Tennessee Valley Authority
Form 10-K
November 18, 2011
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K
(MARK ONE)

x ANNUAL REPORT PURSUANT TO SECTION 13, 15(d), OR 37 OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended September 30, 2011
OR

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF 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	37902
(Address of principal executive offices)	(Zip Code)

(865) 632-2101
Registrant's telephone number, including area code
Securities registered pursuant to Section 12(b) of the Act: None
Securities registered pursuant to Section 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 whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). 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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GLOSSARY OF COMMON ACRONYMS

Following are definitions of terms or acronyms frequently used in this Annual Report on Form 10-K for the fiscal year ended September 30, 2011 (the "Annual Report"):

Term or Acronym	Definition
AFUDC	Allowance for funds used during construction
ARO	Asset retirement obligation
ARP	Acid Rain Program
ART	Asset retirement trust
ASLB	Atomic Safety and Licensing Board
BEST	Bellefonte Efficiency and Sustainability Team
BREDL	Blue Ridge Environmental Defense League
CAA	Clean Air Act
CCOLA	Combined construction and operating license application
CCP	Coal combustion products
CCR	Coal combustion residual
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CME	Chicago Mercantile Exchange
CO_2	Carbon dioxide
COLA	Cost of living adjustment
CVA	Credit valuation adjustment
CY	Calendar year
EPA	Environmental Protection Agency
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
FTP	Financial Trading Program
GAAP	Accounting principles generally accepted in the United States of America
GHG	Greenhouse gas
GWh	Gigawatt hour(s)
IRP	Integrated Resource Plan
KDAQ	Kentucky Division for Air Quality
kWh	Kilowatt-hour(s)
mmBtu	Million British thermal unit(s)
MtM	Mark-to-market
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NDT	Nuclear decommissioning trust
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NO_x	Nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
NRP	Natural Resource Plan
NSR	New Source Review
PSD	Prevention of Significant Deterioration
QSPE	Qualifying special-purpose entity

REIT	Real estate investment trust
SACE	Southern Alliance for Clean Energy
SCRs	Selective catalytic reduction systems
SDE	Seasonal demand and energy

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SEC	Securities and Exchange Commission
SERP	Supplemental Executive Retirement Plan
Seven States	Seven States Power Corporation
SO_2	Sulfur dioxide
SSSL	Seven States Southaven, LLC
TDEC	Tennessee Department of Environment and Conservation
TOU	Time-of-use
TVARS	Tennessee Valley Authority Retirement System
VIE	Variable interest entity

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FORWARD-LOOKING INFORMATION

This Annual Report on Form 10-K ("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.

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 or changed laws, regulations, and administrative orders, including those related to environmental matters, and the costs of complying with these new or changed laws, regulations, and administrative orders, as well as complying with existing laws, regulations, and administrative orders;
- The requirement or decision to make additional contributions to TVA's pension or other post-retirement benefit plans or to TVA's nuclear decommissioning trust ("NDT");
- Events at a TVA nuclear facility, which, among other things, could result in loss of life, damage to the environment, damage to or loss of the facility, and damage to the property of others;
- Events at a nuclear facility, whether or not operated by or licensed to TVA, which, among other things, could lead to increased regulation or restriction on the construction, operation, and decommissioning of nuclear facilities or on the storage of spent fuel, obligate TVA to pay retrospective insurance premiums, reduce the availability and affordability of insurance, increase the costs of operating TVA's existing nuclear units, negatively affect the cost and schedule for completing Watts Bar Nuclear Plant ("Watts Bar") Unit 2 and Bellefonte Nuclear Plant ("Bellefonte") Unit 1, and cause TVA to forego future construction at these or other facilities;
- Significant delays, cost increases, or cost overruns associated with the construction of generation or transmission assets;
- Fines, penalties, natural resource damages, and settlements associated with the Kingston Fossil Plant ("Kingston") ash spill;
- The outcome of legal and administrative proceedings;
- Significant changes in demand for electricity;
- Addition or loss of customers;
- The continued operation, performance, or failure of TVA's generation, transmission, and related assets, including coal combustion residual ("CCR") facilities;
- The economics of modernizing aging coal-fired generating units and installing emission control equipment to meet anticipated emission reduction requirements, which could make continued operation of certain coal-fired units uneconomical and lead to more than anticipated removals of such units from service, perhaps permanently;
- Disruption of fuel supplies, which may result from, among other things, weather conditions, production or transportation difficulties, labor challenges, or environmental laws or regulations affecting TVA's fuel suppliers or transporters;
- Purchased power price volatility and disruption of purchased power supplies;
- Events involving transmission lines, dams, and other facilities not operated by TVA, including those that affect the reliability of the interstate transmission grid of which TVA's transmission system is a part, as well as inadequacies in the supply of water to TVA's generation facilities;
- Inability to obtain regulatory approval for the construction or operation of assets;
- Weather conditions;
- Catastrophic events such as fires, earthquakes, solar events, floods, hurricanes, tornadoes, pandemics, wars, national emergencies, terrorist activities, and other similar events, especially if these events occur in or near TVA's service

