple cycle combustion turbine units are owned by private entities and leased back to TVA under long-term leases.

Caledonia. TVA entered into an operating lease agreement and various related contracts for the Caledonia combined cycle facility located near Columbus, Mississippi, with a commencement date of July 1, 2007. The lease agreement expires on February 28, 2022. The Caledonia facility consists of three combined cycle units with a summer net capability of 768 megawatts. TVA assumed plant operations on December 10, 2007. The lease agreement also includes an end-of-term purchase option.

Brownsville. In November 2007, the TVA Board approved the purchase of a four-unit, 474 megawatt summer net capability simple cycle, gas-fired, combustion turbine facility at a price of \$55 million. TVA agreed to purchase the facility, which is located in Brownsville, Tennessee, from Brownsville Power I, LLC ("Brownsville Power"). Brownsville Power is a wholly owned direct subsidiary of Cinergy Capital & Trading, Inc. The purchase closed April 18, 2008. After the operating systems were evaluated and tested, the units became available for dispatch in June 2008.

Southaven. TVA also agreed to purchase, as part of a bankruptcy auction process, a three-unit, 792-megawatt summer net capability combined cycle, combustion turbine facility located in Southaven, Mississippi, owned by Southaven Power, LLC ("Southaven") for a base purchase price of \$461 million. In addition to the purchase price, TVA agreed to pay \$5 million to Southaven in connection with the termination of an operation and maintenance agreement held by a Southaven affiliate. The purchase closed May 9, 2008, and the plant was available for immediate operation. On September 30, 2008, Seven States Southaven LLC ("SSSL") purchased an undivided 69.69 percent interest in TVA's Southaven combined cycle, combustion turbine facility. SSSL and TVA have entered into an agreement under which TVA leases SSSL's undivided interest in the Southaven facility and operates the facility through April 30, 2010. See Note 4 — New Generation and Note 13 — Leaseback Obligations.

Capacity Expansion. TVA is constructing an additional combined cycle facility, Lagoon Creek Combined Cycle, which is currently scheduled to be in service in June 2010 and have a summer net capability of 540 megawatts. Also, engineering and procurement of equipment is underway for the conversion of the Gleason simple cycle site to a combined cycle site. This conversion is expected to add approximately 375 megawatts of summer net capability and to be completed in January 2012. TVA's Brownsville and Gleason simple cycle sites do not currently have firm gas transportation or the ability to burn oil as a back-up fuel; however, TVA has available interruptible gas supply for these sites through May 2012 which is the norm for simple cycle single fuel sites. TVA has entered into a firm gas

transportation agreement with a supplier for the periods of June 1, 2012, through May 31, 2022. In addition, TVA plans to acquire combustion turbine units for installation at the New Caledonia facility that it acquired in February 2008. The units are expected to be in simple cycle service in June 2013 and have a summer net capability of 458 megawatts.

Diesel Generators. TVA has two diesel generator plants consisting of nine units. At September 30, 2008, these facilities provided 13 megawatts of summer net capability.

Renewable Resources. TVA has one wind energy site with three wind turbines, one biomass cofiring site, one digester gas cofiring site, and 15 solar energy sites. At September 30, 2008, the digester gas cofiring site provided TVA with about three megawatts of renewable summer net capability. In addition, the wind energy site, the solar energy sites, and the biomass cofiring site provided additional megawatts of capability, but because of the nature of this capability, it is not considered to be summer net capability.

Purchased Power and Other Agreements

TVA acquires power from a variety of power producers through long-term and short-term power purchase agreements as well as through power spot market purchases. During 2008, TVA acquired 41 percent of the power that it purchased on the power spot market, nine percent through short-term power purchase agreements, and 50 percent through long-term power purchase agreements that expire more than one year after September 30, 2008.

At September 30, 2008, TVA's long-term power purchase agreements provided TVA with 2,789 megawatts of summer net capability. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Management Activities — Credit Risk.

A portion of TVA's capability provided by power purchase agreements is provided under contracts that expire between 2010 and 2032, and the most significant of these contracts are discussed below.

Calpine Energy Services, L.P. TVA has contracted with Calpine Energy Services, L.P. ("Calpine") for 720 megawatts of summer net capability from a natural gas-fired generating plant located at Decatur, Alabama. This contract expires on August 31, 2012. In addition, TVA has contracted with Calpine for 500 megawatts of summer net capability from a natural gas-fired generating plant located in Morgan County, Alabama. While this contract was executed on August 11, 2008, it will not go into effect until January 1, 2009. This contract expires on December 31, 2011.

Suez Energy Marketing NA, Inc. TVA has contracted with Suez Energy Marketing NA, Inc. ("Suez") for 650 megawatts of summer net capability from a natural gas-fired generating plant located near Ackerman, Mississippi. TVA's contract with Suez expires on December 31, 2012.

Choctaw Generation, L.P. TVA has contracted with Choctaw Generation, L.P. ("Choctaw") for 440 megawatts of summer net capability from a lignite-fired generating plant in Chester, Mississippi. TVA's contract with Choctaw expires on March 31, 2032. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Management Activities — Credit Risk.

Alcoa Power Generating, Inc. Four hydroelectric plants owned by Alcoa Power Generating, Inc. ("APGI"), formerly known as Tapoco, Inc., are operated in coordination with the TVA system. Under contractual arrangements with APGI which terminate on June 20, 2010, TVA dispatches the electric power generated at these facilities and uses it to partially supply Alcoa's energy needs. TVA's arrangement with APGI provides 347 megawatts of summer net capability.

Invenergy TN LLC. TVA has contracted with Invenergy TN LLC for 27 megawatts of wind energy generation from 15 wind turbine generators located on Buffalo Mountain near Oak Ridge, Tennessee. Because of the nature of wind conditions in the TVA service area, these generators provide energy benefits but are not included in TVA's summer net capability total. TVA's contract with Invenergy TN LLC expires on December 31, 2024.

Southeastern Power Administration. TVA, along with others, contracted with the Southeastern Power Administration ("SEPA") to obtain power from eight U.S. Army Corps of Engineers hydroelectric facilities on the Cumberland River system. The agreement with SEPA can be terminated upon three years' notice, but this notice of

termination may not become effective prior to June 30, 2017. The contract originally required SEPA to provide TVA an annual minimum of 1,500 hours of power for each megawatt of TVA's 405 megawatt allocation, and all surplus power from the Cumberland River system. Because hydroelectric production has been reduced at two of the hydroelectric facilities on the Cumberland River system (Wolf Creek and Center Hill Dams) and because of reductions in the summer stream flow on the Cumberland River, SEPA declared "force majeure" on February 25, 2007. SEPA then instituted an emergency operating plan that:

-Eliminates its obligation to provide any affected customer (including TVA) with a minimum amount of power; Provides for all affected customers (except TVA) to receive a pro rata share of a portion of the gross hourly generation from the eight Cumberland River hydroelectric facilities;

- -Provides for TVA to receive all of the remaining hourly generation (minus station service for those facilities);
  - Eliminates the payment of demand charges by customers (including TVA) since there is significantly reduced dependable capacity on the Cumberland River system; and

Increases the rate charged per kilowatt-hour of energy received by SEPA's customers (including TVA), because SEPA is legally required to charge rates that cover its costs.

It is unclear how long the emergency operating plan will remain in effect.

Under the Public Utility Regulatory Policies Act of 1978, as amended by the Energy Policy Act of 1992 and the Energy Policy Act of 2005, TVA is required to purchase energy from qualifying facilities, cogenerators, and small power producers at TVA's avoided cost of self-generating or purchasing this energy from another source.

During the past five years, TVA supplemented its power generation through power purchases as follows:

#### Purchased Power \* For the years ended September 30

	2008	2007	2006	2005	2004
Millions of kWh	20,887	22,141	19,019	14,892	14,025
Percent of TVA's Total Power Supply	11.6	12.4	10.9	8.5	8.3

Note

\*Purchased power amounts for years 2004, 2005, and 2006 have been adjusted to remove APGI purchases and include them as a credit to power sales.

For more information regarding TVA's power purchase obligations, see Note 15 — Commitments — Power Purchase Obligations.

Purchasing power from others will likely remain a part of how TVA meets the power needs of its service area. The Strategic Plan establishes a goal of balancing production capabilities with power supply requirements by promoting the conservation and efficient use of electricity and, when necessary, buying, building, and/or leasing assets or entering into purchased power agreements. Achieving this goal will allow TVA to reduce its reliance on purchased power. Although purchased power volume decreased in 2008, TVA purchased significantly more power than planned due to decreased hydroelectric generation of 26.1 percent as a result of ongoing drought conditions in 2008. Capacity margins in areas surrounding TVA have narrowed over the past three years. However, due to current economic conditions, this trend may flatten or reverse due to lower system loads. A return to normal weather patterns would likely increase hydroelectric generation and reduce reliance on purchased power. See Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations — Challenges During 2008 — Weather Conditions.

## Net Capability

The following table summarizes the summer net capability in megawatts TVA had available as of September 30, 2008:

#### SUMMER NET CAPABILITY 1 As of September 30, 2008

Source of Capability	Location	Number of Units	Summer Net Capability2 (MW)	Date First Unit Placed in Service	Date Last Unit Placed in Service
TVA GENERATING FACILITIES					
Coal-Fired					
Allen	Tennessee	3	735	1959	1959
Bull Run	Tennessee	1	882	1967	1967
Colbert	Alabama	5	1,147	1955	1965
Cumberland	Tennessee	2	2,466	1973	1973
Gallatin	Tennessee	4	964	1956	1959
John Sevier	Tennessee	4	704	1955	1957
Johnsonville	Tennessee	10	1,128	1951	1959
Kingston	Tennessee	9	1,411	1954	1955
Paradise	Kentucky	3	2,201	1963	1970
Shawnee	Kentucky	10	1,323	1953	1956
Widows Creek	Alabama	8	1,508	1952	1965
Total Coal-Fired		59	14,469		
Nuclear					
Browns Ferry	Alabama	3	3,280	1974	1977
Sequoyah	Tennessee	2	2,282	1981	1982
Watts Bar	Tennessee	1	1,109	1996	1996
Total Nuclear		6	6,671		
			,		
Hydroelectric					
Conventional Plants	Alabama	36	1,498	1925	1962
	Georgia	2	31	1931	1956
	Kentucky	5	175	1944	1948
	North Carolina	6	383	1940	1956
	Tennessee	60	1,699	1912	1972
Pumped Storage	Tennessee	4	1,717	1978	1979
Total Hydroelectric		113	5,503		
			,		
Combustion Turbine 3					
Allen	Tennessee	20	478	1971	1972
Brownsville	Tennessee	4	474	2008	2008
Caledonia	Mississippi	3	768	2007	2007
	in the second se	-	,	_007	_001

Colbert	Alabama	8	384	1972	1972
Gallatin	Tennessee	8	636	1975	2000
Gleason	Tennessee	3	519	2007	2007
Johnsonville	Tennessee	20	1,218	1975	2000
Kemper	Mississippi	4	329	2001	2001
Lagoon Creek	Tennessee	12	1,009	2002	2002
Marshall County	Kentucky	8	659	2007	2007
Southaven	Mississippi	3	792	2008	2008
Total Combustion Turbine		93	7,266		
Diesel Generator					
Meridian	Mississippi	5	9	1998	1998
Albertville	Alabama	4	4	2000	2000
Total Diesel Generators		9	13		
Renewable Resources			3		
Total TVA Generating					
Facilities			33,925		
POWER PURCHASE AND					
OTHER AGREEMENTS			2,789		
Total Summer Net Capability			36,714		
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Notes

- (1)Net capability is defined as the ability of an electric system, generating unit, or other system component to carry or generate power for a specified time period.
- (2) TVA estimated total winter net capability at September 30, 2008, to be approximately 37,085 megawatts, including hydroelectric capability of approximately 5,265 megawatts, coal-fired capability of approximately 14,870 megawatts, nuclear power capability of approximately 6,898 megawatts, combustion turbine capability of approximately 7,150 megawatts, diesel generator capability of approximately 13 megawatts, renewable assets capability of approximately three megawatts, and capability from power purchase agreements of approximately 2,886 megawatts. The difference in winter and summer net capability is primarily due to more efficient fossil fuel-fired and nuclear generation performance in cold weather.
- (3)See Item 1, Business Power Supply Generation Facilities Combustion Turbine Facilities, for a description of TVA-operated combustion turbine facilities.

#### **Energy Efficiency Initiatives**

On May 19, 2008, the TVA Board approved staff recommendations for an Energy Efficiency and Demand Response Plan. The plan seeks to slow the current rate of growth in the TVA service area's power demand by providing opportunities for residential, business, and industrial consumer groups to use energy more efficiently. TVA plans to work with the distributor customers to identify energy efficiency opportunities and to reduce peak demand. TVA is also expanding the ways it informs consumers about energy efficiency. In the short term, the plan proposes reducing the growth in peak demand by up to 1,400 megawatts by the end of the 2012.

#### Renewable and Clean Energy

In May 2008, the TVA Board adopted an Environmental Policy that establishes objectives of reducing load growth and meeting remaining load growth through lower carbon emitting energy sources, including affordable renewables. Clean energy is defined as coming from low and, effectively, zero-carbon emitting supply and demand-side options, including renewables, nuclear, combined heat and power, and energy efficiency.

Renewable energy comes from generation that is sustainable and includes:

 Wind generation;
 Solar generation;
 Landfill methane generation;
 Biomass cofiring;
 Dedicated biomass generation;
 Existing hydroelectric generation; and Incremental and low-impact hydroelectric generation.

In April 2000, TVA launched its Green Power Switch® program. This program allows residential, commercial, and industrial customers to voluntarily buy "kwh blocks" of specific renewable generation (wind, solar, and digester gas). This was the first voluntary certified green pricing program offered in the southeast United States

Renewable and clean energy technologies are often considered collectively. However, they are largely unrelated technologically, each having its own developmental challenges such as intermittency and varying regional availability issues.

Technology advancements will be needed to address some of the operation issues associated with renewable energy, such as energy storage to address intermittency and interconnection technologies to address onsite, non-grid connected renewables and efficiencies.

Most renewable energy resources are geographically specific. Some regions of the Unites States have an abundance of wind and solar resources, whereas other regions have hydroelectric resources. Regional differences and limitations play a primary role in the types and amount of renewable and clean energy developed in areas across the country. Within the area served by TVA (southeast United States), two of the most abundant renewable sources are hydroelectric and biomass. Feasible wind energy in this region is primarily associated with mountain top and ridgeline installations, and the total potential capacity is limited when compared to other parts of the nation where wind energy is more abundant.

As of September 30, 2008, TVA's zero and near-zero carbon emitting sources included:

Zero or Low Carbon Emitting Generation						
Source	Site/Units	Megawatts				
Nuclear generation	6 units	6,671.0				
Conventional hydroelectric generation *	109 units	3,786.0				
Wind power purchase agreement *	15 units	27.0				
Methane gas at Allen Fossil Plant *	2 units	8.0				
Biomass cofiring at Colbert Fossil Plant *	4 units	7.0				
Landfill methane gas purchase agreements *	2 sites	5.9				
Wind generation *	3 units	2.0				
Solar photovoltaic *	15 sites	0.3				
Total	156 units/sites	10,507.2				

\*Renewable generation

In May 2008, TVA completed a Renewable and Clean Energy Assessment ("Assessment") which estimated that by 2020 there could be 12,700 million kilowatt-hours of potential renewable resources in the Tennessee Valley. The Assessment determined that TVA's lowest-cost options for additional regional renewables include:

Completion of the hydroelectric modernization program; Additional low level biomass cofiring; Additional hydroelectric units at existing dams; Landfill gas; and Wind.

In 2008, approximately 37 percent of TVA's generation was from clean energy sources. See Item 1, Business — Environmental Matters — Renewables and Clean Energy.

Nuclear

Overview

TVA has six operating nuclear units and has resumed construction of one nuclear unit that is scheduled to be placed in service in 2013. Selected statistics of each of these units are included in the table below.

#### TVA Nuclear Power As of September 30, 2008

				Date of	
			Net	Expiration	Date of
		Installed	Capacity	of	Expiration of
		Capacity	Factor for	Operating	Construction
Nuclear Unit	Status	(MW)	2008	License	Permit
Sequoyah Unit 1	Operating	1,221	85.9	2020	_

Sequoyah Unit 2	Operating	1,221	89.5	2021	_
Browns Ferry Unit 1	Operating	1,150	92.1	2033	_
Browns Ferry Unit 2	Operating	1,190	96.6	2034	_
Browns Ferry Unit 3	Operating	1,190	71.6	2036	_
Watts Bar Unit 1	Operating	1,230	80.2	2035	_
	Construction resumed in				
Watts Bar Unit 2	December 2007	_	_	_	2013

TVA began a significant nuclear plant construction program in 1966 to meet projected system load growth. At the height of its construction program, TVA had 17 units either under construction or in commercial operation at seven plant sites. In 1982, TVA canceled construction of four units because of lower than expected load growth, and TVA canceled four more units in 1984 for similar reasons.

By August 1985, TVA had delayed construction of two units each at Watts Bar and Bellefonte Nuclear Plants and had shut down its three-unit Browns Ferry Nuclear Plant ("Browns Ferry") and two-unit Sequoyah Nuclear Plant ("Sequoyah") because of an increasing number of technical and operational problems. The Nuclear Regulatory Commission ("NRC") required TVA to address program and management deficiencies and to provide its corrective actions to the NRC before restarting any of its licensed nuclear units or requesting a license for Watts Bar Nuclear Plant Unit 1 ("Watts Bar"). After implementing a comprehensive recovery plan, TVA restarted Sequoyah Unit 2 in May 1988 and Sequoyah Unit 1 in November 1988. TVA restarted Browns Ferry Unit 2 in May 1991 and Browns Ferry Unit 3 in November 1995. Construction of Watts Bar Unit 1 was successfully completed, and the unit commenced full power commercial operation in May 1996.

TVA is undertaking an Extended Power Uprate ("EPU") project at Browns Ferry which is expected to increase the amount of electrical generation by increasing the amount of steam produced by the reactors. This project is expected to result in approximately 125 megawatts of additional capability per unit as a result of operating the reactor at 120 percent of the original licensed thermal power. Additional fuel is added to the reactor during each refueling outage to support the increased steam production. The purpose of the EPU project is to complete modifications to the plant required to accommodate the increased steam flows and resulting electrical production. The NRC license for operating the reactor must be modified to allow reactor operation at the higher power level.

In November 2005, TVA canceled the construction of Units 1 and 2 at Bellefonte Nuclear Plant ("Bellefonte"). Two months prior to the cancellation of these units, the Bellefonte site was selected by NuStart Development LLC ("NuStart") as one of two sites for the development of a combined license application for two new reactors using the Westinghouse Advanced Passive 1000 ("AP1000") reactor design. NuStart is an industry consortium composed of 10 utilities and two reactor vendors whose purpose is to satisfactorily demonstrate the new NRC licensing process for advanced design nuclear plants. TVA submitted its combined operating license application ("COLA") to the NRC for Bellefonte Units 3 and 4 in October 2007, and it was accepted for detailed review by the NRC on January 18, 2008. If approved, the license to build and operate the plant would be issued to TVA. The NRC is expected to complete an evaluation of its COLA review schedule in December 2008 prior to making a decision as to the new schedule. The TVA Board has not made a decision to construct a new plant at the Bellefonte site, and TVA continues to evaluate all nuclear generation options at the site. As part of this evaluation, TVA asked the NRC in August 2008 to reinstate the construction permits for its two unfinished nuclear units also at the Bellefonte site. Reinstating the construction permits would allow TVA to place the units in a deferred status again with the NRC and would help TVA clarify the regulatory requirements and continue to evaluate the feasibility of using Bellefonte Units 1 and 2 to meet future base-load power demand.

On June 7, 2008, a joint petition in connection with TVA's COLA for Bellefonte Units 3 and 4 for intervention and a request for a hearing was submitted to the NRC by the Bellefonte Efficiency and Sustainability Team, the Blue Ridge Environmental Defense League, and the Southern Alliance for Clean Energy. The petitioners raised 19 contentions and subsequently added another with respect to TVA's COLA. Following TVA's and NRC's responses opposing the proposed contentions, the Atomic Safety and Licensing Board ("ASLB"), which is presiding over the proceeding, accepted four contentions submitted by two of the petitioners. A hearing on these admitted contentions will be conducted in the future. The admitted contentions involve questions about the estimated costs of the new nuclear plant, the storage of low-level radioactive waste, and the impact of the facility's operations, in particular the plant intake, on aquatic species.

On August 1, 2007, the TVA Board approved completing the construction of Watts Bar Unit 2. Prior to the approval, TVA conducted a detailed scoping, estimating, and planning study to estimate the project's cost, schedule, and risks. Separately, TVA prepared a report evaluating potential environmental impacts as required by the National Environmental Policy Act. TVA has an NRC construction permit for Watts Bar Unit 2 that expires in 2013. TVA will seek an operating license under NRC regulations, and this process will include an opportunity for a public hearing. Completing Watts Bar Unit 2 is expected to take approximately 60 months and cost approximately \$2.5 billion, excluding an allowance for funds used during construction ("AFUDC") and the cost of the first core of fuel. When completed, Watts Bar Unit 2 is expected to provide 1,180 megawatts of summer net capability.

#### Spent Nuclear Fuel

Under the Nuclear Waste Policy Act of 1982, TVA (and other domestic nuclear utility licensees) entered into a contract with the U.S. Department of Energy ("DOE") for the disposal of spent nuclear fuel. 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 spent nuclear fuel from the utilities by January 31, 1998, DOE announced that it would not begin receiving spent nuclear fuel from any domestic nuclear utility until 2010 at the earliest. TVA, like other nuclear utilities, stores spent nuclear fuel in pools of borated water at its nuclear sites. 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 in a timely manner required TVA to construct dry cask storage facilities at its Sequoyah and Browns Ferry Nuclear Plants and to purchase special storage containers for the spent nuclear fuel. The Sequoyah and Browns Ferry dry cask storage facilities have been constructed and approved by the NRC and have been in use since 2004 and 2005, respectively, providing storage capacity through 2030 at Sequoyah and 2019 at Browns Ferry. Watts Bar has sufficient storage capacity in its spent fuel pool to last until approximately 2015.