area;
- Restrictions on TVA's ability to manage real property currently under its control;
- Reliability and creditworthiness of counterparties;
- Changes in the market price of commodities such as coal, uranium, natural gas, fuel oil, crude oil, construction materials, reagents, electricity, and emission allowances;
- Changes in the market price of equity securities, debt securities, and other investments;
- Changes in interest rates, currency exchange rates, and inflation rates;
- Rising pension and health care costs;
- Increases in TVA’s financial liability for decommissioning its nuclear facilities and retiring other assets;
- Limitations on TVA’s ability to borrow money which may result from, among other things, TVA’s approaching or reaching its debt ceiling and changes in TVA’s borrowing authority;
- An increase in TVA’s cost of capital which may result from, among other things, changes in the market for TVA’s debt securities, changes in the credit rating of TVA or the U.S. government, and an increased reliance by TVA on alternative financing arrangements as TVA approaches its debt ceiling;
- Changes in the economy and volatility in financial markets;

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- Inability to eliminate identified deficiencies in TVA's systems, standards, controls, and corporate culture;
- Ineffectiveness of TVA's disclosure controls and procedures and its internal control over financial reporting;
- Problems attracting and retaining a qualified workforce;
- Changes in technology;
- Failure of TVA's information technology assets to operate as planned and the failure of TVA's cyber security program to protect TVA's information technology assets from cyber attacks;
- Differences between estimates of revenues and expenses and actual revenues and expenses incurred; and
- Unforeseeable events.

See also 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 TVA 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

References to years (2011, 2010, etc.) in this Annual Report are to TVA's fiscal years ending September 30 except for references to years in the biographical information about directors and executive officers in Item 10, Directors, Executive Officers and Corporate Governance, as well as to years that are preceded by "CY," which references 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.

Property

TVA does not own real property. TVA acquires real property in the name of the United States, and such legal title in real property is entrusted to TVA as the agent of the United States to accomplish the purposes of the Tennessee Valley Authority Act of 1933, as amended, 16 U.S.C. §§ 831-831ee (as amended, the "TVA Act"). TVA acquires personal property in the name of TVA. Accordingly, unless the context indicates the reference is to TVA's personal property, any statement in this Annual Report referring to TVA property shall be read as referring to the real property of the United States which has been entrusted to TVA as its agent.

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 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. TVA's SEC reports are also available to the public without charge from the web site maintained by the SEC at www.sec.gov. In addition, the public may read and copy any reports or other information that TVA files with or furnishes to the SEC at the SEC's Public Reference Room at 100 F Street N.E., Washington, D.C. 20549. The public may obtain information about the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

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PART I

ITEM 1. BUSINESS

The Corporation

In response to a request by President Franklin D. Roosevelt, the U.S. Congress in 1933 enacted legislation that created the Tennessee Valley Authority ("TVA"), a government corporation. TVA was created to, among other things, 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 over nine million people. In 2011, the revenues generated from TVA's electricity sales were $11.7 billion and accounted for virtually all of TVA's revenues.

TVA also manages the Tennessee River, its tributaries, and certain shorelines 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, natural resource protection, and economic development. TVA performs these management duties in cooperation with other federal and state agencies which have jurisdiction and authority over certain aspects of the river system. TVA's stewardship responsibilities are conducted within the Tennessee Valley watershed, whose boundaries are similar to, though not exactly the same as, the TVA service area. TVA's management of the Tennessee River, its tributaries, and certain shorelines is sometimes 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. The TVA Board also established a council under the Federal Advisory Council Act to advise TVA on its stewardship activities. TVA's power system financings consist primarily of the sale of debt securities and secondarily of alternative financings such as lease financings. As a wholly-owned government corporation, TVA is not authorized to issue equity securities.

Service Area

The area in which TVA sells power, its service area, is defined by the TVA Act. Under the TVA Act, subject to certain minor exceptions, TVA may not, without specific authorization from the U.S. Congress, enter into contracts that 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.

In addition, an amendment to the Federal Power Act ("FPA") includes a provision that helps protect TVA's ability to sell power within its service area. This provision, called 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 customers.

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TVA's revenues by state for each of the last three years are detailed in the table below.