To recover the cost of providing long-term, on-site storage for spent nuclear fuel, TVA filed a breach of contract suit against the United States in the Court of Federal Claims in 2001. In August 2006, the United States paid TVA almost \$35 million in damages awarded by the Court of Federal Claims, which partially offset the construction costs of the dry cask storage facilities that TVA incurred through 2004. In September 2008, the United States paid TVA about \$10.4 million for on-site spent nuclear fuel storage costs incurred during 2005. Additional claims will be reviewed from time-to-time.

#### Low-Level Radioactive Waste

Low-level radioactive waste ("radwaste") results from the normal operation of nuclear units and includes such materials as disposable protective clothing, mops, and filters. TVA contracted to dispose of such waste at a Barnwell, South Carolina, disposal facility through June 2008, when that facility closed to radwaste generators located in states that are not members of the Atlantic Interstate Low-Level Radioactive Waste Management Compact ("Atlantic Compact"). None of TVA's nuclear units are located in states that are members of the Atlantic Compact. Since June 2008, TVA has continued its practice of having certain types of radwaste processed and shipped to a disposal facility in Clive, Utah, and TVA is also storing some radwaste at its own facilities. TVA is capable of storing radwaste at its facilities for an extended period of time and has done so in the past.

#### Nuclear Decommissioning Trust

TVA maintains a nuclear decommissioning trust to provide funding for the ultimate decommissioning of its nuclear power plants. The trust is invested in securities generally designed to achieve a return in line with overall equity market performance. The assets of the trust as of September 30, 2008, totaled \$845 million, which is less than the present value of TVA's estimated future nuclear decommissioning costs as computed under the NRC funding requirements and less than the present value of these costs as computed under Statement of Financial Accounting Standards No. 143, "Accounting for Asset Retirement Obligations." See Note 15 — Contingencies — Decommissioning Costs and Note 18 — Impact of Recent Financial Market Conditions on Investment Portfolios. If market conditions do not improve, additional funding may be required.

#### Nuclear Insurance

The Price-Anderson Act provides a layered framework of protection to compensate for losses arising from a nuclear event. For the first layer, all NRC nuclear plant licensees, including TVA, purchase \$300 million of nuclear liability

insurance from American Nuclear Insurers for each plant with an operating license. Funds for the second layer, the Secondary Financial Program, would come from an assessment of up to \$112 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 \$18 million per year per unit. American Nuclear Insurers, under a contract with the NRC, administers the Secondary Financial Program. With its six licensed units, TVA could be required to pay a maximum of \$671 million per nuclear incident, but it would have to pay no more than \$105 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 \$12 billion, including a five percent surcharge for legal expenses, would be available. Under the Price-Anderson Act, if the first two layers are exhausted, the U.S. Congress is required to take action to provide additional funds to cover the additional losses.

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TVA carries property, decommissioning, and decontamination insurance of \$4.6 billion for its licensed nuclear plants, with up to \$2.1 billion available for a loss at any one site, to cover the cost of stabilizing or shutting down a reactor after an accident. Some of this insurance, which is purchased from Nuclear Electric Insurance Limited ("NEIL"), may require the payment of retrospective premiums up to a maximum of approximately \$72 million.

TVA purchases accidental outage (business interruption) insurance for TVA's nuclear sites from 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 waiting period, an indemnity (a set dollar amount per week) up to a maximum indemnity of \$490 million per unit. This insurance policy may require the payment of retrospective premiums up to a maximum of approximately \$30 million. See Note 15 — Contingencies — Nuclear Insurance.

Fuel Supply

#### General

TVA's consumption of various types of fuel depends largely on the demand for electricity by TVA's customers, the availability of various generating units, and the availability and cost of fuel. The following table indicates TVA's costs for various fuels for the years indicated:

Fuel Purchases for TVA-Owned Facilities For the years ended September 30 (in millions)						
	2008	2007	2006	2005	2004	
Coal	\$2,110	\$1,922	\$1,835	\$1,495	\$1,254	
Natural gas	131	62	60	63	22	
Fuel oil	61	22	46	28	17	
Uranium	71	121	71	44	16	
Total	\$2,373	\$2,127	\$2,012	\$1,630	\$1,309	

TVA also has tolling agreements under which it buys power production from outside suppliers. Under these tolling agreements, TVA supplies the fuel to the outside supplier, and the outsider supplier converts the fuel into electricity. The following table indicates the cost of fuel supplied by TVA under these agreements and also the average fuel expense per kilowatt-hour for the years indicated:

### Natural Gas Purchases for Tolling Plants For the years ended September 30

	2008	2007	2006	2005	2004
Cost of Fuel (in millions)	\$457	\$430	\$288	\$159	\$10
Average Fuel Expense (cents/kWh)	12.26	5.51	6.07	6.21	4.71

Due to rising commodity prices across domestic and international markets, TVA experienced increased costs in short-term markets for natural gas, fuel oil, coal, and electricity during 2008. Market prices for these commodities at September 30, 2008, and 2007, are shown below.

# Commodity Pricing Table As of September 30

Commodity	2008	2007	Percer Increa	
Natural Gas (Henry Hub, \$/mmBtu)	\$9.01	\$6.87	31	%
Fuel Oil (Gulf Coast, \$/mmBtu)	21.38	12.97	65	%
Coal (FOB mine, \$/ton)	48.13	29.65	62	%
Electricity (Into-TVA, \$/MWh)	70.95	58.03	22	%
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Since September 30, 2008, the market prices for all of these commodities except for coal have fallen. Market prices for these commodities at November 30, 2008, and September 30, 2008, are shown below.

### Commodity Pricing Table

Commodity	Prices As of November 30, 2008	Prices As of September 30, 2008	Percent Change	
Natural Gas (Henry Hub, \$/mmBtu)	\$6.71	\$9.01	(26	)%
Fuel Oil (Gulf Coast, \$/mmBtu)	12.20	21.38	(43	)%
Coal (FOB mine \$/ton)	58.76	48.13	22	%
Electricity (Into-TVA, \$/MWh)				
On-Peak (5 days x 16 hours)	38.00	70.95	(46	)%
Off-Peak (5 days x 8 hours)	34.75	38.40	(10	)%

Although the FCA provides a mechanism to modify rates on a quarterly basis to recover changing fuel and purchased power costs, there is a lag between the occurrence of a change in fuel and purchased power costs and the reflection of the change in rates. As a result, TVA's cash flows can be negatively affected by the FCA. As of September 30, 2008, TVA had approximately \$28 million in deferred fuel and purchased power costs that are expected to be recovered through the FCA in future periods. See Item 1, Business — Rate Actions.

#### Coal

Coal consumption at TVA's coal-fired generating facilities during 2008 was 46.3 million tons. As of September 30, 2008, and 2007, TVA had 26 days and 23 days of system-wide coal supply at full burn, respectively, with a net book value of coal inventory of \$303 million and \$264 million, respectively.

TVA utilizes both short-term and long-term coal contracts. Long-term coal contracts generally last longer than one year, while short-term contracts are usually for one year or less. During 2008, long-term contracts made up 93 percent of coal purchases and short-term contracts accounted for the remaining seven percent. TVA plans to continue signing contracts of various lengths, terms, and coal quality to meet its expected burn and inventory requirements. During 2008, TVA purchased coal by basin as follows:

•35 percent from the Illinois Basin; •27 percent from the Powder River Basin in Wyoming; •21 percent from the Uinta Basin of Utah and Colorado; and •17 percent from the Appalachian Basin of Kentucky, Pennsylvania, Tennessee, Virginia, and West Virginia.

Total system coal inventories were at or above target levels for most of 2008. During 2008, 42 percent of TVA's coal supply was delivered by rail, 19 percent was delivered by barge, and 33 percent was delivered by a combination of barge and rail. The remainder was delivered by truck.

Natural Gas and Fuel Oil

During 2008, TVA purchased substantially all of its natural gas requirements from a variety of suppliers 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. At September 30, 2008, all but two of TVA's combustion turbine plants were dual fuel capable, and TVA has fuel oil stored on each site for its dual fuel combustion turbines as a backup to natural gas.

During 2008, TVA purchased substantially all of its fuel oil on the spot market. At September 30, 2008, and 2007, the net book value of TVA's natural gas in inventory was \$12 million and \$3 million, respectively, and the net book value of TVA's fuel oil in inventory was \$66 million and \$50 million, respectively.

### Nuclear Fuel

Converting uranium to nuclear fuel generally involves four stages: the mining and milling of uranium ore to produce uranium concentrates; the conversion of uranium concentrates to uranium hexafluoride gas; enrichment of uranium hexafluoride; and the fabrication of the enriched uranium hexafluoride into usable fuel assemblies. TVA currently has 100 percent of its forward three-year (2009 through 2011) uranium mining and milling requirements either in inventory or under contract for its boiling water reactor units at Browns Ferry Nuclear Plant and has 100 percent of its forward three-year (2009 through 2011) uranium requirements under contract for its pressurized water reactor units at Sequoyah and Watts Bar Nuclear Plants. In addition, TVA has 100 percent of its conversion, enrichment, and fabrication needs under contract through 2011. Beyond 2011, TVA anticipates being able to fill its needs by normal bidding processes for fuel cycle components as market forecasts indicate that the fuel cycle components will be readily available.

TVA, DOE, and some nuclear fuel contractors have entered into agreements that provide for the blending down of surplus DOE highly enriched uranium (uranium that is too highly enriched for use in a nuclear power plant) with other uranium. Under these agreements, the enriched uranium that results from this blending process, which is called blended low enriched uranium ("BLEU"), is fabricated into fuel that can be used in a nuclear power plant. This blended nuclear fuel was first loaded in a Browns Ferry reactor in 2005 and is expected to continue to be used to reload the Browns Ferry reactors through 2014. BLEU fuel was first loaded into Sequoyah Unit 2 in May 2008 and will be loaded again in 2009 and 2011.

Under the terms of an interagency agreement between DOE and TVA, in exchange for supplying highly enriched uranium materials for processing into usable BLEU fuel for TVA, DOE will participate to a degree in the savings generated by TVA's use of this blended nuclear fuel. TVA anticipates these future payments could begin in 2010 and last until 2014. See Note 1 — Blended Low Enriched Uranium Program for a more detailed discussion of the BLEU project.

TVA owns all nuclear fuel held for its nuclear plants. As of September 30, 2008, and 2007, the net book value of this nuclear fuel was \$722 million and \$602 million, respectively.

For a discussion of TVA's plans with respect to spent nuclear fuel storage, see Item 1, Business — Nuclear — Spent Nuclear Fuel.

### Transmission

The TVA transmission system is one of the largest in North America. TVA's transmission system has interconnections with 13 neighboring electric systems, and delivered more than 176 billion kilowatt-hours of electricity to Tennessee Valley customers in 2008. The TVA Act gives TVA overall responsibility for grid reliability in the TVA service area. To that end, TVA has operated with 99.999 percent reliability over the last nine years in delivering electricity to customers. Any changes to the TVA Act which alter TVA's authority to operate and control the transmission system could negatively impact reliability in the region. See Item 1A, Risk Factors — Strategic Risks.

To the extent federal law allows access to the TVA transmission system, the TVA transmission organization offers transmission services to others to transmit power at wholesale in a manner that is comparable to TVA's own use of the transmission system. TVA has also adopted and operates in accordance with a published Standards of Conduct for Transmission Providers and appropriately separates its transmission functions from its marketing functions.

Weather and Seasonality

Weather affects both the demand for and the market prices of electricity. TVA's power system generally peaks in the summer, with a slightly lower peak in the winter. TVA met its highest winter peak demand of 32,027 megawatts on January 25, 2008. See Item 1A, Risk Factors, for a discussion of the potential impact of weather on TVA.

TVA uses weather degree days to measure the impact of weather on TVA's power operations. Weather degree days measure the extent to which average temperatures in the five largest cities in TVA's service area vary from 65 degrees Fahrenheit. TVA calculates weather degree days for Memphis, Nashville, Knoxville, and Chattanooga, Tennessee, and Huntsville, Alabama — the five largest cities in TVA's service area.

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During 2008, TVA had 14 less heating degree days and 371 less cooling degree days than in 2007. The graph below shows the number of heating and cooling degree days for 2008, 2007, and 2006 as compared to the normal number of heating and cooling degree days. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Challenges During 2008 — Weather Conditions.

2008 was the ninth driest year in the eastern Tennessee Valley in 119 years of record-keeping with rainfall 76 percent of normal for the year and runoff 47 percent of normal. Largely as a result of this low rainfall and runoff, TVA's hydroelectric production for 2008 was slightly less than 6.7 billion kilowatt-hours, which was 26 percent, 33 percent, and 57 percent lower than 2007, 2006, and 2005, respectively.

The hot weather and low rainfall were also significant factors in causing TVA to reduce output at several generating plants during the period of mid-June through mid-September of 2008. During this period, temperatures on the Tennessee and Cumberland Rivers reached levels at which discharging cooling water from some of TVA's plants into the rivers could have caused the permitted thermal limits for the rivers to be exceeded. While every effort was made to reduce (derate) electrical output during low load periods to reduce financial and operational impacts, some derates were required during higher load daytime hours to meet the permitted temperature limits. These conditions caused TVA to rely more heavily on purchased power and more expensive generation sources such as combustion turbines during 2008. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary —Challenges During 2008 — Weather Conditions.

#### Competition

TVA sells electricity in a service area that is largely free of competition from other electric power providers. This service area is defined primarily by two provisions of law: one called the "fence" and one called the "anti-cherrypicking" provision. The fence limits the region in which TVA or distributors of TVA power may provide power. The anti-cherrypicking provision limits the ability of others to use the TVA transmission system for the purpose of serving customers within TVA's service area. Bristol, Virginia, was exempted from the anti-cherrypicking provision.

There have been efforts to erode the protection of the anti-cherrypicking provision. FERC issued an order that would have required TVA to interconnect its transmission system with the transmission system of East Kentucky Power Cooperative, Inc. ("East Kentucky") in what TVA believed was a violation of the anti-cherrypicking provision. See Item 3, Legal Proceedings. Additionally, Senators Jim Bunning and Mitch McConnell introduced the Access to Competitive Power Act of 2007 in the Senate that would, among other things, provide that the anti-cherrypicking provision would not apply with respect to any distributor which provided a termination notice to TVA before December 31, 2006, regardless of whether the notice was later withdrawn or rescinded. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Legislative and Regulatory Matters. While the FERC action involving East Kentucky is moot and the proposed legislation has not made it to the Senate floor, the events illustrate how the protection to TVA's service area provided by the anti-cherrypicking provision could be called into question and perhaps eliminated at some time in the future.

### Research and Development

TVA invests in science and technological innovation to inform decision making and improve operational and environmental performance. TVA's research and development activities are leveraged through partnerships with the Electric Power Research Institute, Department of Energy, Oak Ridge National Laboratory, other utilities, and universities. Examples of ongoing work include projects for energy efficiency, renewables, and clean energy, as well as projects to increase efficiency and reliability of existing generation and transmission assets, reduce fossil fuel plant emissions, reduce energy consumption, and evaluate new and proposed generation options. During 2008, TVA spent \$21 million on research and development activities. See Note 1 — Research and Development Costs.

#### Governance

TVA is governed by the TVA Board. The Consolidated Appropriations Act, 2005, amended the TVA Act by restructuring the TVA Board from three full-time members to nine part-time members, at least seven of whom must be legal residents of the TVA service area. TVA Board members are appointed by the President of the United States with the advice and consent of the U.S. Senate. After an initial phase-in period, TVA Board members serve five-year terms, and at least one member's term ends each year. The TVA Board, among other things, establishes broad goals, objectives, and policies for TVA; establishes long-range plans to carry out these goals, objectives, and policies; approves annual budgets; and establishes a compensation plan for employees. To allow TVA to operate more flexibly than a traditional government agency, Congress exempted TVA from some general federal laws that govern other agencies, such as the federal labor relations laws and the civil service laws related to the hiring of federal employees, the procurement of supplies and services, and the acquisition of land. Other federal laws enacted since the creation of TVA have been made applicable to TVA including those related to paying employees overtime, the protection of the environment, cultural resources, and civil rights laws. Information about members of the TVA Board and TVA's executive officers is discussed in Item 10, Directors, Executive Officers and Corporate Governance.

### Regulation

### Congress

TVA exists pursuant to legislation enacted by Congress and carries on its operations in accordance with this legislation. Congress can enact legislation expanding or reducing TVA's activities, change TVA's structure, and even eliminate TVA. Congress can also enact legislation requiring the sale of some or all of the assets TVA operates or reduce the United States' ownership in TVA. To allow TVA to operate more flexibly than a traditional government agency, Congress exempted TVA from some general federal laws that govern other agencies, such as federal labor relations laws and the civil service laws related to the hiring of federal employees, the procurement of supplies and services, and the acquisition of land. Other federal laws enacted since the creation of TVA have been made applicable

to TVA, including those related to paying employees overtime, the protection of the environment, cultural resources, and civil rights.

Securities and Exchange Commission

Section 37 was added to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as part of the Consolidated Appropriations Act, 2005. Section 37 requires TVA to file with the SEC such periodic, current, and supplementary information, documents, and reports as would be required pursuant to section 13 of the Exchange Act if TVA were an issuer of a security registered pursuant to section 12 of the Exchange Act. Section 37 of the Exchange Act exempts TVA from complying with section 10A(m)(3) of the Exchange Act, which requires each member of a listed issuer's audit committee to be an independent member of the board of directors of the issuer. Since TVA is an agency and instrumentality of the United States, securities issued or guaranteed by TVA are "exempted securities" under the Securities Act of 1933, as amended (the "Securities Act"), and may be offered and sold without registration under the Securities Act.

In addition, securities issued or guaranteed by TVA are "exempted securities" and "government securities" under the Exchange Act. TVA is also exempt from sections 14(a)-(d) and 14(f)-(h) of the Exchange Act (which address proxy solicitations) insofar as those sections relate to securities issued by TVA, and transactions in TVA securities are exempt from rules governing tender offers under Regulation 14E of the Exchange Act. Also, since TVA securities are exempted securities under the Securities Act, TVA is exempt from the Trust Indenture Act of 1939 insofar as it relates to securities issued by TVA, and no independent trustee is required for these securities.

### Federal Energy Regulatory Commission

Under the FPA, TVA is not a "public utility," a term which generally includes investor-owned utilities. Therefore, TVA is not subject to the full jurisdiction that FERC exercises over public utilities under the FPA. TVA is, however, an "electric utility" as defined in the FPA and, thus, is directly subject to certain aspects of FERC's jurisdiction.

•Under section 210 of the FPA, TVA can be ordered to interconnect its transmission facilities with the electrical facilities of qualified generators and other electric utilities that meet certain requirements. It must be found that the requested interconnection is in the public interest and would encourage conservation of energy or capital, optimize efficiency of facilities or resources, or improve reliability. The requirements of section 212 concerning the terms and conditions of interconnection, including reimbursement of costs, must also be met.

•Under section 211 of the FPA, TVA can be ordered to transmit power at wholesale provided that the order does not impair the reliability of the TVA or surrounding systems and likewise meets the applicable requirements of section 212 concerning terms, conditions, and rates for service. Under section 211A of the FPA, TVA is subject to FERC review of the transmission rates and the terms and conditions of service that TVA provides others to ensure comparability of treatment of such service with TVA's own use of its transmission system. With the exception of wheeling power to Bristol, Virginia, the anti-cherrypicking provision of the FPA precludes TVA from being ordered to wheel another supplier's power to a customer if the power would be consumed within TVA's defined service territory.

•Sections 221 and 222 of the FPA, applicable to all market participants, including TVA, prohibit (i) using manipulative or deceptive devices or contrivances in connection with the purchase or sale of power or transmission services subject to FERC's jurisdiction and (ii) reporting false information on the price of electricity sold at wholesale or the availability of transmission capacity to a federal agency with intent to fraudulently affect the data being compiled by the agency.

•Section 206(e) of the FPA provides FERC with authority to order refunds of excessive prices on short-term sales (transactions lasting 31 days or less) by all market participants, including TVA, in market manipulation and price gouging situations if such sales are under a FERC-approved tariff.

•Section 220 of the FPA provides FERC with authority to issue regulations requiring the reporting, on a timely basis, of information about the availability and prices of wholesale power and transmission service by all market participants, including TVA.

•Under sections 306 and 307 of the FPA, FERC may investigate electric industry practices, including TVA's operations previously mentioned that are subject to FERC's jurisdiction.

•Under sections 316 and 316A of the FPA, FERC has authority to impose criminal penalties and civil penalties of up to \$1 million a day for each violation on entities subject to the provisions of Part II of the FPA, which includes the above provisions applicable to TVA.

Finally, while not required to do so, TVA has elected to implement various FERC orders and regulations pertaining to public utilities on a voluntary basis to the extent that these are consistent with TVA's obligations under the TVA Act.

For a discussion of legislation that could change FERC's ability to regulate TVA, see Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Legislative and Regulatory Matters.

### Nuclear Regulatory Commission

TVA operates its nuclear facilities in a highly regulated environment and is subject to the oversight of the NRC, an independent agency which sets the rules that users of radioactive materials must follow. The NRC has broad authority to impose requirements relating to the licensing, operation, and decommissioning of nuclear generating facilities. In addition, if TVA fails to comply with requirements promulgated by the NRC, the NRC has the authority to impose fines, shut down units, or modify, suspend, or revoke TVA's operating licenses.

### Environmental Protection Agency

TVA is subject to regulation by the Environmental Protection Agency ("EPA") in a variety of areas, including air quality control, water quality control, and management and disposal of hazardous wastes. See Item 1, Business — Environmental Matters.

#### States

The Supremacy Clause of the U.S. 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.