Operating Revenues By State
For the years ended September 30
(in millions)

	2011	2010	2009
Alabama	$1,699	$1,495	$1,526
Georgia	272	253	264
Kentucky	1,159	1,195	1,252
Mississippi	1,095	974	1,017
North Carolina	58	53	58
Tennessee	7,370	6,693	6,970
Virginia	60	48	51
Subtotal	11,713	10,711	11,138
Sale for resale and other	10	2	4
Subtotal	11,723	10,713	11,142
Other revenues	118	161	113
Operating revenues	$11,841	$10,874	$11,255

Customers

TVA is primarily a wholesaler of power. It sells power to distributor customers which then resell power to their customers at retail rates. TVA's distributor customers consist of (1) municipalities and other local government entities (referred to collectively below as "municipalities") and (2) cooperative organizations of citizens ("cooperatives"). These municipalities and

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cooperatives operate public power electric systems that are not doing business for profit but are operated primarily for the purpose of supplying electricity to their own citizens or members. TVA also sells power to directly served customers, consisting primarily of federal agencies and customers with large or unusual loads. In addition, power that exceeds the needs of the TVA system may, where consistent with the provisions of the TVA Act, be sold under exchange power arrangements with other electric systems.

Operating Revenues by Customer Type
For the years ended September 30
(in millions)

	2011	2010	2009
Sales of electricity			
Municipalities and cooperatives	$10,144	$9,275	$9,644
Industries directly served	1,440	1,321	1,367
Federal agencies and other	139	117	131
Total sales of electricity	11,723	10,713	11,142
Other revenues	118	161	113
Operating revenues	$11,841	$10,874	$11,255

Municipalities and Cooperatives

Revenues from distributor customers accounted for 86 percent of TVA's total operating revenues in 2011. At September 30, 2011, TVA had wholesale power contracts with 155 municipalities and cooperatives. Each of these contracts requires distributor customers to purchase from TVA all of their electric power and energy used within the TVA service area.

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 2011, and the percentage of TVA's 2011 total operating revenues represented by these revenues are summarized in the table below.

TVA Distributor Customer Contracts
At September 30, 2011

Contract Arrangements[1]	Number of Distributor Customers	Sales to Distributor Customers in 2011 (in millions)	Percentage of Total Operating Revenues in 2011	
15-year termination notice	5	$112	0.9	%
10-year termination notice	47	3,390	28.6	%
5-year termination notice	103	6,642	56.1	%
Total	155	$10,144	85.6	%

Note
(1) 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 by the distributor customer until January 2018.

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 2011, sales to MLGW and NES accounted for nine percent and eight percent, respectively.

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 of Directors (the "TVA Board"). Under section 10 of the TVA Act, the TVA Board is authorized to regulate the municipal and cooperative distributors of TVA power to carry out the purposes of the TVA Act through contract terms and conditions as well as through rules and regulations. TVA regulates distributor customers primarily through the provisions of TVA's wholesale power contracts. All of the power contracts between TVA and the distributor customers require that power purchased from TVA be sold and distributed to the ultimate consumer without discrimination among consumers of the same class, and prohibit direct or indirect discriminatory rates, rebates, or other special concessions. In addition, there are a number of wholesale power contract provisions through which TVA seeks to ensure that

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the electric system revenues of the distributor customers are used only for electric system purposes. Furthermore, almost all of these contracts specify the specific resale rates and charges at which the distributor customers must resell TVA power to their 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. The regulatory provisions in TVA's wholesale power contracts are designed to carry out the objectives of the TVA Act, including the objective of providing for an adequate supply of power at the lowest feasible rates. See Rates — Rate Methodology below.

Other Customers

Revenues from directly served industrial customers accounted for 12 percent of TVA's total operating revenues in 2011. Contracts with these customers are subject to termination by the customer or TVA 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 directly served industrial customer. Sales to USEC for its Paducah, Kentucky, facility represented four percent of TVA's total operating revenues in 2011. TVA's current power supply 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 — Counterparty Credit Risk — Credit of Customers. 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 believes USEC will reduce its electricity purchases at the Paducah, Kentucky, facility. Loss of the USEC load would result in a loss of revenue, but the resulting lower demand on the TVA system could result in opportunities to reduce TVA's reliance on less economical power sources.

Rates

Rate Authority

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 Program 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 Program 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.

Rate Methodology

In view of demand for electricity and the level of competition, it is reasonable to assume that rates, set at levels that will recover TVA's costs, can be charged and collected from customers. Further, the TVA Board has the discretion to

determine when costs will be recovered in rates. As a result of these factors, TVA records certain assets and liabilities that result from the self-regulated ratemaking process that could not otherwise be so recorded under accounting principles generally accepted in the United States. See Note 1 — Cost-Based Regulation and Note 7.

In setting rates to cover the costs set out in the TVA Act, TVA uses a wholesale rate structure that is comprised of a base rate and a fuel rate that is automatically determined by the operation of the fuel cost adjustment formula each month. In setting the base rates, 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. Under the DSC methodology, rates are calculated so that an entity will be able to cover its operating costs and to satisfy its obligations to pay principal and interest on debt. This ratemaking approach is particularly suitable for use by entities financed primarily, if not entirely, by debt capital, such as TVA.

TVA's revenue requirements for costs or projected costs (other than the fuel, purchased power, and related costs covered by the fuel rate) are calculated under the DSC methodology as the sum of the following components:

- Operating and maintenance costs;

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- Tax equivalents (other than the amount attributable to fuel cost-related revenues);
- Other costs in accordance with the TVA Act; and
- Debt service coverage.

This methodology reflects the cause-and-effect relationship between TVA's costs and the corresponding rates TVA charges for its regulated products and services. Once the revenue requirements (or projected costs) are determined, they are 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. Power rates are adjusted by the TVA Board to a level deemed by the TVA Board to be sufficient to produce revenues approximately equal to projected costs (exclusive of the costs collected through the fuel rate).

Prior to April 2011, TVA’s wholesale rate structure was largely based on end-use customer demand and/or energy consumption. Under this rate structure, wholesale charges were specified for each customer classification, and each distributor customer’s wholesale bill reflected the application of these charges to actual end-use customers’ volumes within each classification. Wholesale meter-reading was used only to bill distributors for losses occurring between the wholesale meters and the retail meters.

At its August 20, 2010 meeting, the TVA Board approved revised wholesale and retail rate structures which became effective in April 2011. The new wholesale and retail rate structures include time-of-use (“TOU”) and seasonal demand and energy (“SDE”) rates. The revised rate structures provide price signals intended to incentivize distributor and end-use customers to shift energy usage from high-cost periods to less expensive periods. The rates are not intended to provide additional revenue for TVA (although individual customers may see some effects on their bills), but are intended to more closely align TVA's revenues with its costs.

For distributor customers, the default rate structure is TOU with an option to elect an SDE structure for a limited time. The TVA Board-approved rate structures provide that all distributor customers are to be on a TOU wholesale structure by no later than October 2012; however, TVA will continue to have discussions with distributors on alternative rate structures.

For directly served and most distributor-served customers with contract demands in excess of five MW, the default rate structure is a TOU structure. In addition, an optional SDE structure is available. A majority of directly served and these distributor-served customers transitioned to TOU or SDE pilot rates during the three months ended December 31, 2010 to take advantage of lower transitional fall and winter rates.

As noted above, TVA’s rates also include a fuel cost adjustment that automatically adjusts TVA's rates each month to recover TVA’s fuel costs. Prior to April 2011, a portion of TVA's fuel costs were included in the base rate, and the fuel cost adjustment formula adjusted the energy rates to collect the total fuel costs relative to the fuel amount included in the base rate.

The new rate structure that became effective in April 2011 removed most fuel costs from the base rate. In conjunction with that change, the rate structure was also revised to establish a separate fuel rate that includes the costs of natural gas, fuel oil, purchased power, coal, emission allowances, nuclear fuel and other fuel-related commodities; realized gains and losses on derivatives purchased to hedge the costs of such commodities; and tax equivalents associated with the fuel cost adjustments. Instead of adjusting the energy rates as was the case with the previous rate structure where fuel costs were a component of the base rate, the fuel cost adjustment now establishes the separate fuel rate that is applicable for each month. TVA sometimes refers to this separate fuel rate as the total fuel rate or the total monthly fuel cost.

The TVA Board approved a rate adjustment at its August 18, 2011 meeting that went into effect in October 2011. The rate adjustment is expected to increase existing wholesale base rate charges by two percent. See Item 7, Management's Discussion of Financial Condition and Results of Operations — 2011 Highlights — Rate Changes and Adjustments.

Current Power Supply

General

Power generating facilities operated by TVA at September 30, 2011, included 29 conventional hydroelectric sites, one pumped storage hydroelectric site, 11 coal-fired sites, three nuclear sites, 12 natural gas and/or oil-fired sites, two diesel generator sites, one wind energy site (currently nonoperational), and 14 solar energy sites. In addition, TVA has biomass cofiring capability at one of its coal-fired sites and digester gas cofiring capability at a second coal-fired site. TVA acquires power under power purchase agreements of varying durations as well as short-term contracts of less than 24-hours in duration.