### Other Federal Entities

TVA's activities and records are also subject to review to varying degrees by other federal entities, including TVA's Office of Inspector General and the following agencies: the Government Accountability Office, the Congressional Budget Office, and the Office of Management and Budget.

### Payments in Lieu of Taxes

TVA is not subject to federal income taxes, and neither TVA nor its property, franchises, or income is subject to taxation by states or their subdivisions. However, the TVA Act requires TVA to make tax equivalent payments to states and counties in which TVA conducts power operations and in which TVA has acquired properties previously subject to state and local taxation. The total 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 with other utilities, with a provision for minimum payments under certain circumstances. Except for certain direct payments TVA is required to make to counties, distribution of tax equivalent payments within a state is determined by individual state legislation.

### **Environmental Matters**

TVA's power generation activities, like those across the utility industry and in other industrial sectors, are subject to federal, state, and local environmental laws 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. Looking to the future, regulations in all of these areas are expected to become more stringent along with increased emphasis on dealing with climate change, expanding renewable generation alternatives, and encouraging efficient use of electricity.

Due to the increasing level and complexity of environmental requirements and expectations, TVA completed a new high-level environmental policy to align with and execute the direction in the Strategic Plan. The Environmental

Policy ("Environmental Policy") was approved by the TVA Board on May 19, 2008, and is intended to be an integrated framework which provides policy-level guidance to carry out TVA's mission of providing cleaner, affordable energy, sustainable economic development, and proactive environmental stewardship. The TVA Environmental Policy sets out environmental objectives and critical success factors in six environmental dimensions: climate change mitigation, air quality improvement, water resource protection and improvement, waste minimization, sustainable land use, and natural resource management.

TVA has incurred, and expects to continue to incur, substantial capital and operating and maintenance costs to comply with evolving environmental requirements primarily associated with, but not limited to, the operation of TVA's 59 coal-fired generating units. It is virtually certain that environmental requirements placed on the operation of TVA's coal-fired and other generating units will continue to become more restrictive. Litigation over emissions from coal-fired generating units is also occurring, including litigation against TVA. See Item 3, Legal Proceedings.

### Air Quality Control Developments

Air quality in the United States and in the Tennessee Valley has significantly improved since the enactment of the Clean Air Act ("CAA") in 1970. These air quality improvements are expected to continue as the CAA continues to be implemented and evolve as a result of legislative and regulatory changes. Three substances emitted from coal-fired units — sulfur dioxide ("SO2"), oxides of nitrogen ("NOx"), and particulates — have historically been the focus of CAA emission reduction regulatory programs, and these are discussed in more detail below.

Expenditures related to clean air projects aimed at controlling emissions of these substances during 2008 and 2007 were approximately \$274 million and \$239 million, respectively. These figures include expenditures in 2008 of \$9 million to continue to reduce NOx emissions through the installation of selective non-catalytic reduction ("SNCR") systems, and \$240 million for the installation of flue gas desulfurization systems ("scrubbers") to continue to reduce SO2 emissions. TVA had previously estimated its total capital cost for reducing emissions from its power plants from 1977 through 2010 would reach \$5.5 billion, \$5.1 billion of which had already been spent as of September 30, 2008. TVA estimates that compliance with future CAA requirements and potential mercury regulations, but not including carbon dioxide ("CO2"), as discussed below could lead to additional costs of \$3.0 billion to \$3.7 billion in the decade beginning in 2011. There could be additional material costs if reductions of greenhouse gases, including CO2, are mandated under the CAA or via legislation, or if future legislative, regulatory, or judicial actions lead to more stringent emission reduction requirements for conventional pollutants. These costs cannot reasonably be predicted at this time.

On July 11, 2008, the U.S. Court of Appeals for the D.C. Circuit ("D.C. Circuit") issued a decision in State of North Carolina vs. EPA that vacated the Clean Air Interstate Rule ("CAIR") in its entirety and directed the EPA to promulgate a new rule that is consistent with the D.C. Circuit opinion. EPA promulgated CAIR in 2005 and the rule required significant additional utility SO2 and NOx emission reductions to address ozone and fine particulate matter attainment issues in 28 eastern states, including all of TVA's operating area, and the District of Columbia. The requirements of CAIR formed the basis for TVA's (and much of the utility industry's) planning with regard to air emission controls beginning in 2009 and continuing well into the next decade. In the absence of CAIR, the uncertainty regarding compliance requirements, methods, and timelines may result in increased capital expenditures and operating expenses. In addition, it is unclear whether the petitions for a re-hearing or review of this decision will be granted by the D.C. Circuit, which could prolong the uncertainty of the regulatory landscape.

In the absence of CAIR, other requirements of the CAA, such as achievement of ozone and fine particulate ambient air quality standards, requirements relating to regional haze, and control of interstate transport of air pollution (Section 126 petitions), will continue to drive installation of additional controls on electric generating units across the industry, including at TVA. As discussed in more detail below, TVA will continue its previously announced emissions reduction program, including completion of scrubber installations for SO2 control at Bull Run, Kingston, and John Sevier Fossil Plants, and annual operation of the 21 selective catalytic reduction ("SCR") and other NOx controls beginning in October 2008.

On February 8, 2008, the D.C. Circuit vacated the EPA's decision to remove coal and oil-fired Electric Generating Units from the list of stationary sources whose hazardous air pollutant ("HAP") emissions are subject to Maximum Achievable Control Technology ("MACT") standards under section 112 of the CAA. The D.C. Circuit also vacated and remanded the Clean Air Mercury Rule ("CAMR") which set mercury limits via a cap-and-trade program. Unless the D.C. Circuit's ruling is reversed, or EPA is able to determine that mercury emissions are adequately controlled in accordance with the D.C. Circuit's remand instructions, EPA will have to regulate mercury emissions from utilities under section 112(d) of the CAA, setting MACT standards for emissions based on command and control type requirements. The cost to comply with the MACT standards is not known, but is expected to be higher than the cost would have been to comply with CAMR. Regardless of the status of the EPA's regulatory program for mercury, TVA

will continue to reduce mercury emissions from its coal-fired power plants. Over the next five years, mercury emissions from its coal-fired plants are expected to continue to decline, primarily as a result of the co-benefits received from the controls TVA is installing to reduce SO2 and NOx emissions.

The D.C. Circuit's recent decisions with regard to CAIR and CAMR may also have the effect of reviving interest in Congress in adopting multi-pollutant control legislation focused on the electric power sector. Among other things, such an approach could seek to establish coordinated caps for power plant emissions of mercury, SO2, NOx, and CO2. The legislative and regulatory landscape is continuing to change for these and other issues and the outcome cannot be predicted accurately at this time.

Sulfur Dioxide. Utility SO2 emissions are currently regulated under the Federal Acid Rain Program and state programs designed to meet the National Ambient Air Quality Standards ("NAAQS") for SO2 and fine particulate matter. Looking forward, these programs, as well as implementation of the regional haze program, will result in additional regulation of SO2 emissions.

Through calendar year 2007, TVA had reduced its SO2 emissions by 84 percent from the peak 1977 level by switching to lower-sulfur coals, continuing to operate an Atmospheric Fluidized Bed Combustion ("AFBC") unit at its Shawnee Fossil Plant, operating existing scrubbers on six larger units, and installing and operating a scrubber on an additional large unit at Paradise Fossil Plant. TVA is constructing a scrubber at Bull Run Fossil Plant, which is scheduled to begin operation in 2009, and two scrubbers at its Kingston Fossil Plant, which are scheduled to begin operation in 2009, and two scrubbers at its Kingston Fossil Plant, which are scheduled to begin operation in 2010. In April 2008, the TVA Board approved construction of additional flue gas desulfurization equipment at the four-unit John Sevier Fossil Plant in east Tennessee ("John Sevier"), which is expected to begin operation in 2012. Additionally, TVA has switched, or plans to switch, to lower-sulfur coal at several additional units in the next few years. It is likely that additional emission reduction measures will have to be undertaken in addition to these announced actions to achieve compliance with requirements yet to be adopted. Such measures will also help to meet the goal identified in TVA's Environmental Policy to reduce emissions by continuing to install emission reduction equipment and new technology with the aim of controlling over 80 percent of fossil generation in the next 10 years.

Nitrogen Oxides. Utility NOx emissions continue to be regulated under state programs to achieve and maintain EPA's NAAQS for ozone and fine particles, the Federal Acid Rain Program, and the regional haze program. On March 12, 2008, EPA issued final rules adopting new, more stringent NAAQS for ozone. EPA lowered the primary standard, created to protect public health with an adequate margin of safety, from 0.084 parts per million ("ppm") to 0.075 ppm. EPA also promulgated a new secondary standard, mainly created to protect vegetation. The form and level of the secondary standard are the same as the primary standard.

In 2009, states will have to recommend to EPA those counties proposed to be designated as "non-attainment" counties under the new standards, and in 2010, EPA is expected to finalize attainment designations using 2006 to 2008 monitoring data. States must submit plans to EPA no later than 2013 that demonstrate attainment with the standard. Areas must reach attainment by deadlines that vary (2013 to 2030) depending on the severity of the ozone problem.

Based on 2005-2007 monitoring data, virtually all of the larger cities in the Tennessee Valley area and their associated Metropolitan Statistical Areas, as well as those rural counties where ozone monitors are present, will likely be designated as non-attainment areas under the new standard.

Non-attainment designation can impact industrial development and expansion since new businesses tend to avoid non-attainment areas, and expansion of existing businesses becomes more difficult. Non-attainment can have serious repercussions for counties by increasing costs to industry, delaying the air permitting process, and restricting expansion of existing sources. Consumers are also likely to be affected as a result of the institution of vehicle inspection and fuel restriction programs. Non-attainment can also impact transportation planning since loss of federal highway funds can occur unless projects demonstrate "conformity" with the new standards.

TVA contributes to ambient ozone levels primarily as a result of NOx emissions from fossil-fired power plants. As a result of its emission reduction program, TVA's summertime NOx emissions have declined substantially. Since 1995, TVA has reduced its NOx emissions during the summer (when ozone levels increase) by 82 percent by installing various controls, including low-NOx burners and/or combustion controls, on 58 of its 59 coal-fired units and installing SCRs on 21 of the largest units. (The AFBC unit at Shawnee Fossil Plant is inherently low NOx emitting.)

In 2005, TVA installed SNCR systems, which generally have lower NOx removal capabilities than SCRs, on two units, Johnsonville Unit 1 and Shawnee Unit 1, to demonstrate long-term technology capability, and continues to operate the SNCR at Johnsonville Unit 1 in West Tennessee. In 2007, TVA began operating the High Energy Reagent Technology ("HERT") system on Unit 1 at John Sevier, and on Unit 4 at Johnsonville Fossil Plant ("Johnsonville"). HERT is similar to SNCR technology but has higher removal capabilities. Similar HERT equipment is planned for installation on the other three John Sevier units and Johnsonville Units 2 and 3 by May 2009, and TVA has announced plans to install SCRs at John Sevier by 2015.

TVA's NOx emission reduction program is expected to continue to depend primarily on SCRs, but will also incorporate some mix of SNCRs and/or HERTs as TVA gains more experience with these technologies. These plans may change depending on the timing and severity of future regulatory developments affecting power plant emissions. In October 2008, TVA began operating this NOx control equipment year round (except for maintenance outages).

An increase in the number of counties in the Tennessee Valley designated as non-attainment areas is likely to focus additional regulatory attention on all NOx emission sources, including TVA sources.

Particulates/Opacity. Coarse particulates (defined as particles of 10 micrometers or larger), which include fly ash, have long been regulated by states to meet EPA's NAAQS for particulate matter. All of TVA's coal-fired units have been equipped with mechanical collectors, electrostatic precipitators, scrubbers, or baghouses, which have reduced particulate emissions from the TVA system by more than 99 percent compared to uncontrolled units. In 1997, EPA issued separate NAAQS for even smaller particles with a size of up to 2.5 micrometers ("fine particles" or "PM2.5"). Counties and parts of counties in the Knoxville and Chattanooga, Tennessee, metropolitan areas have been designated as non-attainment areas under the 1997 standard.

In September 2006, EPA revised the 1997 standards. The 2006 revisions tighten the 24-hour fine particle standard and retain the 1997 annual fine particle standard. EPA also decided to retain the existing 24-hour standard for coarse particles, but revoked the related annual standard. On August 19, 2008, EPA sent letters to state and tribal representatives responding to their initial recommendations for areas meeting and not meeting the 24-hour national ambient air quality standards for PM2.5. States and tribes now have the opportunity to comment on EPA's modifications to their recommendations and to provide new information and analyses to EPA if appropriate. Several counties and parts of counties in the Tennessee Valley that include or are close to TVA coal-fired generating plants are included in this preliminary designation. Particular areas of concern to TVA are the Kentucky counties of Muhlenberg and McCracken, the Tennessee counties of Humphreys, Montgomery, and Stewart, and the counties in the Knoxville area. EPA has announced plans to make final designations in December 2008 using air quality monitoring data from 2005, 2006, and 2007. TVA will continue efforts to reduce emissions and engage regional and national stakeholders to further understand and improve regional air quality. TVA's continued installations of scrubbers for SO2 control and SCRs and other technologies for NOx control as described above are expected to continue to reduce fine particle levels.

Issues regarding utility compliance with state opacity requirements are also 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. Under some conditions, retrofitting a unit with additional equipment to better control SO2 and NOx emissions can adversely affect opacity performance, and TVA and other utilities are addressing this issue. There are also disputes and lawsuits over the role of continuous opacity monitors in determining compliance with opacity limitations, and TVA has received an adverse decision in one such lawsuit. See Item 3, Legal Proceedings.

Climate Change. In 1995, TVA was the first utility in the nation to participate in "Climate Challenge," a DOE-sponsored voluntary greenhouse gas reduction program. Over the past decade, TVA has reduced, avoided, or sequestered over 305 million tons of CO2 under this program. TVA also participates in the President's Climate VISION program which calls on the electric utility sector, along with other industry sectors, to help meet a national goal of reducing the greenhouse intensity of the U.S. economy by 18 percent from 2002 to 2012.

TVA has taken and is continuing to take significant voluntary steps that will reduce the carbon intensity of its electric generation, including the recovery of Browns Ferry Unit 1, planned power up-rates of Browns Ferry Units 1, 2 and 3 (which will increase the generating capability of the units resulting in additional avoided emissions of CO2), the completion of Watts Bar Unit 2, and the completion of the hydroelectric modernization program. TVA has also filed

with the NRC a combined operating license application for two advanced nuclear reactors at the Bellefonte Nuclear Plant near Hollywood, Alabama, and requested that the NRC reinstate the construction permit for Bellefonte Nuclear Units 1 and 2, although no decision has been made to complete those units or to build the new reactors. TVA is also committed to increasing its renewable energy by adding regional renewable energy sources to its generation portfolio.

In addition, TVA is a member of the Southeast Regional Carbon Sequestration Partnership and is working with the Electric Power Research Institute and other electric utilities on projects investigating technologies for CO2 capture and geologic storage, as well as carbon sequestration via reforestation. Legislation was introduced in the last Congress to require reductions of CO2 that, if enacted, could have resulted in significant additional costs for TVA and other utilities with coal-fired generation. In general, any carbon legislation will result in some level of increase in the price of electricity to consumers, regardless of form, severity, and timing of the legislation, and TVA's analyses of previous versions of several proposed climate bills indicate that the price increases could be substantial. These analyses also show that TVA's existing coal-fired generating assets will continue to play an important role in meeting the energy needs of the Tennessee Valley. TVA expects that the next Congress and Administration will again take up the issue of climate change and is incorporating the possibility of mandatory carbon reductions and a renewable portfolio standard to assess any potential financial and operational impacts as information becomes available. Looking ahead, TVA's Environmental Policy contains a Climate Change Mitigation objective to stop the growth in volume of emissions and reduce the rate of carbon emissions by 2020.

In addition to legislative activity, climate change issues are the subject of a number of lawsuits, including lawsuits against TVA. See Item 3, Legal Proceedings. On November 29, 2006, the U.S. Supreme Court heard the case of Massachusetts v. EPA, concerning whether EPA has the authority and duty to regulate CO2 emissions under the CAA. On April 2, 2007, the Supreme Court found that greenhouse gases, including CO2, are pollutants under the CAA, and that EPA thus does have the authority to regulate these gases. The Supreme Court also concluded that EPA's refusal to regulate these pollutants was based on impermissible reasons, and remanded the case to EPA to make a judgment regarding endangerment (either that greenhouse gases do, or do not, pose a threat to health and welfare) with respect to certain mobile sources. While this case focused on CO2 emissions from motor vehicles, it sets a precedent for regulation in other industrial sectors, such as the electric utility industry.

In July 2008, EPA issued an Advance Notice of Proposed Rulemaking ("ANPR") that addressed essentially all regulatory proceedings before EPA in which greenhouse gas emissions and climate change are issues, including consideration of greenhouse gas emissions in establishing new source performance standards and resolving pending appeals of new source review permit applications. The ANPR sought comments on the framework and direction of EPA's actions to regulate greenhouse gas emissions from a wide range of facilities, including electric generating facilities. The ANPR outlines issues to be addressed in new legislation that may be required in order to regulate greenhouse gas emissions. Regulatory options that may be considered in such legislation include, but are not limited to, the enactment of a cap-and-trade policy and development and deployment of alternative fuels, renewable energy resources, and energy conservation. Whether climate change legislation will be enacted during the 2009 to 2010 legislative session, and if so its potential impacts, cannot be assessed at this time. Any such legislation, or similar regulatory action by EPA under the CAA or otherwise, would probably have a significant impact on fossil-fueled generation facilities.

States are also becoming more active in the regulation of emissions that are believed to be contributing to global climate change. Several northeastern states have formed the Regional Greenhouse Gas Initiative, which is in the process of being implemented, and California passed a bill capping greenhouse gas emissions in the state. Other states are considering a variety of actions. North Carolina is studying initiatives aimed at climate change under the provisions of the state's Clean Smokestacks Act of 2002. This act required the State Division of Air Quality to study potential control of CO2 emissions from coal-fired utility plants and other stationary sources. This has also prompted efforts to develop a climate action plan for North Carolina.

### Renewables and Clean Energy

In light of increasing national focus on renewable and clean energy and TVA's desire to reduce its environmental footprint, on May 19, 2008, the TVA Board approved guiding principles for an Energy Efficiency and Demand Response Plan and a Renewable and Clean Energy Assessment.

The Energy Efficiency and Demand Response Plan seeks to slow the current rate of growth in the region's power demand by providing opportunities for residential, business, and industrial consumer groups to use energy more efficiently. In the short term, the plan proposes reducing the growth in peak demand by up to 1,400 megawatts by the end of the 2012 fiscal year.

The Renewable and Clean Energy Assessment strives to add clean energy resources to TVA's generating mix to help reduce carbon emissions while minimizing costs and maintaining a reliable power supply. The assessment proposes to review TVA's generation mix and identify a road map for pursuing additional renewable and clean energy supply in the region, and recommends consideration of different sources of renewable energy and a reduction in carbon intensity in TVA's generation mix, along with additional energy conservation by everyone who uses electricity.

#### Water Quality Control Developments

In the second phase of a three-part rulemaking to minimize the adverse impacts from cooling water intake structures on fish and shellfish, as required under Section 316(b) of the Clean Water Act ("CWA"), EPA promulgated a final rule for existing power producing facilities ("Phase II Rule") that became effective on September 7, 2004. On January 25, 2007, the U.S. Court of Appeals for the Second Circuit (the "Second Circuit") remanded the Phase II Rule, holding, among other things, that costs cannot be compared to benefits in picking the best technology available ("BTA") to minimize the adverse environmental impacts of intake structures. The Utility Water Act Group, Entergy Corporation, and PSEG Fossil LLC filed a petition seeking review of the decision by the U.S. Supreme Court. TVA and the attorneys general of several states, including Alabama, Kentucky, and Tennessee, supported this petition. On April 14, 2008, the U.S. Supreme Court granted the petition, limiting its review to one issue: "Whether Section 316(b) of the CWA authorizes EPA to compare costs with benefits in determining the 'best technology available for minimizing adverse environmental impact' at cooling water intake structures." The Department of Justice and industry petitioners will defend the EPA rule supporting the concept that costs under the rule should be limited to those that are "not significantly greater than" the benefits to be derived. The case has been argued before the U.S. Supreme Court. TVA is unable to predict the outcome.

On July 9, 2007, EPA suspended all but one provision of the Phase II Rule until the agency resolves the issues raised by the Second Circuit's remand. The provision that was retained requires permitting authorities to apply, in the interim, Best Professional Judgment ("BPJ") controls for existing facilities. BPJ controls are those that reflect the best technology available for minimizing the adverse environmental impacts of intake structures. The use of BPJ controls reflects a return to the regulatory process that was used by permitting authorities to regulate the impact of intake structures prior to the promulgation of the Phase II Rule.

All of the intakes at TVA's existing coal and nuclear generating facilities were subject to the Phase II Rule. Given the uncertainty over the ultimate outcome of the appellate process and what the changes in the final rule as ultimately issued by EPA will be, the impacts of the eventual rulemaking are uncertain at this time.

Section 303d of the CWA requires states to develop and report to EPA on a two-year cycle a list of waters that are "impaired" or are expected to not meet water quality standards in the next two years and need additional pollution controls. The Tennessee Department of Environment and Conservation ("TDEC") placed a portion of Barkley Reservoir downstream of TVA's Cumberland Fossil Plant on its 2008 list of impaired streams (the "303d List"). This section of Barkley Reservoir had not been listed previously. The reservoir conditions in 2007, especially for temperature and dissolved oxygen, changed significantly due primarily to reduced flows in the Cumberland River resulting from emergency dam repairs on the Wolf Creek and Center Hill Dams coupled with the most severe drought on record in the region. The lower flows made less water available to dissipate the heated discharge from Cumberland Fossil Plant and resulted in increased river temperatures. The prospect of continued reduced flows through the Cumberland River system during the period required to complete the necessary repairs to Wolf Creek and Center Hill Dams may impact the generation of electricity from TVA's Cumberland and Gallatin Fossil Plants. Placing this section of Barkley reservoir on the 303d List could also impact the thermal limits imposed by the State of Tennessee when the discharge permit for Cumberland Fossil Plant is renewed in 2010, or earlier if the state or EPA determines that additional actions are required to protect the aquatic environment below the plant. TVA is working with the U.S. Army Corps of Engineers and TDEC to minimize the impacts to TVA's generating plants and improve the conditions observed in the river in 2007. TVA began operating temporary cooling towers at Cumberland Fossil Plant to reduce the temperature of the water discharged to the river.