TVA’s generation fleet is among the oldest of any utility in the southeastern United States. TVA has invested substantially less in maintaining its coal-fired generation assets than surrounding utilities. Although TVA is planning to increase its maintenance expenditures on its generating assets in 2012, some assets may not operate as planned in the future due to their age and condition.

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The following table summarizes TVA's net generation in millions of kilowatt-hours ("kWh") 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)

	2011			2010			2009		
Coal-fired	74,583	52	%	74,590	51	%	76,794	53	%
Nuclear	49,562	34	%	53,339	36	%	53,047	37	%
Hydroelectric	12,706	9	%	14,013	9	%	11,421	8	%
Natural gas and/or oil-fired	6,809	5	%	5,475	4	%	3,481	2	%
Renewable resources (non-hydro)	17	(1) <1%		4	(1) <1%		29	<1%	
Total	143,677	100	%	147,421	100	%	144,772	100	%

Note
(1) Operation and maintenance issues reduced the available renewable generation during 2011 and 2010 from several facilities, including those utilizing methane, solar, and wind.

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Net Capability

The following table summarizes the summer net capability in MW TVA had available at September 30, 2011:

SUMMER NET CAPABILITY[1]
At September 30, 2011

Source of Capability	Location	Number of Units	Summer Net Capability (MW)	Date First Unit Placed in Service	Date Last Unit Placed in Service
TVA-Operated Generating Facilities					
Coal-Fired					
Allen [2]	Tennessee	3	702	1959	1959
Bull Run	Tennessee	1	870	1967	1967
Colbert	Alabama	5	1,184	1955	1965
Cumberland	Tennessee	2	2,386	1973	1973
Gallatin	Tennessee	4	976	1956	1959
John Sevier [3]	Tennessee	4	704	1955	1957
Johnsonville [3]	Tennessee	10	1,206	1951	1959
Kingston	Tennessee	9	1,398	1954	1955
Paradise	Kentucky	3	2,201	1963	1970
Shawnee [3]	Kentucky	9	1,206	1953	1955
Widows Creek [3]	Alabama	3	974	1954	1965
Total Coal-Fired		53	13,807		
Nuclear					
Browns Ferry	Alabama	3	3,300	1974	1977
Sequoyah	Tennessee	2	2,282	1981	1982
Watts Bar	Tennessee	1	1,109	1996	1996
Total Nuclear		6	6,691		
Hydroelectric					
Conventional Plants	Alabama	36	1,188	1925	1962
	Georgia	2	35	1931	1956
	Kentucky	5	223	1944	1948
	North Carolina	6	492	1940	1956
	Tennessee	60	1,889	1912	1972
Pumped Storage	Tennessee	4	1,616	1978	1979
Total Hydroelectric		113	5,443		
Natural Gas and/or Oil-Fired[4]					
Simple Cycle Combustion Turbine					
Allen	Tennessee	20	456	1971	1972
Brownsville	Tennessee	4	468	1999	1999
Colbert	Alabama	8	392	1972	1972
Gallatin	Tennessee	8	600	1975	2000
Gleason	Tennessee	3	360	2000	2000
Johnsonville	Tennessee	20	1,128	1975	2000
Kemper	Mississippi	4	312	2002	2002
Lagoon Creek	Tennessee	12	904	2001	2002
Marshall County	Kentucky	8	616	2002	2002
		87	5,236		

Subtotal Simple Cycle Combustion Turbine					
Combined Cycle Combustion Turbine					
Caledonia	Mississippi	3	765	2003	2003
Lagoon Creek	Tennessee	2	540	2010	2010
Magnolia	Mississippi	3	909	2003	2003
Southaven	Mississippi	3	774	2003	2003
Subtotal Combined Cycle Combustion Turbine		11	2,988		
Total Natural Gas and/or Oil-Fired		98	8,224		
Diesel Generator					
Meridian	Mississippi	5	9	1998	1998
Albertville	Alabama	4	4	2000	2000

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Total Diesel Generators	9	13
TVA Renewable Resources (non-hydro)[5]		< 1
Total TVA-Operated Generating Facilities		34,178
Contract Renewable Resources (non-hydro)[6]		35
Power Purchase and Other Agreements		3,087
Total Summer Net Capability		37,300

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) 17 MW of cofired methane is accounted for as coal generation as opposed to TVA Renewable Resources.

(3) See Current Power Supply — Coal-Fired for a discussion of TVA's idling plans for coal-fired units.

(4) See Current Power Supply — Natural Gas and/or Oil-Fired for a discussion of TVA-operated natural gas and/or oil-fired facilities subject to leaseback and long-term lease arrangements.

(5) TVA's three wind turbines (2 MW) at its Buffalo Mountain site are currently not operational and do not appear to be economical for returning to operation. TVA owns 0.3 MW of solar installations at 14 sites.

(6) Contract Renewable Resources (non-hydro) include wind, landfill gas, and Generation Partners contracts. See Current Power Supply — Purchased Power and Other Agreements for a discussion of TVA's Generation Partners program.

Coal-Fired

TVA began its coal-fired plant construction program in the 1940s, and its coal-fired units were placed in service between 1951 and 1973. Coal-fired units are either active or inactive. TVA considers units to be in an active state when the unit is generating, available for service, or is temporarily unavailable due to equipment failures, inspections, or repairs. As of September 30, 2011, TVA had 11 coal-fired plants consisting of 53 active units, accounting for 13,807 MW of summer net capability. TVA considers units to be inactive if those units have been retired, mothballed, or placed in inactive reserve. As of September 30, 2011, TVA had six inactive units, discussed below.

Inactive units may be in three categories: retired, mothballed, or inactive reserve. Retired units are unavailable for service and are not expected to return to service in the future. TVA currently has no retired units. Mothballed units are unavailable for service but can be brought back into service after some repairs with appropriate amount of notification, typically weeks or months. As of September 30, 2011, TVA had three mothballed units: Shawnee Unit 10, Widows Creek Unit 2, and Widows Creek Unit 5. Inactive reserve is the state in which a unit is unavailable for service but can be brought back into service after some minor repairs in a relatively short duration of time, typically measured in days. As of September 30, 2011, TVA had three units in inactive reserve: Widows Creek Unit 1, Widows Creek Unit 3, and Widows Creek Unit 4. Effective October 1, 2011, Widows Creek Unit 6 was placed in inactive reserve. TVA refers to units which are in inactive reserve or mothballed status as idled.

Coal-fired plants have been subject to increasingly stringent regulatory requirements over the last few decades, including those of the Clean Air Act ("CAA") and subsequent laws and regulations. On April 14, 2011, TVA entered into two agreements (collectively, the "Environmental Agreements"). The first agreement is a Federal Facilities Compliance Agreement with the Environmental Protection Agency ("EPA"). The second agreement is with Alabama, Kentucky, North Carolina, Tennessee, and three environmental advocacy groups: the Sierra Club, National Parks Conservation Association, and Our Children's Earth Foundation. Under the Environmental Agreements, TVA agreed to retire 18 of its 59 coal-fired units by the end of 2017 and was generally absolved, from any liability, subject to

certain limitations and exceptions under the New Source Review ("NSR") requirements of the CAA for maintenance, repair, and component replacement projects that were commenced at TVA's coal-fired units prior to the execution of the agreements. Failure to comply with the terms of the Environmental Agreements would subject TVA to penalties stipulated in the agreements. TVA is taking actions necessary to comply with the Environmental Agreements.

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The following table summarizes the actions TVA is required to take under the Environmental Agreements, and actions TVA has already taken or is planning to take with respect to its coal-fired units.

Plant	Total Units	Existing Scrubbers and SCRs[2]	Requirements Under Environmental Agreements	Actions Taken or Planned to Be Taken by TVA
Allen	3	SCRs on all three units	Install scrubbers or retire no later than December 31, 2018	Add scrubbers on all three units by December 31, 2018
Bull Run	1	Scrubber and SCRs on unit	Continuously operate current and any new emission control equipment	Continuously operate existing emission control equipment
Colbert	5	SCR on Unit 5	· Remove from service, control[1], convert[3], or retire Units 1-4 no later than June 30, 2016 · Remove from service, control[1], or retire Unit 5 no later than December 31, 2015 · Control or retire removed from service units within three years	TVA has not yet decided what actions to take with respect to the Colbert units.
Cumberland	2	Scrubbers and SCRs on both units	Continuously operate current and any new emission control equipment	Continuously operate existing emission control equipment
Gallatin	4	None	Control[1], convert[3], or retire all four units no later than December 31, 2017	Add scrubbers and SCRs on all four units by December 31, 2017
John Sevier	4	None	· Retire two units no later than December 31, 2012 · Remove from service two units no later than December 31, 2012 and control[1], convert[3], or retire those units no later than December 31, 2015	· Retire two units by December 31, 2012 · Remove from service the other two units by December 31, 2012. TVA has not yet decided what additional actions to take with respect to these two units.
Johnsonville	10	None	· Retire six units no later than December 31, 2015 · Retire four units no later than December 31, 2017	· Retire six units by December 31, 2015 · Retire four units by December 31, 2017
Kingston	9	Scrubbers and SCRs on all nine units	Continuously operate current and any new emission control equipment	Continuously operate existing emission control equipment
Paradise	3	Scrubbers and SCRs on all three units	Upgrade scrubbers on Units 1 and 2 no later than December 31, 2012	Upgrade scrubbers on Units 1 and 2 by December 31, 2012
Shawnee	10	None	Control[1], retire, or convert[3] Units 1 and 4 no later than December 31, 2017	· Idled Unit 10 in October 2010 · TVA has not yet decided what actions to take with respect to Units 1 and 4.
Widows Creek	8	Scrubbers and SCRs on Units 7 and 8	· Retire two of Units 1-6 no later than July 31, 2013 · Retire two of Units 1-6 no later than July 31, 2014 · Retire two of Units 1-6 no later than July 31, 2015	· As of September 30, 2011, TVA had idled Units 1-5. · TVA idled Unit 6 effective October 1, 2011. · Continuously operate current or equivalent emissions control equipment on Units 7 and 8