EPA, and many states, are taking increased interest in evaluating the potential effects of thermal discharges from steam-electric generating facilities. TVA is working with states and EPA Region IV to demonstrate that the data collected by TVA in the vicinity of its facilities is sufficient to meet the requirements for assessing the impacts of

thermal discharges on the aquatic environment.

In March 2007, TDEC adopted a lower, more conservative threshold (0.3 ppm) for issuing precautionary advisories for fish consumption due to mercury. Adoption of the lower threshold resulted in the issuance of several new precautionary fish consumption advisories in April 2007 for all or parts of five TVA reservoirs (Norris, Cherokee, South Holston, Watauga, and Tellico) and parts of four rivers in the Tennessee Valley (Buffalo, Emory, Hiwassee, and Holston) as well as the Loosahatchie, Wolf, and Mississippi Rivers in Tennessee that are not in the Tennessee River watershed.

As part of the 2007 advisory determinations, TDEC also identified several water bodies where more data were needed to determine if advisories were necessary. State agencies have since collected fish from those water bodies and decided several of them needed advisories to protect public health. The new Precautionary Advisory list for 2008 includes one additional TVA reservoir (Beech) and three additional river segments in the Tennessee River watershed (French Broad, Sequatchie, and Duck). Also, existing advisories for several reservoirs and rivers were expanded to include mercury as a chemical of concern and/or to include more kinds of fish.

TDEC's announcement of additional Precautionary Advisories for several Tennessee water bodies does not mean that mercury levels in fish are increasing, but is more reflective of the effect of the lowered threshold values for issuing a precautionary consumption advisory. TVA has been monitoring mercury levels in fish and sediments in TVA reservoirs for the last 35 years, and TVA's data were provided to TDEC as a part of its review process. TVA's data show significant reductions in mercury concentrations in fish from the reservoirs with known industrial discharges that have now ceased. Other than those areas historically impacted by industrial discharges, mercury concentrations in fish have tended to fluctuate through time with no discernible trend in fish from most reservoirs. Despite increased burning of coal for electricity generation, current and historic data records indicate that mercury concentrations in reservoir sediments have remained stable or declined.

One of the results of the major reductions in atmospheric emissions resulting from the clean air expenditures discussed above is that wastewaters at TVA coal-fired facilities and across the utility industry may be changing because of waste streams from air quality control technologies. Varying amounts of ammonia or similar compounds used as a necessary component of SCR and SNCR operations may end up in facility wastewater ponds that may discharge through outfalls regulated under the CWA. Operation of scrubbers for SO2 control also results in additional amounts of pollutants being introduced into facility wastewater treatment ponds. EPA is currently collecting information to determine if the national Steam Electric Point Source Effluent Guidelines ("Effluent Guidelines") under the CWA need to be revised. If the Effluent Guidelines are revised, potentially more restrictive discharge limitations for existing parameters or the addition of new parameters could result in additional wastewater treatment expenses to meet requirements of the CWA. These costs cannot be accurately predicted at this time, but TVA is involved in and closely monitoring EPA's data collection activities and the progress of the Effluent Guidelines review process. On the state level, new numeric nutrient criteria development and implementation (an EPA requirement) may require additional treatment costs to reduce nitrogen concentrations being added to the waste treatment ponds as a result of the operation of air pollution control equipment. TVA is closely monitoring the development and implementation of numeric nutrient criteria, particularly by the states in TVA's service area and is encouraging regulatory agencies in the Valley states to incorporate water quality trading regulations into their water quality standards.

As is the case across the utility industry and in other industrial sectors, TVA is also facing more stringent requirements related to protection of wetlands, reductions in storm water impacts from construction activities, water quality degradation, new water quality criteria, and laboratory analytical methods. TVA is also following litigation related to the use of herbicides, water transfers, and releases from dams. TVA is not facing any substantive requirements related to non-compliance with existing CWA regulations.

Hazardous Substance Response, Oil Cleanup, and Similar Environmental Work

Liability for releases and cleanup of hazardous substances is primarily regulated under the federal Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), and other federal and parallel 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 alleged hazardous-substance releases at 10 non-TVA areas for which it may have some liability. TVA has reached agreements with EPA to settle its liability at two of the non-TVA areas for a total of less than \$23,000. There have been no recent assertions of TVA liability for five of the non-TVA areas, and there is little or no known evidence that TVA contributed any significant quantity of hazardous substances to these five sites. There is evidence that TVA sent some materials to the remaining three non-TVA areas: the David Witherspoon site in Knoxville, Tennessee, the Ward Transformer site in Raleigh, North Carolina, and the General Waste Products site in Evansville, Indiana. As discussed below, TVA is not able to estimate its liability related to these sites at this time.

The Witherspoon site is contaminated with radionuclides, polychlorinated biphenyls ("PCBs"), and metals. DOE has admitted to being the main contributor of materials to the Witherspoon site and is currently performing clean up

activities. DOE claims that TVA sent equipment to be recycled at this facility, and there is some supporting evidence for the claim. However, TVA believes it sent only a relatively small amount of equipment and that none of it was radioactive. DOE has asked TVA to "cooperate" in completing the cleanup, but it has not provided to TVA any evidence of TVA's percentage share of the contamination.

The Ward Transformer site is contaminated by PCBs from electrical equipment. EPA and a working group of potentially responsible parties (the "PRP Work Group") have provided documentation showing that TVA sent a limited amount of equipment containing PCBs to the site in 1974. The PRP Work Group is cleaning up on-site contamination in accordance with an agreement with EPA. The cleanup effort has been divided into four areas: two phases of soil cleanup; cleanup of off-site contamination in the downstream drainage basin; and supplemental groundwater remediation. The first phase of soil cleanup is underway, and the high-end cost estimate for this work is about \$66 million. There are no reliable estimates for the second phase of soil cleanup or the supplemental groundwater remediation. EPA has selected a cleanup plan for the down stream drainage basin with a present-worth cost estimate of \$6.1 million. TVA understands that EPA has incurred approximately \$3 million in past response costs, and the PRP Work Group has reimbursed EPA approximately \$725,000 of those costs. The PRP Work Group plans to propose a cost allocation schedule which it will use as the basis for offering settlements to PRPs for the first phase of soil cleanup. It plans to sue PRPs who do not settle. There also may be natural resource damages liability at this site, but TVA is not aware of any estimated amount for any such damages. TVA has a potential defense that it only sent useful equipment to Ward and thus is not liable for arranging for disposal of a hazardous substance at the site.

General Waste Products was a scrap metal salvage yard that operated from the 1930s until 1998. The original defendants in a CERCLA action have filed a third party complaint against TVA and others seeking cost contribution for cleanup of contamination from lead batteries and PCB transformers at the facility. There is evidence that TVA sent scrap metal to the facility, but TVA has not found any records indicating that it sent batteries or PCB equipment. There are two cleanup sites at the facility. TVA has been informed that the first site has been cleaned up at a cost of \$3.2 million, and cleanup estimates for the second site range from \$2 million to \$7 million. TVA's allocated share of the cleanup costs, if any, is expected to be relatively small.

TVA operations at some TVA facilities have resulted in oil spills and other contamination TVA plans to address, and TVA expects to incur costs of about \$15 million for environmental work related to decommissioning of the Watts Bar Fossil Plant.

As of September 30, 2008, TVA's estimated liability for cleanup and similar environmental work for those sites for which sufficient information is available to develop a cost estimate (primarily the TVA sites) is approximately \$18 million on a non-discounted basis, including the Watts Bar Fossil Plant work, and is included in Other liabilities on the Balance Sheet.

### **Coal-Combustion Wastes**

In accordance with a regulatory determination by EPA in May 2000, coal-combustion and certain related wastes disposed of in landfills and surface impoundments are not regulated as hazardous waste. In conjunction with this determination, EPA committed to developing non-hazardous management standards for these wastes. These standards are likely to include increased groundwater monitoring, more stringent siting requirements, and closure of existing waste-management facilities not meeting minimum standards. On August 29, 2007, EPA issued a Notice of Data Availability ("NODA") in which it requested public comment on whether the additional information mentioned in the notice should affect EPA's decisions as it continues to follow up on its commitment to develop management standards for coal-combustion wastes. Although TVA did not comment on the NODA, the Utility Solid Waste Activity Group, of which TVA is a member, did file extensive comments with EPA regarding the risk assessment method that EPA chose to support the NODA.

# **Employee Relations**

On September 30, 2008, TVA had 11,584 employees, of whom 5,010 were trades and labor employees. Under the TVA Act, TVA is required to pay trades and labor workers hired by TVA or its contractors the prevailing rate of

wages. This rate is the rate of wages for work of a similar nature prevailing in the vicinity where the work is being performed. 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, and that 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.

### ITEM 1A. RISK FACTORS

The risk factors described below, as well as the other information included in this Annual Report, should be carefully considered. Risks and uncertainties described in these risk factors could cause future results to differ materially from historical results as well as from the results predicted in forward-looking statements. Although the risk factors described below are the ones that TVA management considers significant, additional risk factors that are not presently known to TVA management or that TVA management presently considers insignificant may also impair TVA's business operations. Although TVA has the authority to set its own rates and thus mitigate some risks by increasing rates, it is possible that partially or completely eliminating one or more of these risks through rate increases might adversely affect TVA commercially or politically. Accordingly, the occurrence of any of the following could have a material adverse effect on TVA's cash flows, results of operations, and financial condition.

For ease of reference, the risk factors are presented in four categories: strategic risks, operational risks, financial risks, and risks related to TVA securities.

Strategic Risks

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New laws, regulations, and administrative orders may negatively affect TVA's cash flows, results of operations, and financial condition, as well as the way TVA conducts its business.

Although it is difficult to predict exactly how any new laws, regulations, and administrative orders would impact TVA, some of the possible effects are described below.

TVA could lose its protected service territory.

TVA's service area is primarily defined by two provisions of law.

The TVA Act provides that, subject to certain minor exceptions, neither TVA nor its distributor customers may be a source of power supply outside of TVA's defined service area. This provision is often called the "fence" since it limits TVA's sales activities to a specified service area.

The Federal Power Act prevents FERC from ordering TVA to provide others with access to its transmission lines for the purpose of delivering power to customers within TVA's defined service area, except to those customers residing in Bristol, Virginia. This provision is often called the "anti-cherrypicking provision" since it prevents competitors from "cherrypicking" TVA's customers.

If Congress were to eliminate or reduce the coverage of the anti-cherrypicking provision, TVA could more easily lose customers, and the loss of these customers could adversely affect TVA's cash flows, results of operations, and financial condition. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Legislative and Regulatory Matters — Proposed Legislation.

The TVA Board could lose its sole authority to set rates for electricity.

Under the TVA Act, the TVA Board has the sole authority to set the rates that TVA charges for electricity, and these rates are not subject to review. The loss of this authority could have material adverse effects on TVA including, but not limited to, the following:

TVA might be unable to set rates at a level sufficient to generate adequate revenues to service its financial obligations, properly operate and maintain its power assets, and provide for reinvestment in its power program; and

TVA might become subject to additional regulatory oversight that could impede TVA's ability to manage its business.

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TVA could become subject to increased environmental regulation.

There is a risk that new environmental laws and regulations could become applicable to TVA or the facilities it operates and that existing environmental regulations could be revised or reinterpreted in a way that adversely affects TVA. For example, proposals in Congress that would regulate CO2 and other greenhouse gases could require TVA to incur significantly increased costs. Any such developments could require TVA to make significant capital expenditures, increase TVA's operating and maintenance costs, require TVA to pay a carbon penalty, or even lead to TVA's closing certain facilities. See Item 1, Business — Environmental Matters.

•TVA could become subject to Renewable Energy Portfolio Standards.

TVA is not currently obligated to provide a percentage of the power it sells from renewable sources but might be required to do so in the future. In such a case, TVA would either have to build additional facilities that use renewable resources to produce the power itself or purchase renewable power from other companies. Such developments could require TVA to make significant capital expenditures, increase its purchased power costs, or make changes in how it operates its facilities. See Item 1, Business — Renewable and Clean Energy.

•The NRC could impose significant restrictions or requirements on TVA.

The NRC has broad authority to impose requirements relating to the licensing, operation, and decommissioning of nuclear generation facilities. If the NRC modifies existing requirements or imposes new requirements, TVA could be required to make substantial capital expenditures at its nuclear plants or make substantial contributions to its nuclear decommissioning trust. In addition, if TVA fails to comply with requirements promulgated by the NRC, the NRC has the authority to impose fines, shut down units, or modify, suspend, or revoke TVA's operating licenses. See Item 1, Business — Nuclear.

•TVA could lose responsibility for managing the Tennessee River system.

TVA's management of the Tennessee River system is important to effective operation of the power system. TVA's ability to integrate management of the Tennessee River system with power system operations increases power system reliability and reduces costs. Restrictions on how TVA manages the Tennessee River system could negatively affect TVA's operations.

•Congress could take actions that lead to a downgrade of TVA's credit rating.

TVA's rated securities are currently rated "Aaa" by Moody's Investors Service and "AAA" by Standard and Poor's and Fitch Ratings, which are the highest ratings assigned by these rating agencies. TVA's credit ratings are not based solely on its underlying business or financial condition, which by themselves may not be commensurate with a triple-A rating. TVA's current ratings are based to a large extent on the body of legislation that defines TVA's business structure. Key characteristics of TVA's business defined by legislation include (1) the TVA Board's ratemaking authority, (2) the current competitive environment, which is defined by the fence and the anti-cherrypicking provision, and (3) TVA's status as a corporate agency and instrumentality of the United States. Accordingly, if Congress takes any action that effectively alters any of these characteristics, TVA's credit ratings could be downgraded.

•TVA's debt ceiling could become more restrictive.

The TVA Act provides that TVA can issue bonds, notes, and other evidences of indebtedness ("Bonds") in an amount not to exceed \$30 billion outstanding at any time. If Congress either lowers the debt ceiling or broadens the types of financial instruments that are covered by the debt ceiling, TVA might not be able to raise enough capital to, among

other things, service its financial obligations, properly operate and maintain its power assets, and provide for reinvestment in its power program.

TVA may lose some of its customers.

As of September 30, 2008, three distributor customers had notices in effect terminating their power contracts with TVA. Although sales to these three distributor customers generated only 0.5 percent of TVA's total operating revenues in 2008, the loss of additional customers could have a material adverse effect on TVA's cash flows, results of operations, and financial condition. See Item 1, Business — Customers — Municipalities and Cooperatives and Other Customers.

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### **Operational Risks**

TVA's generation and transmission assets may not operate as planned.

Many of TVA's generation and transmission assets have been operating since the 1950s or earlier and have been in nearly constant service since they were completed. If these assets fail to operate as planned, TVA, among other things:

- Might have to invest a significant amount of resources to repair or replace the assets;
  - Might be unable to operate the assets for a significant period of time;
    - Might have to purchase replacement power on the open market;
  - Might not be able to meet its contractual obligations to deliver power; and
  - Might have to remediate collateral damage caused by a failure of the assets.

In addition, the failure of TVA's assets to perform as planned could cause health, safety, and environmental problems and even result in such events as the failure of a dam or a nuclear accident. Any of these potential outcomes could negatively affect TVA's cash flows, results of operations, and financial condition. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Challenges During 2008.

TVA's fuel supplies might be disrupted.

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TVA purchases coal, uranium, fuel oil, and natural gas from a number of suppliers. Disruption in the acquisition or delivery of fuel may result from a variety of factors, including, but not limited to, weather, production or transportation difficulties, labor challenges, or environmental regulations affecting TVA's fuel suppliers. These disruptions could adversely affect TVA's ability to operate its facilities and could require TVA to acquire power at higher prices on the spot market, purchase more expensive alternative fuels, or operate higher cost plants, thereby adversely affecting TVA's cash flows, results of operations, and financial condition.

Compliance with existing and future environmental laws and regulations may affect TVA's operations in unexpected ways.

TVA is subject to risks from existing federal, state, and local environmental laws and regulations including, but not limited to, the following:

• Compliance with existing environmental laws and regulations may cost TVA more than it anticipates. At some of TVA's older facilities, it may be uneconomical for TVA to install the necessary equipment to comply with future environmental laws, which may cause TVA to shut down those facilities.

TVA may be responsible for on-site liabilities associated with the environmental condition of facilities that it has acquired or developed, regardless of when the liabilities arose and whether they are known or unknown.
TVA may be unable to obtain or maintain all required environmental regulatory approvals. If there is a delay in obtaining any required environmental regulatory approvals or if TVA fails to obtain, maintain, or comply with any such approval, TVA may be unable to operate its facilities or may have to pay fines or penalties.

See Item 1, Business — Environmental Matters.

Compliance with environmental laws and regulations relating to carbon dioxide and other greenhouse gases may affect TVA's operations in unexpected ways.

Future compliance may be required resulting from the regulation of carbon dioxide and other greenhouse gases. Any future legislative or regulatory actions to address global climate change may be materially adverse to TVA's financial position or results of operations. The cost impact of legislation or regulation to address global climate change would depend on the specific legislation or regulation enacted, which cannot be determined at this time. See Item 1, Business — Environmental Matters.

TVA is the sole power provider for customers within its service area, and if demand for power in TVA's service area increases, TVA is contractually obligated to take steps to meet this increased demand.

If demand for power in TVA's service area increases, TVA may need to meet this increased demand by purchasing power from other sources, building new generation and transmission facilities, or purchasing existing generation and transmission facilities. Purchasing power from external sources, as well as acquiring or building new generation and transmission facilities, could negatively affect TVA's cash flows, results of operations, and financial condition.

Purchased power prices may be highly volatile, and providers of purchased power may fail to perform under their contracts with TVA.

TVA acquires a portion of its electricity needs through purchased power arrangements. The price for purchased power has been volatile in recent years, and the price that TVA pays for purchased power may increase significantly in the future. In addition, if one of TVA's purchased power suppliers fails to perform under the terms of its contract with TVA, TVA might have to purchase replacement power on the spot market, perhaps at a significantly higher price than TVA was entitled to pay under the contract. In some circumstances, TVA may not be able to recover this difference from the supplier. Moreover, if TVA is unable to acquire enough purchased power or enough replacement power on the spot market and does not have enough reserve generation capacity available to offset the loss of power from the purchased power supplier, TVA might not be able to supply enough power to meet the demand, resulting in power curtailments or even blackouts. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Management Activities — Credit Risk — Credit of Other Counterparties.

TVA's ability to supply power and its customers' demands for power are influenced by weather conditions.

Extreme temperatures may increase the demand for power and require TVA to purchase power at high prices in order to meet the demand from customers, while unusually mild weather may result in decreased demand for power and lead to reduced electricity sales. In addition, in periods of low rainfall or drought, TVA's low-cost hydroelectric generation may be reduced, requiring TVA to purchase power or use more costly means of producing power. Furthermore, high river water temperatures in the summer may limit TVA's ability to use water from the Tennessee or Cumberland River system for cooling at its generating facilities, thereby limiting TVA's ability to operate its generating facilities. See Item 1, Business — Weather and Seasonality and Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Challenges During 2008 — Weather Conditions.

TVA may incur delays and additional costs in power plant construction and may be unable to obtain necessary regulatory approval.

TVA has begun the process of completing the construction of Watts Bar Nuclear Unit 2 and may need to construct more generating facilities in the future. The completion of such facilities involves substantial risks of delays and overruns in the cost of labor and materials. In addition, completion may require regulatory approval, as in the case of Watts Bar Nuclear Unit 2. If TVA does not obtain the necessary regulatory approval, is otherwise unable to complete the development or construction of a facility, decides to cancel construction of a facility, or incurs delays or cost overruns in connection with constructing a facility, TVA's cash flows, financial condition, and results of operations could be negatively affected. In addition, if construction projects are not completed according to specifications, TVA may suffer, among other things, reduced plant efficiency and higher operating costs. See Item 1, Business — Nuclear.

TVA may face problems attracting and retaining skilled workers.

As TVA employees retire and TVA faces competition for skilled workers, TVA may face problems attracting and retaining skilled workers to, among other things, operate and maintain TVA's generation and transmission facilities and complete large construction projects such as Watts Bar Nuclear Unit 2.

TVA is involved in various legal and administrative proceedings whose outcomes may affect TVA's finances and operations.

TVA is involved in various legal and administrative proceedings and is likely to become involved in other legal proceedings in the future in the ordinary course of business. Although TVA cannot predict the outcome of the individual matters in which TVA is involved or will become involved, the resolution of these matters could require TVA to make expenditures in excess of established reserves and in amounts that could have a material adverse effect on TVA's cash flows, results of operations, and financial condition. Similarly, resolution could require TVA to change its business practices or procedures, which could also have a material adverse effect on TVA's cash flows, results of operations.

TVA's transmission reliability could be affected by problems at other utilities or TVA facilities.

TVA's transmission facilities are directly interconnected with the transmission facilities of neighboring utilities and are thus part of an interstate power transmission grid. Accordingly, problems at other utilities, or at TVA's own facilities, may cause interruptions in TVA's transmission service. If TVA were to suffer a transmission service interruption, TVA's cash flows, results of operations, and financial condition could be negatively affected.

Events at non-TVA facilities which affect the supply of water to TVA's generation facilities may interfere with TVA's ability to generate power.

TVA's coal-fired and nuclear generation facilities depend on water from the river systems near which they are located for cooling water and for water to convert into steam to drive turbines. While TVA manages the Tennessee River and large portions of its tributary system in order to provide much of this necessary water, the U.S. Army Corps of Engineers operates and manages other bodies of water upon which some TVA facilities rely. Events at these non-TVA managed bodies of water or their associated hydroelectric facilities may interfere with the flow of water and may result in TVA having insufficient water to meet the needs of its plants. In such scenarios, TVA may be required to reduce generation at its affected facilities to levels compatible with the available supply of water. See Item 1, Business — Power Supply and Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Challenges During 2008.