	· Continuously operate current and any new emissions control equipment on Units 7 and 8.

Notes
(1) If TVA decides to add emission controls to these units, TVA must continuously operate the emission controls once they are installed.
(2) Selective catalytic reduction systems ("SCRs").
(3) Convert to renewable biomass.

TVA's long-range plans will continue to attempt to balance the costs and benefits of significant investments at its remaining coal-fired plants without scrubbers and/or SCRs. TVA expects to decide whether to control, convert, or retire its remaining coal-fired capacity on a unit-by-unit schedule.

Coal Combustion Residual Facilities

TVA retained an independent third-party engineering firm to perform a multi-phased evaluation of the overall stability and safety of all existing embankments associated with TVA's wet coal combustion residual ("CCR") facilities. The first phase of the evaluation, which is finished, involved a detailed inspection of all wet CCR facilities, detailed documentation reviews, and a determination of any immediate actions necessary to reduce risks. The second phase of the program, which is also complete, included geotechnical explorations, material testing, stability analyses, and studies. The study showed that none of TVA's other coal-fired plants showed the same set of conditions that existed at Kingston Fossil Plant ("Kingston") at the time of the ash spill, and that the ongoing remediation work being done at the plants should bring all of them within industry standards in terms of stability. The third phase of the program, which is implementation of recommended actions, is ongoing. This phase includes risk mitigation steps such as performance monitoring, designing and completing repairs, developing planning documents, obtaining permits, and generally implementing the lessons learned from the Kingston ash spill at TVA's other wet CCR facilities. As a part of this effort, an ongoing dam oversight program has been undertaken, and TVA employees have received additional training in dam safety and monitoring.

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TVA is planning to convert all of its wet CCR facilities to dry collection facilities. The expected cost of the CCR work is between $1.5 billion and $2.0 billion, and the work is expected to be completed by 2022. At September 30, 2011, $275 million of costs had been incurred since the start of the work. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — 2011 Challenges — Coal Combustion Residuals for a discussion of the challenges of dealing with coal combustion residuals, and Note 8 for a discussion of the Kingston ash spill.

On December 15, 2010, a leak was identified in the clay liner of the gypsum pond at Kingston. TVA submitted to the Tennessee Department of Environment and Conservation ("TDEC") a two-phase Corrective Action Plan ("CAP") to install a synthetic liner on the gypsum pond. The synthetic liner is being designed and installed to meet the requirements of the CAP, current TDEC regulations, and anticipated RCRA Subtitle D requirements for CCR storage. The gypsum pond was expected to be back in service by September 2011; however, due to weather and other unforeseeable conditions, implementation of the CAP was delayed. Under the Environmental Agreements, TVA is generally not allowed to operate Kingston after September 20, 2011, without the scrubbers in operation, and the scrubbers cannot be operated unless TVA has the ability to store the gypsum the scrubbers produce. Accordingly, TVA stopped operating Kingston on September 19, 2011, and began the fall maintenance outage to tie in the new dry fly ash handling system. Work on the first phase of the new gypsum storage facility was completed on October 21, 2011 and TDEC approval to place the facility back in operation was received on November 16, 2011. As the Kingston fall outage work is completed, and as power is needed, Kingston's units will be brought back on line. The approximate cost of the first phase of work for the gypsum facility is $24 million. The estimate and schedule for the second phase of work has not been established at this time.

Nuclear

TVA has three nuclear sites consisting of six units in operation. The units at Browns Ferry Nuclear Plant ("Browns Ferry") are boiling water reactor units, and the units at the Sequoyah Nuclear Plant ("Sequoyah") and Watts Bar Nuclear Plant ("Watts Bar") are pressurized water reactor units. Statistics for each of these units are included in the table below.