An incident at any nuclear facility, even one that is not owned by or licensed to TVA, could result in increased expenses and oversight.

A nuclear incident at a TVA facility could have significant consequences including loss of life, damage to the environment, damage to or loss of the facility, and damage to non-TVA property. Any nuclear incident, even at a facility that is not owned by or licensed to TVA, has the potential to impact TVA adversely by obligating TVA to pay up to \$105 million per year and a total of \$671 million per nuclear incident under the Price-Anderson Act. In addition, a nuclear incident could negatively affect TVA by, among other things, obligating TVA to pay retrospective premiums, reducing the availability of insurance, increasing the costs of operating nuclear units, or leading to increased regulation or restriction on the construction, operation, and decommissioning of nuclear facilities.

Catastrophic events could affect TVA's ability to supply electricity or reduce demand for electricity.

TVA could be adversely affected by catastrophic events such as fires, earthquakes, floods, tornadoes, wars, terrorist activities, pandemics, and other similar events. These events, the frequency and severity of which are unpredictable, could negatively affect TVA's cash flows, results of operations, and financial condition by, among other things, limiting TVA's ability to generate and transmit power, reducing the demand for power, disrupting fuel or other supplies, leading to an economic downturn, or creating instability in the financial markets.

Demand for electricity supplied by TVA could be reduced by changes in technology.

Research and development activities are ongoing to improve existing and alternative technologies to produce electricity, including gas turbines, fuel cells, microturbines, and solar cells. It is possible that advances in these or other alternative technologies could reduce the costs of electricity production from alternative technologies to a level that will enable these technologies to compete effectively with traditional power plants like TVA's. To the extent these technologies become a more cost-effective option for certain customers, TVA's sales to these customers could be reduced, thereby negatively affecting TVA's cash flows, results of operations, and financial condition. In addition, demand for electricity may be affected by the implementation of time-of-use rates. Depending on design features, time-of-use rates may affect timing and volatility of cash flow. Metering or related technology changes may impact the features and penetration of time-of-use rates.

#### Financial Risks

TVA is subject to a variety of market risks that could negatively affect TVA's cash flows, results of operations, and financial position.

TVA is subject to a variety of market risks, including, but not limited to, commodity price risk, investment price risk, interest rate risk, and credit risk.

Commodity Price Risk. Prices of commodities critical to TVA's operations, including coal, uranium, natural gas, fuel oil, construction materials, emission allowances, and electricity, have been extremely volatile in recent years. If TVA fails to effectively manage its commodity price risk, TVA's rates could increase and thereby cause customers to look for alternative power suppliers.

Investment Price Risk. TVA is exposed to investment price risk in its nuclear decommissioning trust, its asset retirement trust, and its pension fund. If the value of the investments held in the nuclear decommissioning trust or the pension fund decreases significantly, TVA could be required to make substantial unplanned contributions to these funds, which would negatively affect TVA's cash flows, results of operations, and financial condition.

Interest Rate Risk. Changes in interest rates could negatively affect TVA's cash flows, results of operations, and financial condition by increasing the amount of interest that TVA pays on new bonds that it issues, decreasing the return that TVA receives on its short-term investments, decreasing the value of the investments in TVA's pension fund and trusts, and increasing the losses on the mark-to-market valuation of certain derivative transactions into which TVA has entered.

Credit Risk. TVA is exposed to the risk that its counterparties will not be able to perform their contractual obligations. If TVA's counterparties fail to perform their obligations, TVA's cash flows, results of operations, and financial condition could be adversely affected. In addition, the failure of a counterparty to perform could make it difficult for TVA to perform its obligations, particularly if the counterparty is a supplier of electricity or fuel to TVA.

For more information regarding market risks, see Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Management Activities, and for a discussion of the impact on TVA of recent developments in the commodity, investment, interest rate, and credit markets, see Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Challenges During 2008 and Liquidity and Capital Resources — Sources of Liquidity.

TVA and owners of TVA securities could be impacted by a downgrade of TVA's credit rating.

A downgrade in TVA's credit rating could have material adverse effects on TVA's cash flows, results of operations, and financial condition as well as on investors in TVA securities. Among other things, a downgrade could have the following effects:

A downgrade would increase TVA's interest expense by increasing the interest rates that TVA pays on new Bonds that it issues. An increase in TVA's interest expense would reduce the amount of cash available for other purposes, which could result in the need to increase borrowings, to reduce other expenses or capital investments, or to increase power rates.

A significant downgrade could result in TVA's having to post collateral under certain physical and financial contracts that contain rating triggers.

A downgrade below a contractual threshold could prevent TVA from borrowing under two credit facilities totaling \$2.25 billion.

A downgrade could lower the price of TVA securities in the secondary market.

See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources.

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TVA may have to make significant unplanned contributions to fund its pension and other postretirement benefit plans.

TVA's costs of providing pension benefits and other postretirement benefits depend upon a number of factors, including, but not limited to:

Provisions of the pension and postretirement benefit plans;

Changing employee demographics;

Rates of increase in compensation levels;

Rates of return on plan assets;

Discount rates used in determining future benefit obligations;

Rates of increase in health care costs;

Levels of interest rates used to measure the required minimum funding levels of the plans;

Future government regulation; and

Contributions made to the plans.

Any number of these factors could increase TVA's costs of providing pension and other postretirement benefits and require TVA to make significant unplanned contributions to the plans. Such contributions would negatively affect TVA's cash flows, results of operations, and financial condition. For a discussion of the impact of the recent turmoil in the financial markets on TVA's pension fund, including the funded status and recent performance of the fund, see Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Challenges During 2008 — Investment Performance.

TVA may have to make significant unplanned contributions to its nuclear decommissioning trust.

TVA maintains a nuclear decommissioning trust for the purpose of providing funds to decommission its nuclear facilities. The decommissioning trust is invested in securities generally designed to achieve a return in line with overall equity market performance. TVA might have to make significant unplanned contributions to the trust if, among other things:

The value of the investments in the trust declines significantly;

•The laws or regulations regarding nuclear decommissioning change the decommissioning funding requirements;

• The assumed real rate of return on plan assets, which is currently five percent, is lowered by the TVA Board;

Changes in technology and experience related to decommissioning cause decommissioning cost estimates to increase significantly; or

TVA is required to decommission a nuclear plant sooner than it anticipates.

If TVA makes unplanned contributions to the trust, the contributions would negatively affect TVA's cash flows, results of operations, and financial condition. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Challenges During 2008 — Investment Performance.

TVA may be unable to meet its current cash requirements if its access to the debt markets is limited.

TVA's cash management policy is to use cash provided by operations together with proceeds from power program borrowings to fund TVA's current cash requirements. In addition, TVA has access to a \$150 million credit facility with the U.S. Treasury and \$2.25 billion of credit facilities with a national bank. In light of TVA's cash management policy, it is critical that TVA continue to have access to the debt markets in order to meet its cash requirements. The importance of having access to the debt markets is underscored by the fact that TVA, unlike many utilities, relies almost entirely on the debt markets to raise capital since it is not authorized to issue equity securities. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources.

Approaching or reaching its debt ceiling could limit TVA's ability to carry out its business.

At September 30, 2008, TVA had approximately \$22.7 billion of Bonds outstanding (not including noncash items of foreign currency valuation loss of \$138 million and net discount on sale of bonds of \$199 million). TVA has a statutorily imposed ceiling of \$30 billion on outstanding Bonds. Approaching or reaching this debt ceiling could adversely affect TVA's business by limiting TVA's ability to borrow money and increasing the cost of servicing TVA's debt. In addition, approaching or reaching this debt ceiling could lead to increased legislative or regulatory oversight of TVA's activities.

TVA's cash flows, results of operations, and financial condition could be negatively affected by economic downturns.

Sustained downturns or weakness in the economy in TVA's service area or other parts of the United States could reduce overall demand for power and thus reduce TVA's power sales and cash flows, especially as TVA's industrial customers reduce their operations and thus their consumption of power. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Future Challenges.

TVA's financial control system cannot guarantee that all control issues and instances of fraud or errors will be detected.

No financial control system, no matter how well designed and operated, can provide absolute assurance that the objectives of the control system are met, and no evaluation of financial controls can provide absolute assurance that all control issues and instances of fraud or errors can be detected. The design of any system of financial 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. For an assessment as of September 30, 2008, of TVA's disclosure controls and procedures (which were deemed ineffective) and TVA's internal controls and procedures (which were deemed effective) as well as a discussion of the remediation during the fourth quarter of 2008 of a material internal control weakness related to TVA's estimate of unbilled revenue, see Item 9A, Controls and Procedures.

TVA could lose the ability to use regulatory accounting and be required to write off a significant amount of regulatory assets.

TVA is able to use regulatory accounting because it satisfies the requirements set forth in Statement of Financial Accounting Standards ("SFAS") No. 71, "Accounting for the Effects of Certain Types of Regulation." Accordingly, TVA records as assets certain costs that would not be recorded as assets under generally accepted accounting principles for non-regulated entities. As of September 30, 2008, TVA had \$6.9 billion of regulatory assets. If TVA loses its ability to use regulatory accounting, TVA could be required to write-off its regulatory assets. Any 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 to TVA.

#### Risks Related to TVA Securities

Payment of principal and interest on TVA securities is not guaranteed by the United States.

Although TVA is a corporate agency and instrumentality of the United States government, TVA securities are not backed by the full faith and credit of the United States. Principal and interest on TVA securities are payable solely from TVA's net power proceeds. Net power proceeds are defined as the remainder of TVA's gross power revenues after deducting the costs of operating, maintaining, and administering its power properties 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 from the sale or other disposition of any power facility or interest therein.

The trading market for TVA securities might be limited.

All of TVA's Bonds are listed on the New York Stock Exchange except for TVA's discount notes, which have maturities of less than one year, and the power bonds issued under TVA's electronotes® program, which is TVA's medium-term retail notes program. In addition, some of TVA's Bonds are listed on foreign stock exchanges. Although many of TVA's Bonds are listed on stock exchanges, there can be no assurances that any market will develop or continue to exist for any Bonds. Additionally, no assurances can be made as to the ability of the holders of Bonds to sell their Bonds or the price at which holders will be able to sell their Bonds. Future trading prices of Bonds will depend on many factors, including prevailing interest rates, the then-current ratings assigned to the Bonds, the amount of Bonds outstanding, the time remaining until the maturity of the Bonds, the redemption features of the Bonds, the market for similar securities, and the level, direction, and volatility of interest rates generally.

If a particular series of Bonds is offered through underwriters, those underwriters may attempt to make a market in the Bonds. The underwriters would not be obligated to do so, however, and could terminate any market-making activity at any time without notice.

In addition, legal limitations may affect the ability of banks and others to invest in Bonds. For example, national banks may purchase TVA Bonds for their own accounts in an amount not to exceed 10 percent of unimpaired capital and surplus. Also, TVA Bonds are "obligations of a corporation which is an instrumentality of the United States" within the meaning of section 7701(a)(19)(C)(ii) of the Internal Revenue Code for purposes of the 60 percent of assets limitation applicable to U.S. building and loan associations.

#### ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

#### **ITEM 2. PROPERTIES**

TVA holds personal property in its own name but holds real property as agent for the United States of America. TVA may acquire real property by negotiated purchase or by eminent domain.

#### **Generating Properties**

At September 30, 2008, generating assets operated by TVA consisted of 59 coal-fired units, six nuclear units, 109 conventional hydroelectric units, four pumped storage units, 93 combustion turbine units, three combined cycle units, nine diesel generator units, one digester gas site, one biomass cofiring site, one wind energy site, and 15 solar energy sites. See Item 1, Business — Power Supply for a chart that indicates the location, capability, and in-service dates for each of these properties. Construction on Watts Bar Unit 2 commenced in December 2007. Completing Watts Bar Unit 2 is expected to take 60 months. TVA added seven combustion turbine units in 2008 and subsequently sold an undivided 69.69 percent interest in three of the combined cycle, combustion turbine units it had acquired. It now operates these three units under a lease agreement. See Item 1, Business — Power Supply — Generation Facilities — Combustion Turbine Facilities.

Twenty-four of TVA's simple cycle combustion turbines are subject to leaseback arrangements. For more information regarding these arrangements, see Note 13 — Leaseback Obligations.

# **Transmission Properties**

TVA's transmission system interconnects with systems of surrounding utilities and consists primarily of the following assets:

Approximately 15,860 circuit miles of transmission lines (primarily 500 kilovolt and 161 kilovolt lines);
 487 transmission substations, power switchyards, and switching stations; and
 64 individual interchange and 1,006 customer connection points.

In 2003, TVA entered into a leaseback of certain qualified technological equipment and other software related to TVA's transmission system. For more information regarding this transaction, see Note 13 — Leaseback Obligations.

Natural Resource Stewardship Properties

TVA operates and maintains 49 dams, and TVA manages the following natural resource stewardship properties:

•	11,000 miles of reservoir shoreline; 293,000 acres of reservoir land;
•	650,000 surface acres of water; and
•	Over 100 public recreation facilities.

As part of its stewardship responsibilities, TVA approval is required to be obtained before construction of any obstruction affecting navigation, flood control, or public lands can be constructed in or along the Tennessee River and its tributaries.

#### Buildings

TVA has a variety of buildings throughout its service area in addition to the buildings located at its generation and transmission facilities, including office buildings, customer service centers, power service centers, warehouses, visitor centers, and crew quarters. The most significant of these buildings is the Knoxville Office Complex. TVA also leases buildings when it deems appropriate, including its Chattanooga Office Complex, which consists of approximately 1.2 million square feet of office space. The initial term of TVA's lease of approximately 1.05 million square feet of the Chattanooga Office Complex upon the expiration of the existing lease term on January 1, 2011. On February 8, 2008, TVA finalized an agreement to purchase this portion of the Chattanooga Office Complex upon the expiration of the existing lease term on January 1, 2011. The purchase price is \$22 million, payable on January 3, 2011. See Note 4 — Asset Acquisitions and Dispositions. The lease on the Monteagle Place the remaining portion of the Chattanooga Office Complex (approximately 131,979 square feet) expires on September 30, 2012. TVA also owns a significant number of buildings in Muscle Shoals, Alabama, and is currently evaluating strategies for long-term solutions to further reduce its Muscle Shoals portfolio.

#### Disposal of Property

Under the TVA Act, TVA has broad authority to dispose of personal property but only limited authority to dispose of real property. TVA's primary sources of authority to dispose of real property are briefly described below:

Under Section 31 of the TVA Act, TVA has authority to dispose of surplus real property at a public auction.
Under Section 4(k) of the TVA Act, TVA can dispose of real property for certain specified purposes, including to provide replacement lands for certain entities whose lands were flooded or destroyed by dam or reservoir construction and to grant easements and rights-of-way upon which are located transmission or distribution lines.
Under Section 15d(g) of the TVA Act, TVA can dispose of real property in connection with the construction of generating plants or other facilities under certain circumstances.

•Under 40 U.S.C. § 1314, TVA has authority to grant easements for rights-of-way and other purposes.

In addition, the Basic Tennessee Valley Authority Power Bond Resolution adopted by the TVA Board on October 6, 1960, as amended on September 28, 1976, October 17, 1989, and March 25, 1992, prohibits TVA from mortgaging any part of its power properties and from disposing of all or any substantial portion of these properties unless TVA provides for a continuance of the interest, principal, and sinking fund payments due and to become due on all outstanding Bonds, or for the retirement of such Bonds.

#### ITEM 3. LEGAL PROCEEDINGS

TVA is subject to various legal proceedings and claims that have arisen in the ordinary course of business. These proceedings and claims include the matters discussed below. In accordance with SFAS No. 5, "Accounting forContingencies," TVA had accrued approximately \$46 million and \$3 million with respect to the proceedings described below as of September 30, 2008 and 2007, respectively, as well as approximately \$5 million and \$4 million as of September 30, 2008, and 2007, respectively, with respect to other proceedings that have arisen in the normal course of TVA's business. TVA recognized \$20 million, \$4 million, and \$24 million in 2008, 2007, and 2006, respectively, of expense by increasing accruals related to legal proceedings. No assurance can be given that TVA will not be subject to significant additional claims and liabilities. If actual liabilities significantly exceed the estimates made, TVA's results of operations, liquidity, and financial condition could be materially adversely affected.

Global Warming Cases, Southern District of New York. On July 21, 2004, two lawsuits were filed against TVA in the United States District Court for the Southern District of New York alleging that global warming is a public nuisance and that CO2 emissions from fossil-fuel electric generating facilities should be ordered abated because they contribute to causing the nuisance. The first case was filed by various states (California, Connecticut, Iowa, New Jersey, New York, Rhode Island, Vermont, and Wisconsin) and the City of New York against TVA and other power companies. The second case, which alleges both public and private nuisance, was filed against the same defendants by Open Space Institute, Inc., Open Space Conservancy, Inc., and the Audubon Society of New Hampshire. The plaintiffs do not seek monetary damages, but instead seek a court order requiring each defendant to cap its CO2 emissions and then reduce these emissions by an unspecified percentage each year for at least a decade. In September 2005, the district court dismissed both lawsuits because they raised political questions that should not be decided by the courts. The plaintiffs appealed to the United States Court of Appeals for the Second Circuit ("Second Circuit"). Oral argument was held before the Second Circuit on June 7, 2006. On June 21, 2007, the Second Circuit directed the parties to submit letter briefs by July 6, 2007, addressing the impact of the Supreme Court's decision in Massachusetts v. EPA, 127 S.Ct. 1438 (2007), on the issues raised by the parties. On July 6, 2007, the defendants jointly submitted their letter brief. The Second Circuit is deliberating on its decision.

Case Involving Alleged Violations of the New Source Review Regulations at Bull Run Fossil Plant. The National Parks Conservation Association, Inc. ("NPCA"), and the Sierra Club, Inc. ("Sierra Club") filed suit against TVA on February 13, 2001, in the United States District Court for the Eastern District of Tennessee, alleging that TVA did not comply with the new source review ("NSR") requirements of the CAA when TVA repaired its Bull Run Fossil Plant ("Bull Run"), a coal-fired electric generating facility located in Anderson County, Tennessee. In March 2005, the district court granted TVA's motion to dismiss the lawsuit on statute of limitation grounds. The plaintiffs' motion for reconsideration was denied, and they appealed to the United States Court of Appeals for the Sixth Circuit ("Sixth Circuit"). Friend of the court briefs supporting the plaintiffs' appeal were filed by New York, Connecticut, Illinois, Iowa, Maryland, New Hampshire, New Jersey, New Mexico, Rhode Island, Kentucky, Massachusetts, and Pennsylvania. Several Ohio utilities filed a friend of the court brief supporting TVA. A panel of three judges issued a decision reversing the district court's dismissal on March 2, 2007. TVA's request that the full Sixth Circuit rehear the appeal was denied. The district court trial previously scheduled for September 2, 2008, was postponed, and the district court instead heard oral arguments on the parties' motions for summary judgment on that date. The trial has not yet been rescheduled. TVA is already installing or has installed the control equipment that the plaintiffs seek to require TVA to install in this case, and it is unlikely that an adverse decision will result in substantial additional costs to TVA at Bull Run. An adverse decision, however, could lead to additional litigation and could cause TVA to change its emission control strategy and increase costs. It is uncertain whether there would be significant increased costs to TVA.

Case Involving Opacity at Colbert Fossil Plant. On September 16, 2002, the Sierra Club and the Alabama Environmental Council filed a lawsuit in the United States District Court for the Northern District of Alabama alleging that TVA violated CAA opacity limits applicable to Colbert Fossil Plant ("Colbert") between July 1, 1997, and June 30, 2002. The plaintiffs seek a court order that could require TVA to incur substantial additional costs for environmental controls and pay civil penalties of up to approximately \$250 million. After the court dismissed the complaint (finding that the challenged emissions were within Alabama's two percent de minimis rule, which provided a safe harbor if nonexempt opacity monitor readings over 20 percent did not occur more than two percent of the time each quarter), the plaintiffs appealed the district court's decision to the United States Court of Appeals for the Eleventh Circuit ("Eleventh Circuit"). On November 22, 2005, the Eleventh Circuit affirmed the district court's dismissal of the claims for civil penalties but held that the Alabama de minimis rule was not applicable because Alabama had not yet obtained Environmental Protection Agency ("EPA") approval of that rule. The case was remanded to the district court for further proceedings. On April 5, 2007, the plaintiffs moved for summary judgment. TVA opposed the motion and moved to stay the proceedings. On April 12, 2007, EPA proposed to approve Alabama's de minimis rule subject to certain changes. On July 16, 2007, the district court denied TVA's motion to stay the proceedings pending approval of

Alabama's de minimis rule. Oral argument on the plaintiffs' motion for summary judgment was held on August 16, 2007. On August 27, 2007, the district court granted the plaintiffs' motion for summary judgment, finding that TVA had violated the CAA at Colbert. The district court held that, while TVA had achieved 99 percent compliance on Colbert Units 1-4 and 99.5 percent compliance at Colbert Unit 5, TVA had exceeded the 20 percent opacity limit (measured in six-minute intervals) more than 3,350 times between January 3, 2000, and September 30, 2002. The district court ordered TVA to submit a proposed remediation plan, which TVA did on October 26, 2007. The plaintiffs responded to TVA's proposed plan, and the district court held a hearing on the plan on December 15, 2008. EPA has approved Alabama's de minimis rule, which will become effective in 2009.

In addition to Colbert, TVA has another coal-fired power plant in Alabama, Widows Creek Fossil Plant ("Widows Creek"), which has a summer net capability of 1,508 megawatts. Since the operation of Widows Creek must meet the same opacity requirements, this plant may be affected by the decision in this case. The recently approved de minimis rule change helps reduce the chances of an adverse effect on Widows Creek from the district court decision.

Case Brought by North Carolina Alleging Public Nuisance. On January 30, 2006, North Carolina filed suit against TVA in the United States District Court for the Western District of North Carolina alleging that TVA's operation of its coal-fired power plants in the States of Tennessee, Alabama, and Kentucky constitute public nuisances. North Carolina is asking the court to impose caps on emissions of certain pollutants from TVA's coal-fired plants that North Carolina considers to be equivalent to caps on emissions imposed by North Carolina law on North Carolina's two largest electric utilities. The imposition of such caps could require TVA to install more pollution controls on a faster schedule than required by federal law. The trial in this case was completed on July 30, 2008. The parties submitted their post-trial filings on September 15, 2008, and a decision will follow at a later time.

Case Arising out of Hurricane Katrina. In April 2006, TVA was added as a defendant to a class action lawsuit brought in the United States District Court for the Southern District of Mississippi by 14 residents of Mississippi allegedly injured by Hurricane Katrina. The plaintiffs sued seven large oil companies and an oil company trade association, three large chemical companies and a chemical trade association, and 31 large companies involved in the mining and/or burning of coal, including TVA and other utilities. The plaintiffs allege that the defendants' greenhouse gas emissions contributed to global warming and were a proximate and direct cause of Hurricane Katrina's increased destructive force. The plaintiffs are seeking monetary damages among other relief. TVA has moved to dismiss the complaint on grounds that TVA's operation of its coal-fired plants is not subject to tort liability due to the discretionary function doctrine. The district court dismissed the case on the grounds that the plaintiffs lacked standing. The plaintiffs appealed the dismissal to the United States Court of Appeals for the Fifth Circuit, and oral argument was held before a three judge panel in July 2008. A judge on the panel subsequently recused himself from the case, and the case was reargued during the week of November 3, 2008.

East Kentucky Power Cooperative Transmission Case. In April 2003, Warren Rural Electric Cooperative Corporation ("Warren") notified TVA that it was terminating its power contract with TVA. Warren then entered into an arrangement with East Kentucky Power Cooperative ("East Kentucky") under which Warren would become a member of East Kentucky, and East Kentucky would supply power to Warren after its power contract with TVA expires in 2009. East Kentucky asked to interconnect its transmission system with the TVA transmission system in three places that are currently delivery points through which TVA supplies power to Warren. TVA did not agree and East Kentucky asked FERC to order TVA to provide the interconnections. In January 2006, FERC issued a final order directing TVA to interconnect its transmission facilities with East Kentucky's system at three locations. TVA appealed the FERC order in the United States Court of Appeals for the District of Columbia Circuit ("D.C. Circuit") seeking review of this order on the grounds that this order violated the anti-cherrypicking provision. On January 10, 2007, TVA and Warren executed an agreement under which Warren rescinded its notice of termination. FERC terminated the proceeding but did not vacate its previous order. On January 17, 2008, TVA filed an unopposed motion to dismiss the D.C. Circuit appeal as moot. The D.C. Circuit dismissed the case on January 29, 2008.

Case Involving AREVA Fuel Fabrication. On November 9, 2005, TVA received two invoices totaling \$76 million from Framatome ANP Inc., which subsequently changed its name to AREVA NP Inc. ("AREVA"). AREVA asserted that it was the successor to the contract between TVA and Babcock and Wilcox Company ("B&W") under which B&W would provide fuel fabrication services for TVA's Bellefonte Nuclear Plant. AREVA's invoices were based upon the premise that the contract required TVA to buy more fuel fabrication services from B&W than TVA actually purchased. In September 2006, TVA received a formal claim from AREVA which requested a Contracting Officer's decision pursuant to the Contract Disputes Act of 1978 and reduced the amount sought to \$26 million. On April 13, 2007, the Contracting Officer issued a final decision denying the claim. On April 19, 2007, AREVA filed suit in the

United States District Court for the Eastern District of Tennessee, reasserting the \$26 million claim and alleging that the contract required TVA to purchase certain amounts of fuel and/or to pay a cancellation fee. TVA filed its answer to the complaint on June 15, 2007. AREVA subsequently raised its claim to \$48 million. Trial on the question of liability was scheduled to begin on September 22, 2008, but has been reset for April 20, 2009. A second trial on the question of damages will be held later, if necessary. TVA and AREVA have negotiated the terms of a settlement agreement. This agreement is contingent on approval by the TVA Board. The parties have scheduled a meeting with an independent third-party on December 16, 2008, to review the proposed settlement agreement.

Notification of Potential Liability for Ward Transformer Site. The Ward Transformer site is contaminated by PCBs from electrical equipment. EPA and a working group of potentially responsible parties (the "PRP Work Group") have provided documentation showing that TVA sent a limited amount of equipment containing PCBs to the site in 1974. The PRP Work Group is cleaning up on-site contamination in accordance with an agreement with EPA. The cleanup effort has been divided into four areas: two phases of soil cleanup; cleanup of off-site contamination in the downstream drainage basin; and supplemental groundwater remediation. The first phase of soil cleanup is underway, and the high-end cost estimate for this work is about \$66 million. There are no reliable estimates for the second phase of soil and cleanup or the supplemental groundwater remediation, although EPA has selected a cleanup plan for the downstream drainage basin with a present worth cost estimate of \$6 million. TVA understands that EPA has incurred approximately \$3 million in past response costs, and the PRP Work Group has reimbursed EPA approximately \$725,000 of those costs. The PRP Work Group plans to propose a cost allocation schedule which it will use as the basis for offering settlements to PRPs for the first phase of soil cleanup. It plans to sue PRPs who do not settle. There also may be natural resource damages liability at this site, but TVA is not aware of any estimated amount for any such damages. TVA has a potential defense that it only sent useful equipment to Ward and thus is not liable for arranging for disposal of a hazardous substance at the site.

Case Involving the General Waste Products Sites. In July 2008, a third-party complaint under CERCLA was filed against TVA in the District Court for the Southern District of Indiana, alleging that TVA, and several other defendants, disposed of hazardous materials at the General Waste Products sites in Evansville, Indiana. TVA was named in the complaint based on allegations that TVA arranged for the disposal of contaminated materials at the sites. The other third-party defendants are General Waste Products, General Electric Company, Indianapolis Power and Light, National Tire and Battery, Old Ben Coal Co., Solar Sources Inc., Whirlpool, White County Coal, PSI, Tell City Electric Department, Frontier Kemper, Speed Queen, Allan Trockman (the former operator of the site), and the City of Evansville. This action was brought by the Evansville Greenway PRP Group, a group of entities who are currently being sued in the underlying case for disposing of hazardous materials at the sites, in order to require the third-party defendants to contribute to, or pay for, the remediation of the sites. The complaint also includes a claim under state law against the defendants for the release of hazardous materials. TVA filed its answer to the complaint on October 29, 2008.

Completion of Browns Ferry Unit 1, Team Incentive Fee Pool Claims. Under the contracts for the restart of TVA's Browns Ferry Unit 1, TVA and two engineering and construction contractors, Bechtel Power Corporation ("Bechtel") and Stone & Webster Construction, Inc. ("Stone and Webster"), are to share in a team incentive fee pool funded from cost savings based on underruns in the budgets for their respective work scopes. The contracts provide that the fee pool could not exceed \$100 million regardless of the actual savings involved, and the savings would be allocated as follows: 90 percent of the first \$40 million would be given to the contractors, and any amount over \$40 million would be split equally among TVA and the two contractors. Thus, if the maximum cost savings of \$100 million had been attained, each contractor's payment from this pool would have been \$38 million, for a total payout under both contracts of \$76 million with the remaining \$24 million being credited to TVA. The contractors have taken the position that they should each receive the maximum payment. In 2008, Bechtel agreed to settle its team incentive fee claim for a payment of \$15 million, conditioned upon Bechtel receiving an additional payment equal to any amount over \$15 million that Stone and Webster receives in resolution of its team incentive fee claim. TVA and Stone and Webster mediated the team incentive fee claim (as well as other claims) in May 2008 and discussions with Stone and Webster are continuing. On August 20, 2008, the TVA Board approved a proposed settlement with Stone and Webster, contingent on Stone and Webster agreeing to certain conditions. Stone and Webster has not agreed to the conditions. It is reasonably possible that TVA could incur some potential liability in excess of the amount previously calculated by TVA, and TVA has created a reserve for the additional amount.

Paradise Fossil Plant Clean Air Act Permit. On December 21, 2007, the Sierra Club, the Center for Biological Diversity, Kentucky Heartwood, and Hilary Lambert filed a petition with EPA raising objections to the conditions of

TVA's current CAA permit at the Paradise Fossil Plant ("Paradise"). Among other things, the petitioners allege that activities at Paradise triggered the NSR requirements for NOx and that the monitoring of opacity at Units 1 and 2 of the plant is deficient. The current permit continues to remain in effect. It is unclear whether or how the plant's permit might be modified as a result of this proceeding.

Employment Proceedings. TVA is engaged in various administrative and legal proceedings arising from employment disputes. These matters are governed by federal law and involve issues typical of those encountered in the ordinary course of business of a utility. They may include allegations of discrimination or retaliation (including retaliation for raising nuclear safety or environmental concerns), wrongful termination, and failure to pay overtime under the Fair Labor Standards Act. Adverse outcomes in these proceedings would not normally be material to TVA's results of operations, liquidity, and financial condition, although it is possible that some outcomes could require TVA to change how it handles certain personnel matters or operates its plants.

Information Request from EPA. On April 25, 2008, TVA received a request from EPA under section 114 of the CAA requesting extensive information about projects at and the operations of 14 of TVA's 59 coal-fired units. These 14 units are located in the States of Alabama, Kentucky, and Tennessee. This request for information is similar to but broader than section 114 requests that other companies have received during EPA's NSR enforcement initiative. TVA has responded to this request. EPA's request could be the first step in an administrative proceeding against TVA that could then result in litigation in the courts.

Notice of Violation at Widows Creek Unit 7. On July 16, 2007, TVA received a Notice of Violation ("NOV") from EPA alleging that TVA failed to properly maintain ductwork at Widows Creek Unit 7 and other violations. TVA repaired the ductwork in 2005. While the NOV does not set out an administrative penalty, it is likely that EPA may seek a monetary sanction through giving up emission allowances, paying an administrative penalty, or both. TVA and the State of Alabama entered into an agreed order in which TVA agreed to pay the state \$100,000. TVA is unable to estimate the amount of potential monetary sanctions from EPA for which TVA may be liable in connection with the NOV.

Administrative Proceeding Regarding Bellefonte Nuclear Plant Units 3 and 4. TVA submitted its COLA to NRC for Bellefonte Nuclear Plant ("Bellefonte") Units 3 and 4 in October 2007. If approved, the license to build and operate the plant would be issued to TVA. Obtaining the necessary license would give TVA more certainty about the cost and schedule of a nuclear option for future decisions. The COLA for two AP1000 reactors at Bellefonte was officially docketed by NRC on January 18, 2008, indicating the NRC found it complete and technically sufficient to support NRC's more detailed reviews.

On June 6, 2008, a joint petition for intervention and a request for a hearing submitted to the NRC by the Bellefonte Efficiency and Sustainability Team, the Blue Ridge Environmental Defense League, and the Southern Alliance for Clean Energy. The petition raised 19 potential contentions with respect to TVA's COLA. Both TVA and the NRC staff opposed the admission of the petitioners' proposed contentions, and, as a result, the admission of the petitioners as parties to the proceeding. Additionally, TVA opposed the admission of one of the petitioners to the proceeding on the grounds that it lacked standing. The Atomic Safety and Licensing Board presiding over the proceeding subsequently denied standing to one of the petitioners and accepted four of the 19 contentions submitted by the remaining two petitioners. A hearing on these admitted contentions will be conducted in the future. The admitted contentions involve questions about the estimated costs of the new nuclear plant, the storage of low-level radioactive waste, and the impact of the facility's operations, in particular the plant intake, on aquatic species. Other COLA applicants have received similar petitions raising similar potential contentions.

The TVA Board has not made a decision to construct new plant units at the Bellefonte site, and TVA continues to evaluate all nuclear generation options at the site.

Significant Litigation to Which TVA Is Not a Party. On April 2, 2007, the Supreme Court issued an opinion in the case of United States v. Duke Energy, vacating the ruling of the United States Court of Appeals for the Fourth Circuit ("Fourth Circuit") in favor of Duke Energy and against EPA in EPA's NSR enforcement case against Duke Energy. The NSR regulations apply primarily to the construction of new plants but can apply to existing plants if a maintenance project (1) is "non-routine" and (2) increases emissions. The Supreme Court held that under EPA's Prevention of Significant Deterioration regulations, increases in annual emissions should be used for the test, not hourly emissions as utilities, including TVA, have argued should be the standard. Annual emissions can increase when a project improves the reliability of plant operations and, depending on the time period over which emission changes are calculated, it is possible to argue that almost all reliability projects increase annual emissions. Neither the Supreme Court nor the Fourth Circuit addressed what the "routine" project test should be. The United States District Court for the Middle District of North Carolina had ruled for Duke Energy on this issue, holding that "routine" must take into account what is routine in the industry and not just what is routine at a particular plant or unit as EPA has argued. EPA

did not appeal this ruling. On October 5, 2007, EPA filed a motion with the United States District Court for the Middle District of North Carolina asking that court to vacate its entire prior ruling, including the portion relating to the test for "routine" projects.

TVA is currently involved in an NSR case involving Bull Run, which is discussed in more detail above. The Supreme Court's rejection of the hourly standard for emissions testing could undermine one of TVA's defenses in the Bull Run case, although TVA has other available defenses. Environmental groups and North Carolina have given TVA notice in the past that they may sue TVA for alleged NSR violations at a number of TVA units. The Supreme Court's decision could encourage such suits, which are likely to involve units where emission control systems such as scrubbers and selective catalytic reduction systems are not installed, under construction, or planned to be installed in the relatively near term.

Significant Litigation to Which TVA Is Not a Party, Case Involving North Carolina's Petition to EPA. In 2005, North Carolina petitioned EPA under Section 126 of the CAA to impose additional emission reduction requirements for SO2 and NOx on coal-fired power plants in 13 states, including the states where TVA's coal-fired power plants are located. In March 2006, EPA denied the North Carolina petition primarily on the basis that CAIR remedies the problem. In June 2006, North Carolina filed a petition for review of EPA's decision with the D.C. Circuit. On October 1, 2007, TVA filed a friend of the court brief in support of EPA's decision to deny North Carolina's Section 126 petition. The D.C. Circuit ordered the parties, including TVA, to file new briefs in the case and to address what should happen if the court vacates CAIR.

# ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

Not applicable.

# PART II

# ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Not applicable.

#### ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data for the years 2004 through 2008 should be read in conjunction with the audited financial statements and notes thereto (collectively, the "Financial Statements") presented in Item 8, Financial Statements and Supplementary Data. Certain reclassifications have been made to the 2004, 2005, 2006, and 2007 financial statement presentation to conform to the 2008 presentation.

	Statements of Income Data For the years ended September 30 (in millions)									
	2008		2007		2006		2005		2004	
Operating revenues1, 7	\$10,382		\$9,326		\$8,983		\$7,792	7	\$7,525	7
Revenue capitalized during										
pre-commercial plant operations	_		(57	)	_		_		_	
Operating expenses 6, 8	(8,198	) 2	(7,726	) 2	(7,560	) 2	(6,455	) 2, 7	(5,833	) 3, 7
Operating income	2,184		1,543		1,423		1,337		1,692	
Other income, net 1, 4, 6, 7	9		71		78		57	7	64	7
Unrealized gain (loss) on derivative										
contracts, net	_		41		(15	)	3		(7	)
Net interest expense 4, 8	(1,376	)	(1,232	)	(1,264	)	(1,312	) 8	(1,363	) 8
Cumulative effect of accounting										
changes	_		_		(109	) 5	_		_	
Net income	\$817		\$423		\$113		\$85		\$386	
-	\$817		\$423			,-	\$85		\$386	

Notes

(1)Prior to 2007, TVA reported certain revenue not directly associated with revenue derived from electric operations as Other revenue. This income of \$10 million, \$12 million, and \$8 million for 2006, 2005, and 2004, respectively, has been reclassified from Other revenue to Other income. Additionally, certain items not directly associated with the sale of electricity were previously reported as Sales of electricity. This revenue of \$22 million, \$23 million, and \$22 million for 2006, 2005, and 2004, respectively, has been reclassified from Sales of electricity to Other revenue.

(2) During 2008, 2007, 2006, and 2005, TVA recognized a total of \$9 million, \$21 million, \$14 million, and \$24 million, respectively, in impairment losses related to its Property, plant, and equipment. The 2008 Loss on asset impairment included a \$4 million write-off due to project and technology changes from a wet scrubber to a dry scrubber at John Sevier Fossil Plant, a \$4 million write-off of limestone grinding equipment purchased for the Bull Run Fossil Plant when the decision was made to purchase limestone in the pre-ground state, as well as approximately \$1 million in write-offs of other Construction work in progress assets. The 2007 Loss on asset impairment included a \$17 million write-down of a scrubber project at Colbert and write-downs of \$4 million

related to other Construction in progress assets. The 2006 Loss on asset impairment included write-downs of \$12 million on certain Construction in progress assets related to new pollution-control and other technologies that had not been proven effective and a re-evaluation of other projects due to funding limitations and a \$2 million write-down on one of two buildings in TVA's Knoxville Office Complex based on TVA's plans to sell or lease the East Tower of the Knoxville Office Complex. The 2005 Loss on asset impairment included a \$16 million write-down on certain Construction in progress assets related to new pollution-control and other technologies that had not been proven effective and a re-evaluation of other projects due to funding limitations and an \$8 million write-down on one of two buildings in TVA's Knoxville Office Complex based on TVA's plans to sell or lease the East Tower of the write-down on one of two buildings in TVA's Knoxville Office Complex based on TVA's plans to sell or lease that had not been proven effective and a re-evaluation of other projects due to funding limitations and an \$8 million write-down on one of two buildings in TVA's Knoxville Office Complex based on TVA's plans to sell or lease the East Tower of the Knoxville Office Complex.

- (3)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.
- (4)Prior to 2006, TVA reported short-term investment interest income with interest expense. Interest income of \$19 million and \$6 million for 2005 and 2004, respectively, has been reclassified from Interest expense, net to Other income, net.
- (5) During 2006, TVA adopted FIN No. 47, "Accounting for Conditional Asset Retirement Obligations an interpretation of FASB Statement No. 143," which resulted in a cumulative effect charge to income of \$109 million and an increase in accumulated depreciation of \$20 million. See Note 5.
- (6) TVA has certain service organizations which provide maintenance and testing services to customers both inside and outside of TVA. For 2006 and 2005, the excess of cost recovery over actual cost and services provided to TVA organizations of \$12 million and \$12 million, respectively, has been reclassified from Other income to Operating expense.
- (7) Certain items previously reported as revenue under Other revenue were reclassified as Other income. These items were not directly associated with revenue derived from electric operations but are associated with the operation of service organizations which provide environmental and maintenance and testing services. Previously reported revenue from these items of approximately \$5 million and \$13 million for 2005 and 2004, respectively, are now included in Other income. Additionally, certain Other revenue related to income derived from electric operations was recorded net of related expenses. Expenses of \$15 million and \$13 million for 2005 and 2004, respectively, have been reclassified from Other revenue to operating expenses.
- (8) Subsequent to 2005, certain financing charges related to leaseback obligations were recorded as Operating and maintenance expense. Beginning with 2006, these financing charges are classified as interest expense. Previously reported financing charges of approximately \$51 million and \$53 million for 2005 and 2004, respectively, are now included in Interest on debt and leaseback obligations.

	Balance Sheets Data At September 30 (in millions)				
	2008	2007	2006	2005	2004
Assets					
Current assets 1	\$2,503	\$2,436	\$2,513	\$2,176	\$2,295
Property, plant, and equipment, net	25,779	24,832	24,421	23,888	23,699
Investment funds	956	1,169	972	858	744
Regulatory and other long-term assets	7,899	5,295	6,402	7,551	7,451
Total assets	\$37,137	\$33,732	\$34,308	\$34,473	\$34,189
Liabilities and proprietary capital					
Current liabilities 1	\$4,252	\$3,429	\$5,229	\$6,724	\$5,420
Regulatory and other liabilities	8,918	6,400	7,052	7,606	7,168
Long-term debt, net	20,404	21,099	19,544	17,751	19,337
Total liabilities	33,574	30,928	31,825	32,081	31,925
					· ·
Retained earnings	2,571	1,763	1,349	1,244	1,162
Other proprietary capital	992	1,041	1,134	1,148	1,102
Total proprietary capital	3,563	2,804	2,483	2,392	2,264
Total liabilities and proprietary capital	\$37,137	\$33,732	\$34,308	\$34,473	\$34,189

Notes

(1)In 2006, TVA began to apply certain customer advances previously reported as Current liabilities as a reduction to Accounts receivable. The advances were \$93 million in 2005 and \$91 million in 2004. A reduction occurred to both Current assets and Current liabilities for the same amount.

	As of Sep	Obligations tember 30 llions)					
	2008	2007	2006	2005	2004		
Net long-term debt, excluding current	Net long-term debt, excluding current						
maturities	\$20,404	\$21,099	\$19,544	\$17,751	\$19,337		
Other long-term obligations							
Capital leases *	92	104	128	150	138		
Leaseback obligations	1,353	1,072	1,108	1,143	1,178		
Energy prepayment obligations	1,033	1,138	1,244	1,350	1,455		
Total other long-term obligations	2,478	2,314	2,480	2,643	2,771		
Total long-term obligations	22,882	23,413	22,024	20,394	22,108		
Discount notes	185	1,422	2,376	2,469	1,924		
Current maturities of long-term debt, net	2,030	90	985	2,693	2,000		
Total short-term obligations	2,215	1,512	3,361	5,162	3,924		
č							

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Total financial obligations	\$25,097 \$24,925		\$25,385	\$25,556	\$26,032	
Note						
* Included in Accrued lia	abilities and Ot	her liabilities o	on the Balance	Sheets.		
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# ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (Dollars in millions except where noted)

**Business Overview** 

Distinguishing Features of TVA's Business

TVA operates the nation's largest public power system. In 2008, TVA provided electricity to 52 large industrial customers, six federal customers, and 159 distributor customers that serve nearly nine million people in seven southeastern states. TVA generates almost all of its revenues from the sale of electricity, and in 2008 revenues from the sale of electricity totaled \$10.3 billion. As a wholly-owned agency and instrumentality of the United States, however, TVA is different from other electric utilities in a number of ways. A few of the more distinguishing features are discussed below.

Defined Service Area. TVA has a defined service area established by federal law. Subject to certain minor exceptions, TVA may not, without an act of Congress, enter into contracts which would have the effect of making it or the distributor customers of its power a source of power supply outside the area for which TVA or its distributor customers were the primary source of power supply on July 1, 1957. This statutory provision is referred to as the "fence" because it bounds TVA's sales activities, essentially limiting TVA to power sales within a defined service area. Correspondingly, however, the possibility of sales by others into TVA's service area is significantly limited. The Federal Power Act, primarily through its anti-cherrypicking provision, prevents FERC from ordering TVA to provide access to its transmission lines to others for the purpose of delivering power to customers within its service area except for customers in Bristol, Virginia.

Rate Authority. Typically, a utility is regulated by a public utility commission, which approves the rates the utility may charge. TVA, however, is self-regulated with respect to rates. The TVA Act gives the TVA Board sole responsibility for establishing the rates TVA charges for power. These rates are not subject to judicial review or review or approval by any state or federal regulatory body. In setting TVA's rates, however, the TVA Board is charged by the TVA Act to have due regard for the objective that power be sold at rates as low as are feasible.

Funding. TVA's operations were originally funded primarily with appropriations from Congress. In 1959, however, Congress passed legislation that required TVA's power program to be self-financing from power revenues and proceeds from power program financings. Until 1999, TVA continued to receive some appropriations for certain multipurpose activities and for its stewardship activities. Since 1999, however, TVA has not received any appropriations from Congress for any activities and has funded essential stewardship activities primarily with power revenues in accordance with a statutory directive from Congress.

TVA, unlike investor-owned power companies, is not authorized to raise capital by issuing equity securities. TVA relies primarily on cash from operations and proceeds from power program borrowings to fund its operations. The TVA Act authorizes TVA to issue bonds, notes, and other evidences of indebtedness (collectively, "Bonds") in an amount not to exceed \$30 billion at any time. From time to time, draft legislation is introduced in Congress that would expand the types of financial obligations that count towards TVA's \$30 billion debt ceiling. Under this draft legislation, long-term obligations that finance capital assets would also count toward the debt ceiling, including leaseback arrangements and power prepayment agreements with original terms exceeding one year. If Congress decides to broaden the type of financial instruments that are covered by the debt ceiling or to lower the debt ceiling, TVA might not be able to raise enough capital to, among other things, service its then-existing financial obligations, properly operate and maintain its power assets, and provide for reinvestment in its power program. At September 30, 2008, TVA had approximately \$22.7 billion of Bonds outstanding (not including noncash items of foreign currency

valuation loss of \$138 million and net discount on sale of bonds of \$199 million). For additional information regarding TVA's sources of funding, see Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Sources of Liquidity.

Stewardship Activities. TVA's mission includes managing the United States' fifth largest river system — the Tennessee River, its tributaries, and public lands along the shoreline — to provide, among other things, year-round navigation, flood damage reduction, affordable and reliable electricity, and, consistent with these primary purposes, recreational opportunities, adequate water supply, improved water quality, and economic development. There are 49 dams that comprise TVA's integrated reservoir system. The reservoir system provides 800 miles of commercially navigable waterway and also provides significant flood reduction benefits both within the Tennessee River system and downstream on the lower Ohio and Mississippi Rivers. The reservoir system also provides a water supply for residential and industrial customers, as well as cooling water for some of TVA's coal-fired and nuclear power plants. TVA's Environmental Policy (approved in May 2008) provides objectives for an integrated approach to TVA's multi-faceted mission by providing cleaner, reliable, and still affordable energy, supporting sustainable economic growth, and engaging in proactive environmental stewardship. The Environmental Policy provides additional direction in several environmental stewardship areas, including water resource protection and improvements, sustainable land use, and natural resource management. TVA also manages 293,000 acres of reservoir lands for natural resource protection, and other purposes.

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Economic Development Activities. Since its beginnings in 1933, part of TVA's mission has been to promote the development of the Tennessee Valley. TVA works with its distributor customers, regional, state and local agencies, and communities to showcase the advantages available to businesses locating or expanding in TVA's seven-state service area. These efforts have resulted in new investments and quality jobs that benefit Tennessee Valley residents.

At its October 30, 2008 meeting, the TVA Board approved a new economic development initiative, the Valley Investment Initiative. Under the Valley Investment Initiative, TVA and distributors of TVA power will provide an incentive award to existing companies in TVA's seven-state service area that demonstrate a multi-year commitment to sustained capital investment, the creation of quality jobs, compatible and efficient power use, and a commitment to remain in the TVA region.

To monitor its progress in accomplishing its economic development mission, the TVA Board uses an economic development index performance measure. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — 2008 Performance Indicators. This measure tracks the number of jobs added and/or retained in the Tennessee Valley, the amount of capital investment in the Valley, and the impact of the retained and added jobs on the economic vitality of the Valley. These three metrics represent the influence TVA has on sustainable economic growth in the Valley.

#### **Executive Summary**

#### Challenges During 2008

TVA faced several challenges during 2008 that impacted its cash flows, results of operations, and financial condition. The most significant of these challenges related to investment performance, weather conditions, higher commodity prices, asset performance, and water supply and temperature.

Investment Performance. The performance of debt, equity, and other markets in 2008 negatively impacted the asset values of investments held in TVA's pension and decommissioning trust funds. During 2008, the investments in the TVA Retirement System declined in value \$1,429 million, or 19 percent. As of September 30, 2008, the TVA retirement system was approximately 80 percent funded. From October 1, 2008, to November 30, 2008, the investments in the TVA Retirement System declined in value an additional \$1,138 million, or 18 percent. Because of these declines, TVA may be required to make additional contributions to the TVA Retirement System in the future.

During 2008, the nuclear decommissioning trust portfolio declined in value \$241 million, or 22 percent. As of September 30, 2008, TVA's nuclear decommissioning trust funding was 98 percent of the estimated present value of the funding requirements established by the Nuclear Regulatory Commission ("NRC"). From October 1, 2008, to November 30, 2008, the nuclear decommissioning trust portfolio declined in value an estimated additional \$206 million, or 24 percent.

TVA will submit its biennial funding status report to NRC in March 2009. Based on the status of the funding requirement at that time, TVA anticipates it may make contributions to the decommissioning trust fund or provide other methods of decommissioning funding assurance necessary to match projected decommissioning fund balances. TVA is monitoring the monetary value of its nuclear decommissioning trust fund in light of recent market performance and believes that, over the long term before cessation of nuclear plant operations and commencement of decommissioning activities, adequate funds from investments will be available to support decommissioning.

During 2008, TVA's asset retirement trust portfolio, which is invested entirely in fixed income funds, increased in value \$1.4 million, or 3.5 percent. From October 1, 2008, to November 30, 2008, the asset retirement trust portfolio

increased in value an additional \$155 thousand, or 0.19 percent.

TVA's investment policies are based on the objective of meeting long-term obligations, and the allocation of investments is based on the assumption of encountering distressed market conditions from time to time. TVA does not anticipate making significant changes in its basic investment policies as a result of current market conditions. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Management Activities — Investment Price Risk.

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Weather Conditions. 2008 was the ninth driest year in the eastern Tennessee Valley in 119 years of record-keeping. Rainfall in the eastern Tennessee Valley was 76 percent of normal for the year, and runoff was 47 percent of normal. Largely as a result of this low rainfall and runoff, TVA's hydroelectric production for 2008 was slightly less than 6.7 billion kilowatt-hours, which was 26 percent, 33 percent, and 57 percent lower than in 2007, 2006, and 2005, respectively. Because of the lower hydroelectric production, TVA had to rely more heavily on purchased power and more expensive generation sources such as combustion turbines during 2008.

Higher Commodity Prices. Due to rising commodity prices across domestic and international markets, TVA experienced increased costs in short-term markets for natural gas, fuel oil, coal, and electricity during 2008. The market prices for these commodities at September 30, 2008, increased 31 percent, 65 percent, 62 percent, and 22 percent, respectively, as compared to the market prices at September 30, 2007. Market prices for these commodities at September 30, 2008, increased 31, 2007. Market prices for these commodities at September 30, 2007. Market prices for these commodities at September 30, 2008, and 2007, are shown in the table below.

# Commodity Pricing Table As of September 30, 2008

2008	2007		
\$9.01	\$6.87	31	%
21.38	12.97	65	%
48.13	29.65	62	%
70.95	58.03	22	%
	\$9.01 21.38 48.13	\$9.01         \$6.87           21.38         12.97           48.13         29.65	\$9.01         \$6.87         31           21.38         12.97         65           48.13         29.65         62

Since September 30, 2008, the market prices for some of these commodities have fallen.

Although the FCA provides a mechanism to regularly alter rates to reflect changing fuel and purchased power costs, there is a lag between the occurrence of a change in fuel and purchased power costs and the reflection of the change in rates. As a result, TVA's cash flows can be negatively affected by the FCA. As of September 30, 2008, TVA had \$28 million in deferred fuel and purchased power costs that are expected to be recovered through the FCA in future periods. See Item 1, Business — Rate Actions.

Performance of Assets. Although TVA's generation and transmission assets performed well overall in meeting the peak demands during the summer of 2008, TVA faced hard spots in its operations related to large generating unit outages.

Browns Ferry Unit 1 experienced five unplanned reactor shutdowns in the first five months after restart in June 2007.

A planned outage at Sequoyah Nuclear Plant Unit 1 was extended 16 days due to the identification and repair of damage in the main generator during the scheduled outage.

Browns Ferry Nuclear Plant Unit 3 experienced an unplanned automatic shutdown due to a main generator trip. As it was recovering from this generator trip, a secondary problem was discovered which required repairs and extended the duration of this outage 21 days.

•The duration of a planned outage scheduled at Watts Bar Nuclear Plant Unit 1 was extended nine days due to emergent issues and complications associated with completion of identified outage work.

Fossil generation was 2.2 percent less than planned during 2008 primarily due to a 35-day extension of a planned outage on Colbert Fossil Plant Unit 5 and increased forced outage rates at Bull Run Fossil Plant and Widows Creek Fossil Plant Unit 7.

See Item 7, Management's Discussion and Analysis and Results of Operations — Results of Operations — Operating Expenses.

Challenges Related to Water Supply and Water Temperature. TVA faces challenges related to water supply and water temperature on the Cumberland River system and on the Tennessee River system. On the Cumberland River system, the U.S. Army Corps of Engineers ("Corps") operates hydroelectric facilities and TVA operates fossil plants. TVA also operates hydroelectric facilities, fossil plants, and nuclear plants on the Tennessee River system.

Cumberland River Challenges. The Corps operates eight hydroelectric facilities on the Cumberland River which fall under the SEPA agreement with TVA. Of these facilities, Wolf Creek and Center Hill Dams are in need of emergency repairs. The need to repair the dams coupled with the drought has resulted in less water flow and above normal water temperatures. TVA has been impacted in two ways.

First, SEPA's emergency operating plan reduced the amount of power TVA received from SEPA due to the drought and the need to repair the Wolf Creek and Center Hill Dams. It is likely that an easing of the drought will not eliminate the need for the emergency operating plans in the future because it is unclear how long it will take the Corps to repair these facilities.

Second, during the summer of 2008, reduced flow through the Cumberland River system, combined with higher than normal upstream river temperatures, forced TVA to reduce ("derate") the power output of its Cumberland and Gallatin Fossil Plants to remain in compliance with discharge temperature limits contained in the plants' discharge permits. To mitigate the derates, TVA installed and commenced operation of temporary cooling towers at its Cumberland Fossil Plant in July 2008. Operation of the cooling towers reduced Cumberland Fossil Plant's output by slightly less than one percent; however, no derates were experienced at the plant after the cooling towers began operating. Output from Gallatin Fossil Plant on the Cumberland River was reduced by approximately three percent, primarily during off-peak hours, to avoid exceeding thermal limits. Summer derates continue to remain a possibility in the future, especially until the Wolf Creek and Center Hill Dams are repaired and normal water flow is restored on the Cumberland River.

Tennessee River System Challenges. Due to the drought, there has been significantly less rainfall and runoff in the Tennessee River system. The result was that less water was available for cooling purposes, and the water that was available was higher in temperature. During the summer of 2008, temperatures on the Tennessee River reached levels that required nearly constant use of cooling towers at Sequoyah and Browns Ferry Nuclear Plants to keep the permitted thermal limits for the river from being exceeded. Using the cooling towers required a substantial amount of power that TVA would have otherwise sold. After Browns Ferry lost the use of cooling towers due to equipment malfunction in early August 2008, TVA temporarily reduced power output on all three units to 50 percent of capacity to avoid exceeding permitted thermal limits. While every effort was made to take derates during low load periods to reduce financial and operational impacts, some derates were required during higher load daytime hours to meet the permitted temperature limits.

#### 2008 Performance Indicators

TVA quantifies the results of its operations in accordance with its Strategic Plan, which outlines the policy-level direction for TVA and lists corporate-level metrics to be used in monitoring progress toward successful implementation of the plan. The Strategic Plan focuses on TVA's performance in the following five broad areas and establishes general guidelines for each area:

Customers:	Maintain power reliability, provide competitive rates, and build trust with TVA's customers;		
People:	Build pride in TVA's performance and reputation;		
Financial:	Adhere to a set of sound financial guiding principles to improve TVA's fiscal performance;		
Assets:	Use TVA's assets to meet market demand and deliver public value; and		
Operations:	Improve performance to be recognized as an industry leader.		

The Strategic Plan also outlines the policy-level direction for TVA and lists corporate-level metrics to be used in monitoring progress toward successful implementation of the plan. These metrics encompass aspects of TVA's mission in energy, the environment, and economic development and may change from time to time.

#### 2008 Performance Indicators

	Performance Measure	Description
Customer	TVA's Delivered Cost of Power	
	Excluding FCA Costs	Measures cost per MWh sold (excluding FCA costs). Addresses the highest customer priority of "low cost and reliable power" and emphasizes controlling costs and increasing output.
	FCA Costs	Measures TVA's FCA expenses per MWh sold. Includes eligible expenses recovered through FCA mechanism (fuel, purchased power, emission allowance, and reagents). Encourages TVA to take actions to lower the overall cost of fuel, purchased power, and other eligible FCA costs.
	Economic Development Index	Measures the effectiveness of TVA's sustainable economic development efforts by focusing on jobs growth in the Tennessee Valley, the quality of those jobs, and partnership investments in the TVA service area.
	Participation in Energy Efficiency & Peak Shaving Initiatives	Measures the percent of TVA customers that are participating in demand-side management programs (new and existing) such as energyright© New Homes or Heat Pumps.
	Customer Satisfaction Survey	Measures distributors' and directly served customers' satisfaction with TVA in a variety of areas including wholesale/retail supplier, performance of local TVA customer service staff, and power quality and reliability of transmission service, pricing, contracts, and power supply mix.
	Connection Point Interruptions	Measures reliability from the customer perspective by focusing on interruptions of power, including momentary, caused by the transmission system at connection points.
People	Cultural Health Index	Survey of TVA employees includes questions relating to the workforce environment, safety, Winning Behaviors, and Winning Performance. CHI assesses employee alignment, capability, and engagement as an overall gauge of cultural health.
	Safe Workplace	Measures TVA employee and staff augmentation safety related to the number of Occupational Safety and Health Administration recordable injuries per 200,000 hours worked. Includes fatality, day time restricted duty/job transfer, medical treatment, loss of consciousness, and other

		significant work-related injury/illness.
Financial	Debt-like Obligations/Asset Value	Measures TVA's debt-like obligations as a percent of total assets. Includes debt, lease obligations, and prepaid energy obligations. Focuses on achieving a more flexible cost structure.
	Earnings/Asset Value	Measures income statement earnings before interest, depreciation, amortization, and taxes divided by total assets. Emphasizes effective cost management and productivity by focusing on TVA's return on assets.
	Non-fuel O&M	Measures all non-fuel operations and maintenance costs per MWh sales. Emphasizes competitiveness by focusing on the most controllable component of TVA's total costs.
Asset/Operations	Key Environmental Metrics	Measures impact of TVA's operations on the environment by focusing on key environmental footprint metrics. Includes weighted summation of: NOx + SO2 + CO2 + Clean Water Act Nonconformances + Oil Spills to Water + Reportable Quantity Releases + Notices of Violation + Office Recyclables.
	Megawatt Demand Reduction	
	(MW Reduced)	Measures level of demand reduction for electricity (MW) through the efficient use of electricity. Promotes conservation through the construction of site-built homes that exceed minimum efficiency standards.
	Equivalent Availability Factor	Measures the actual available generation from all TVA generating assets in a given period compared to maximum potential availability. Focuses on the generation component of the highest customer priority, "low cost and reliable power."
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# Future Challenges

TVA faces several challenges that may impact its cash flows, results of operations, and financial condition in the future. The most significant of these challenges are discussed below.

Meeting the Power Needs in TVA's Service Area. Demand for power in TVA's service area had grown at an average of two percent per year from 2001 to 2007. During 2008, demand increased only about 0.2 percent, however, for 2009, TVA has forecasted relatively flat load and sales growth as compared to 2008. This forecast is due in part to expected tighter economic conditions. Although there are many drivers that can contribute to lower sales growth and lower load, such as energy efficiency and more efficient industrial and mechanical equipment, loads are dependent on the economic conditions in TVA's service area. As economic conditions have deteriorated, TVA has experienced roughly a two percent reduction in expected sales in early 2009 and anticipates that the energy sales for the remainder of 2009 will be lower than expected in the 2009 budget. TVA is not anticipating conditions to improve significantly in the near future but continues to monitor and react to these trends.

Despite the recent reduction in power sales, TVA still projects that demand for power in its service area will increase over the long-term and plans to meet the need for additional power through a variety of means:

New Generation. TVA intends to add new generation assets. This intention was reflected in TVA's decision to complete the construction of Watts Bar Unit 2. The completion of Watts Bar Unit 2 is scheduled to occur in 2013 and cost approximately \$2.5 billion. TVA plans to consider other opportunities to add new generation from time to time. Market conditions, like the volatility of the price of construction materials and the potential shortage of skilled craft labor, may add uncertainties to the cost and schedule of new construction.

Distributor-Owned Generation. Under interim agreements dated September 30, 2008, TVA and Seven States Power Corporation ("SSPC"), a non-profit organization comprised of the majority of TVA distributor customers (who are also members of the Tennessee Valley Public Power Association), took the first steps in joint power plant ownership in the Tennessee Valley. (See Item 1 Business — Power Supply — Generation Facilities, Note 4 — New Generation, and Note 13 — Leaseback Obligations, )

Power Purchases. Purchasing power from others will likely remain a part of how TVA meets the power needs of its service area. The Strategic Plan establishes a goal of balancing production capabilities with power supply requirements by promoting the conservation and efficient use of electricity and, when necessary, buying, building, and/or leasing assets or entering into purchased power agreements. Achieving this goal will allow TVA to reduce its reliance on purchased power.

Non-Fuel Operating and Maintenance Costs. TVA has established two significant goals relating to non-fuel operating and maintenance costs.

Achieving non-fuel operating and maintenance spending performance that ranks in the top quartile in the electric utility industry by managing these costs over the next three years; and after that time.

Maintaining spending performance within the top quartile by keeping the rate of increase in these costs in line with the top quartile in the industry.

Meeting these goals will significantly affect TVA's ability to add new generation assets.

Future Contributions to TVA Investment Funds. TVA's nuclear decommissioning trust and pension funds have been adversely affected by the recent turmoil in the financial markets. If market conditions do not recover quickly enough

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or continue to deteriorate, TVA may be required to make contributions to these investment funds in excess of the amounts TVA is currently planning to contribute for the foreseeable future.

Performance of Generation Assets. Although TVA's generation and transmission assets performed extremely well overall in meeting the peak demands during the summer of 2008, TVA was adversely affected by the failure of some assets to operate as planned during times of high demand. As a result, TVA had to operate higher cost units or purchase power in the higher cost energy spot market. See Item 1, Business — Power Supply. TVA is likely to face similar problems in the future since many of TVA's generation assets have been operating since the 1950s or earlier and have been in nearly constant service since they were completed. In addition, if drought conditions continue, TVA will have limited availability to operate its hydroelectric generating assets, which are its least expensive units to operate.

Bonds and Other Financial Obligations. As of September 30, 2008, TVA had \$22.7 billion of Bonds outstanding (not including noncash items of foreign currency valuation loss of \$138 million and net discount on sale of bonds of \$199 million). The amount of TVA's Bonds outstanding has been reduced by about \$5 billion since September 30, 1996, when the end of year balance of outstanding Bonds peaked. Since that time, however, TVA has entered into energy prepayment transactions that resulted in \$1.6 billion in prepayment obligations and certain leaseback transactions that resulted in \$1.3 billion. The amount of prepayment and leaseback obligations outstanding at September 30, 2008, was \$2.4 billion. Payments on these Bonds and obligations do not change with the amount of power sold, and if competition increases, TVA's obligations to make these payments could limit its ability to adjust to market pressures. While prudent management of Bonds and other financial obligations will remain an important strategic consideration in the future, increased capital commitments may make it difficult for TVA to continue its trend of reducing these obligations.

Environmental Regulation. TVA expects to see increased environmental regulation in the future, including but not limited to the regulation of mercury and the emission of greenhouse gases such as CO2. TVA has considered, and intends to continue considering, fuel mix in making decisions about additional generation. The restart of Browns Ferry Unit 1, the decision to complete the construction of Watts Bar Unit 2, and TVA's filing of a combined operating license application for two new units at the Bellefonte Nuclear Plant ("Bellefonte"), as well as TVA's request to reactivate the construction permit for the existing Bellefonte units (although no decision to construct any units at Bellefonte has been made), are examples of TVA's decisions to pursue or consider generation sources that do not emit greenhouse gases. The nature or level of future regulation of greenhouse gases is unclear at this time. Accordingly, the costs associated with such regulation are currently unknown but could be substantial. TVA would have to recover such costs in rates or pursue some other action which, among other options, might include removing some coal-fired units from service.

Renewable Portfolio. Under most proposed legislation, renewable power generation resources include solar, wind, incremental hydroelectric, biomass, and landfill gas. Generating power with renewable sources instead of coal-fired plants could help reduce the carbon intensity of TVA's generation. Power generated using renewable sources, with current technologies, may not be economically competitive compared to existing power generation assets. Technology advancements will be needed to address some of the operational issues associated with renewable energy, such as energy storage to address intermittency and interconnection technologies to address onsite, non-grid connected renewables and efficiencies.

Most renewable energy resources are geographically specific. Some regions of the United States have an abundance of wind and solar resources, whereas other regions have hydroelectric resources. Regional differences and limitations play a primary role in the types and amount of renewable and clean energy developed across the country. Within the area served by TVA (southeast United States), two of the most abundant renewable resources are hydroelectric and biomass. Feasible wind energy in this region is primarily associated with mountain top and ridgeline installations, and the total potential capacity is limited when compared to other parts of the nation where wind energy is more abundant. If TVA is required to increase its use of renewable resources and the cost of doing so is greater than the costs of other sources of generation, TVA's costs may increase, and, as a result, TVA may be forced to raise rates.

Liquidity and Capital Resources

## Sources of Liquidity

TVA's current liabilities exceed current assets because of continued use of short-term debt to fund cash needs as well as scheduled maturities of long-term debt. To meet short-term cash needs and contingencies, TVA depends on various sources of liquidity. TVA's primary sources of liquidity are cash on hand and cash from operations and proceeds from the issuance of short-term and long-term debt.

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Financial markets experienced extreme volatility in 2008, and have continued to experience extreme volatility into 2009 amid negative developments in housing and mortgage-related activities, weakness of major financial institutions, government actions, and negative economic developments. These conditions have resulted in disruptions in credit and lending activities, particularly in the short-term credit markets through which corporate institutions borrow and lend to each other. Disruptions in the short-term credit markets have the potential to impact TVA because TVA uses short-term debt to meet working capital needs, and because it typically invests its cash holdings in the short-term debt securities of other institutions.

TVA has not experienced difficulty in issuing short-term debt, or in refunding maturing debt, despite the disruptions in the credit markets. Throughout the period, TVA has experienced strong demand for its short-term discount notes, and has been able to issue discount notes at competitive rates.

Other than issuing electronotes<sup>®</sup>, which are retail notes and are generally smaller in size than TVA's other long-term debt, TVA has not sought to issue long-term debt since June 2008. Despite conditions in the credit markets, however, TVA believes it would be able to issue long-term debt if needed.

Management expects continued demand for TVA short-term debt securities. Along with the short-term debt program, management expects operating cash flows, cash on hand, and access to credit facilities to continue to provide more than adequate liquidity for TVA for the foreseeable future.

Management is not able to anticipate the long-term impacts of recent financial market turmoil on TVA, the financial markets in which TVA participates, or the economy of the Tennessee Valley. Management closely monitors conditions in the markets in which TVA conducts business and the financial health of companies with which it does business, and will continue to monitor these conditions in the future in an effort to be proactive in maintaining financial health.

The majority of TVA's balance of cash on hand is typically invested in short-term investments. During 2008, TVA's average daily balance of cash and cash equivalents on hand was \$357 million. The daily balance of cash and cash equivalents maintained is based on near-term expectations for cash expenditures and funding needs. Under the current market conditions, TVA has placed more of its short-term investments in U.S. Treasury securities and less in commercial paper money market funds.

In addition to cash on hand, cash from operations, and proceeds from the issuance of short-term and long-term debt, TVA's sources of liquidity include a \$150 million credit facility with the U.S. Treasury, two credit facilities totaling \$2.25 billion with a national bank, and occasional proceeds from other financing arrangements including call monetization transactions, sales of assets, and sales of receivables and loans. Each of these sources of liquidity is discussed below.

Summary Cash Flows. A major source of TVA's liquidity is operating cash flows resulting from the generation and sales of electricity. A summary of cash flow components for the years ended September 30 follows:

Summary Cash Flows

For the years ended September 30							
	2008	2007	2006				
Cash provided by (used in):							
Operating activities	\$1,957	\$1,788	\$1,985				
Investing activities	(2,299	) (1,686	) (1,698	)			
Financing activities	390	(473	) (289	)			
Net (decrease) increase in cash and cash equivalents	\$48	\$(371	) \$(2	)			

Issuance of Debt. The TVA Act authorizes TVA to issue Bonds in an amount not to exceed \$30 billion outstanding at any time. At September 30, 2008, TVA had only two types of Bonds outstanding: power bonds and discount notes. Power bonds have maturities of between one and 50 years, and discount notes have maturities of less than one year. Power bonds and discount notes rank on parity and have first priority of payment out of net power proceeds are defined as the remainder of TVA's gross power revenues after deducting the costs of operating, maintaining, and administering its power properties 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 from the sale or other disposition of any power facility or interest therein. See Note 11 — General.

Power bonds and discount notes are both issued pursuant to section 15d of the TVA Act and pursuant to the Basic Tennessee Valley Authority Power Bond Resolution adopted by the TVA Board on October 6, 1960, as amended on September 28, 1976, October 17, 1989, and March 25, 1992 (the "Basic Resolution"). The TVA Act and the Basic Resolution each contain two bond tests: the rate test and the bondholder protection test.

Under the rate test, TVA must 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;

Payments to the U.S. Treasury as a repayment of and a return on the Power Facilities Appropriation Investment; and Such additional margin as the TVA Board may consider desirable for investment in power system assets, retirement of outstanding Bonds in advance of maturity, additional reduction of the Power Facilities Appropriation Investment, and other purposes connected with TVA's power business, having due regard for the primary objectives of the TVA Act, including the objective that power shall be sold at rates as low as are feasible.

Under the bondholder protection test, TVA must, in successive five-year periods, use an amount of net power proceeds at least equal to the sum of:

The depreciation accruals and other charges representing the amortization of capital expenditures, and
 The net proceeds from any disposition of power facilities,

for either

•The reduction of its capital obligations (including Bonds and the Power Facilities Appropriation Investment), or • Investment in power assets.

TVA must next meet the bondholder protection test for the five-year period ending September 30, 2010.

As discussed above, TVA uses proceeds from the issuance of discount notes, in addition to other sources of liquidity, to fund working capital requirements. During 2008, 2007, and 2006, the average outstanding balance of discount notes was \$767 million, \$2.3 billion, and \$2.0 billion, respectively, and the weighted average interest rate on discount notes was 3.71 percent, 5.17 percent, and 4.47 percent, respectively. At September 30, 2008, \$185 million of discount notes were outstanding with a weighted average interest rate of 1.26 percent. The discount notes are not listed on any stock exchange.

TVA issues power bonds primarily to refinance previously-issued power bonds as they mature. During 2008 and 2007, TVA issued \$2.1 billion and \$1.0 billion of power bonds, respectively, and redeemed \$689 million and \$470 million of power bonds, respectively. At September 30, 2008, outstanding power bonds (including current maturities of long-term debt) consisted of the following:

OLIGID

# Outstanding Power Bonds As of September 30, 2008

CUSIP or Other			Principal	
Identifier	Maturity	Coupon Rate	Amount 1	Stock Exchange Listings
Identifier	03/15/2009 -	3.200% -	Amount I	Stock Exchange Listings
electronotes®	01/15/2028	5.625 %2	\$ 910	None
ciccitolioics®	01/15/2020	5.025 /02	φ 910	New York, Hong Kong,
880591DB5	11/13/2008	5.375 %	2,000	Luxembourg, Singapore
880591DN9	01/18/2011	5.625 %	1,000	New York, Luxembourg
880591DL3	05/23/2012	7.140 %	29	New York
880591DT6	05/23/2012	6.790 %	1,486	New York
000571010	0312312012	0.790 //	1,+00	New York, Hong Kong,
880591CW0	03/15/2013	6.000 %	1,359	Luxembourg, Singapore
880591DW9	08/01/2013	4.750 %	940	New York, Luxembourg
880591DY5	06/15/2015	4.375 %	1,000	New York, Luxembourg
880591DS8	12/15/2016	4.875 %	524	New York
880591EA6	07/18/2017	5.500 %	1,000	New York, Luxembourg
880591CU4	12/15/2017	6.250 %	650	New York
880591EC2	04/01/2018	4.500 %	1,000	New York, Luxembourg
880591DC3	06/07/2021	5.805 %3		New York, Luxembourg
				New York, Hong Kong,
880591CJ9	11/01/2025	6.750 %	1,350	Luxembourg, Singapore
880591300	06/01/2028	5.460 %	350	New York
880591409	05/01/2029	5.174 %	298	New York
880591DM1	05/01/2030	7.125 %	1,000	New York, Luxembourg
880591DP4	06/07/2032	6.587 %3	445	New York, Luxembourg
880591DV1	07/15/2033	4.700 %	472	New York, Luxembourg
880591DX7	06/15/2035	4.650 %	436	New York
880591CK6	04/01/2036	5.980 %	121	New York
880591CS9	04/01/2036	5.880 %	1,500	New York
880591CP5	01/15/2038	6.150 %	1,000	New York
880591ED0	06/15/2038	5.500 %	500	New York
880591BL5	04/15/2042	8.250 %	1,000	New York
880591DU3	06/07/2043	4.962 %3	267	New York, Luxembourg
880591CF7	07/15/2045	6.235 %	140	New York
880591EB4	01/15/2048	4.875 %	500	New York, Luxembourg
880591DZ2	04/01/2056	5.375 %	1,000	New York
Subtotal			22,633	
	ints, premiums, and other		(199)	
Total outstanding po	ower bonds, net		\$ 22,434	

#### Notes

(1) The above table includes net exchange losses from currency transactions of \$138 million at September 30, 2008.
(2) The weighted average interest rate of TVA's outstanding electronotes® was 4.83 percent at September 30, 2008.
(3) The coupon rate represents TVA's effective interest rate.

As of September 30, 2008, all of TVA's Bonds were rated by at least one rating agency except for two issues of power bonds and TVA's discount notes. TVA's rated Bonds are currently rated "Aaa" by Moody's Investors Service and/or "AAA" by Standard & Poor's and/or Fitch Ratings, which are the highest ratings assigned by these agencies. The ratings are not recommendations to buy, sell, or hold any TVA securities and may be subject to revision or withdrawal at any time by the rating agencies. Ratings are assigned independently, and each should be evaluated as such.

For additional information about TVA debt issuance activity and debt instruments issued and outstanding as of September 30, 2008 and 2007, including identifiers, rates, maturities, outstanding principal amounts, and redemption features, see Note 11.

\$150 Million Note with U.S.Treasury. TVA has access to financing arrangements with the U.S. Treasury, whereby the U.S. Treasury is authorized to accept an interim obligation with maturity of one year or less in an aggregate amount outstanding not to exceed \$150 million. Interest accrues daily at a rate determined by the U.S. 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 2008, 2007, and 2006, the daily average amounts outstanding were approximately \$74 million, \$132 million, and \$131 million, respectively. The outstanding balances were repaid quarterly. In 2009, TVA and the U.S. Treasury replaced the \$150 million note under which TVA previously borrowed from the U.S. Treasury with a memorandum of understanding under which TVA will have a \$150 million credit facility. There are no fees other than interest on borrowings under the credit facility. TVA plans to use the U.S. Treasury credit facility as a source of liquidity, but not as a primary source of liquidity, in 2009. See Note 9 — Payments to U.S. Treasury and Note 11 — Short-Term Debt.

Credit Facilities. TVA has short-term funding available in the form of two short-term revolving credit facilities, one of which is a \$1.25 billion facility that matures on May 13, 2009, and the other of which is a \$1 billion facility that matures on November 9, 2009. See Note 18 — Credit Facility Agreements. The interest rate on any borrowing under both of these facilities is variable and based on market factors and the rating of TVA's senior unsecured long-term non-credit enhanced debt. TVA is required to pay an unused facility fee on the portion of the total \$2.25 billion against which TVA has not borrowed. The fee may fluctuate depending on the non-enhanced credit ratings on TVA's senior unsecured long-term debt. There were no outstanding borrowings under the facilities at September 30, 2008. TVA anticipates renewing each credit facility as it matures. TVA anticipates that when it renews the second credit facility in May 2009, the amount of this facility will also be reduced.

Call Monetization Transactions. From time to time TVA has entered into swaption transactions to monetize the value of call provisions on certain of its Bond issues. A swaption essentially grants a third party the right to enter into a swap agreement with TVA under which TVA receives a floating rate of interest and pays the third party a fixed rate of interest equal to the interest rate on the Bond issue whose call provision TVA monetized. Through September 30, 2008, TVA has entered into four swaption transactions that generated proceeds of \$261 million.

In 2003, TVA monetized the call provisions on a \$1 billion Bond issue and a \$476 million Bond issue by entering into swaption agreements with a third party in exchange for \$175 million and \$81 million, respectively.

In 2005, TVA monetized the call provisions on two Bond issues (\$42 million total par value) by entering into swaption agreements with a third party in exchange for \$5 million.

For more information regarding TVA's call monetization transactions, see Note 10 — Swaptions and Related Interest Rate Swaps.

Sale of Interest in TVA Generating Facility. On September 30, 2008, TVA obtained approximately \$325 million in proceeds from selling a 69.69 percent undivided interest in its three-unit, 792-megawatt summer net capability, combined cycle combustion turbine facility located in Southaven, Mississippi. Seven States Power Corporation ("SSPC"), the purchaser, through its wholly-owned subsidiary, Seven States Southaven, LLC ("SSSL"), has the ability to acquire up to a 90 percent undivided interest in the facility and may increase its ownership in the facility up to this amount on or prior to May 9, 2009. Because of TVA's continued ownership interest in the facility as well as buy-back provisions, the transaction did not qualify as a sale and accordingly has been recorded as a leaseback obligation. See Note 4 — Asset Acquisitions and Dispositions.

Sales of Receivables/Loans. From time to time TVA obtains proceeds from selling receivables and loans. During 2008, TVA sold \$2 million of receivables at par such that TVA did not recognize a gain or loss on the sale. These were receivables from a power customer related to energy conservation projects. The proceeds from the sale of these receivables are included within the Cash Flow Statement under the caption Cash flows from investing activities.

During 2007, TVA sold \$2 million of receivables at par such that TVA did not recognize a gain or loss on the sale. These were receivables from a power customer related to the construction of a substation. The proceeds from the sale of these receivables are included within the Cash Flow Statement under the caption Cash flows from investing activities.

TVA did not retain any claim on these receivables and loans sold, and they are no longer reported on TVA's Balance Sheets. For more information regarding TVA's sales of receivables and loans, see Note 1 — Sales of Receivables/Loans.

2008 Compared to 2007

Net cash provided by operating activities increased from \$1,788 million in 2007 to \$1,957 million in 2008. This \$169 million increase primarily resulted from:

An increase in cash from operating revenues of \$1,109 million resulting primarily from increases in revenue from municipalities and cooperatives and industries directly served, in both cases, from higher average rates and the FCA and, in the case of industries directly served, higher volume.

This increase was partially offset by:

An increase in cash paid for fuel and purchased power of \$376 million due to higher volume and increased market prices for purchased power;

•

An increase in cash paid for interest of \$147 million;

An increase in cash used by changes in working capital of \$115 million resulting primarily from an \$88 million decrease in accounts payable and accrued liabilities in 2008 compared to a \$103 million increase in 2007 and a \$40 million larger increase in inventories and other, net, partially offset by an \$85 million smaller increase in accounts receivable and a \$31 million larger increase in interest payable;

•

•

An increase in pension contributions of \$85 million;

Cash provided by deferred items of \$5 million in 2008 compared to \$61 million of cash provided by deferred items in 2007. This change is primarily due to funds collected in rates in 2007 that were used to fund future generation. See Note 1 — Reserve for Future Generation;

- An increase in cash paid for refueling outage costs of \$54 million;
  - An increase in tax equivalent payments of \$40 million; and
- An increase in cash outlays for routine and recurring operating costs of \$25 million.

Net cash used in investing activities increased from \$1,686 million in 2007 to \$2,299 million in 2008. This \$613 million increase resulted primarily from:

An increase in expenditures for capital projects of \$484 million primarily due to the purchase of a three-unit, 792-megawatt combined cycle, combustion turbine facility located in Southaven, Mississippi;

A \$119 million increase in expenditures for the enrichment and fabrication of nuclear fuel related to a buildup of fuel for strategic inventory purposes; and

• A \$23 million decrease in cash from collateral deposits. See Note 1 — Restricted Cash and Investments.

Net cash used by financing activities was \$473 million in 2007 as compared to net cash provided by financing activities of \$390 million in 2008. The \$863 million change was primarily the result of:

An increase in long-term debt issues as a result of the issuance of \$2,105 million of long-term debt; and
 Proceeds of \$325 million from the sale/leaseback of the Southaven facility.

These items were partially offset by:

The net redemption of \$1,237 million of short-term debt in 2008 as compared to the net redemption of \$955 million of short-term debt in 2007; and

An increase in redemptions and repurchases of long-term debt of \$219 million, with long-term debt of \$689 million retired in 2008.

# 2007 Compared to 2006

Net cash provided by operating activities decreased from \$1,985 million in 2006 to \$1,788 million in 2007. This \$197 million decrease primarily resulted from:

An increase in cash paid for fuel and purchased power of \$249 million due to higher volume of fuel and purchased power needed to replace hydroelectric generation as well as increased market prices for fuel;

An increase in cash outlays for routine and recurring operating costs of \$108 million;

An increase in tax equivalent payments of \$76 million; and

An increase in expenditures for nuclear refueling outages of \$24 million due to three planned outages in 2007 compared to two planned outages in the prior year.

These items were partially offset by:

A decrease of \$154 million in cash used by changes in working capital resulting primarily from a smaller increase in the accounts receivable balance of \$142 million and a larger increase in accounts payable and accrued liabilities of \$9 million;

Cash provided by deferred items of \$61 million in 2007 compared to a \$35 million net use of cash in 2006. This change is primarily due to funds collected in rates during 2007 that were used to fund future generation. See Note 1—Reserve for Future Generation; and

A decrease in cash paid for interest of \$33 million in 2007.

Cash used in investing activities decreased from \$1,698 million in 2006 to \$1,686 million in 2007. This \$12 million decrease resulted primarily from:

A source of cash from collateral deposits in 2007 of \$48 million as compared to a net use of cash of \$91 million in 2006. See Note 1 — Restricted Cash and Investments; and

A decrease in expenditures for the enrichment and fabrication of nuclear fuel of \$74 million related to the restart of Browns Ferry Unit 1 in 2007.

These items were partially offset by:

An increase in expenditures of \$111 million to acquire the Gleason and Marshall County combustion turbine facilities in 2007;

• A \$40 million contribution to the Asset Retirement Trust. See Note 1 — Investment Funds; A damage award of \$35 million that TVA received in 2006 in its breach of contract suit against the DOE not present in 2007; and

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An increase in expenditures for capital projects of \$9 million.

Net cash used in financing activities increased from \$289 million in 2006 to \$473 million in 2007. This \$184 million increase resulted primarily from:

A decrease of \$92 million in long-term debt issues; and An increase in net redemptions of short-term debt of \$862 million.

These items were partially offset by a decrease in redemptions of long-term debt of \$771 million in 2007 compared to 2006.

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 is 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 estimated to be as follows:

Future Planned Construction Expenditures 1

As of September 30							
	Actual Estimated Construction Expenditures						
	2008	2009	2010	2011	2012	2013	
Watts Bar Unit 2	\$245	\$649	\$681	\$595	\$314	\$-	
Other Capacity Expansion							
Expenditures	827	665	773	957	1,507	1,954	
Clean Air Expenditures	277	232	223	440	475	608	
Transmission Expenditures 2	98	32	45	34	40	41	
Other Capital Expenditures 3	547	510	489	557	566	557	
Total Capital Projects							
Requirements	\$1,994	4 \$2,088	\$2,211	\$2,583	\$2,902	\$3,160	

Notes

- (1)TVA plans to fund these expenditures with power revenues and proceeds from power program financings. This table shows only expenditures that are currently planned. Additional expenditures may be required for TVA to meet the anticipated growth in demand for power in its service area.
- (2) Transmission Expenditures include reimbursable projects. Transmission expenditures for capacity expansion or load growth are included in Other Capacity Expansion Expenditures.
- (3) Other Capital Expenditures are primarily associated with short lead time construction projects aimed at the continued safe and reliable operation of generating assets.
- (4) The numbers above exclude allowance for funds used during construction of \$4 million in 2008.

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, but not limited to, 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. See Forward-Looking Information.

Management does not anticipate that TVA will substantially change its strategy for meeting long-term power supply needs due to recent conditions in the financial markets. TVA's primary sources of funding for new generation investments are expected to continue to be cash from operations and power program financings.

In the near term, TVA may be negatively impacted by investments in new generation (for example Watts Bar Unit 2) that are not expected to provide a cash return until put into service.

TVA also has certain obligations and commitments to make future payments under contracts. The following table sets forth TVA's estimates of future payments as of September 30, 2008. See Notes 9, 11, and 15 for a further description of these obligations and commitments.

Commitments and Contingencies Payments due in the year ending September 30								
	2009	2010	2011	2012	2013	Thereafter	Total	
	2007	2010	2011	2012	2015	Thereafter	Totai	
Debt	\$2,215	\$-	\$1,000	\$1,514	\$2,388	\$15,563	\$22,680	1
Interest payments relating to debt	1,243	1,186	1,158	1,130				