TVA Nuclear Power
At September 30, 2011

Nuclear Unit	Status	Nameplate Capacity (MW)	Net Capacity Factor for 2011	Date of Expiration of Operating License	Date of Expiration of Construction Permits
Sequoyah Unit 1	Operating	1,221	81.1	2020	—
Sequoyah Unit 2	Operating	1,221	86.8	2021	—
Browns Ferry Unit 1	Operating	1,150	80.5	2033	—
Browns Ferry Unit 2	Operating	1,190	77.7	2034	—
Browns Ferry Unit 3	Operating	1,190	83.7	2036	—
Watts Bar Unit 1	Operating	1,230	80.9	2035	—
Watts Bar Unit 2	Under construction	1,220	—	—	2013

Response to Recent Events. TVA management has established a response team to analyze the March 2011 events at the Fukushima Daiichi Nuclear Power Plant ("Fukushima Daiichi") in Japan. A comprehensive review is in progress to determine the status of safety-related equipment and other aspects of plant operations that affect nuclear, radiological, and personal safety so that TVA can make any necessary changes. In response to the Japanese nuclear events and the April 27 and April 28, 2011, storms that caused significant damage to the TVA system, TVA is analyzing the ability of its nuclear plants to shut down safely during simultaneous natural disasters.

The nuclear industry and regulators have been working to understand the events that damaged the Fukushima Daiichi reactors and spent fuel storage pools and whether any changes might be necessary at nuclear plants in the United States. As part of its response to the events at Fukushima Daiichi, the Nuclear Regulatory Commission ("NRC") conducted special inspections of nuclear power plants in the United States, including TVA's three nuclear power plants. The focus of the inspections was on the licensee's capability to mitigate conditions that could result from fire and flood events during an earthquake. The results of the inspections are reported in letters from the NRC dated May 13, 2011. The NRC's reactor oversight process will further evaluate any issues identified during the inspection and will determine, in a separate report, whether there are regulatory findings or violations, but no response to the May 13, 2011 letters was required. Although the NRC is still evaluating the inspection results, no material concerns have been identified relating to any of TVA's nuclear power plants nor have any of these activities yet resulted in new regulatory requirements affecting any of the plants.

The NRC also formed the Near-Term Task Force ("task force") on the Fukushima Event to perform a systematic and methodical review of its regulations and practices to determine if any changes should be made to further ensure health and safety protections in light of what has been learned from the Japanese nuclear events. On July 13, 2011, the task force released its first report. The task force report recommends that the NRC pursue both short-term and long-term actions to improve its safety regulations and oversight. The report also recommends that the NRC propose safety improvements in areas ranging from loss of power to earthquakes, flooding, spent fuel pools, containment venting, and emergency preparedness. The task

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force’s recommended strategy includes several rulemaking activities to establish new requirements and interim actions to be taken while the rulemaking activities are conducted. The NRC staff reviewed the task force's July 2011 report and provided a proposal to the NRC Commissioners on its recommendations. On October 19, 2011, the NRC voted to fast track seven of the 12 recommendations from the task force. Recommendations for action in the short-term include reevaluating seismic and flood hazards; strengthening the ability to withstand complete loss of power; improving spent fuel monitoring instrumentation; and bolstering emergency operating procedures and plant staff training. Longer-term actions include improvements to the containment structures that surround nuclear reactors, especially for the 23 U.S. reactors with designs similar to those in Japan (including TVA's Browns Ferry), and improvements to venting systems that are used to relieve steam pressure inside the containment structures following an accident. TVA does not yet know the extent to which the changes in the regulations, programs, and processes of the NRC as a result of the recommendations of the task force will affect its operations. See Note 20 — Legal Proceedings — Petitions Resulting from Japanese Nuclear Events.

The Japanese nuclear events have also created broader economic uncertainties that may affect future nuclear plant operating costs. The political climate, public pressure, or other forces may make it more difficult or expensive to continue to operate, construct, or improve nuclear power generation facilities. Internationally, some governments are changing their positions on nuclear power. For example, operations have been suspended at several existing nuclear power facilities in Japan, and Germany has committed to the elimination of its use of nuclear power altogether by 2022. Legislation has been introduced in the U.S. Congress that would require an overhaul of the NRC safety regulations. TVA cannot predict whether this or any similar legislation may be enacted and, if enacted, the impact on the operation and costs of TVA’s nuclear power plants. These broader economic uncertainties could adversely affect the demand for nuclear power, and TVA cannot know their impact on its operations.

Sequoyah License Renewal. On August 5, 2009, TVA notified the NRC of its intent to submit license renewal applications for both Sequoyah units in the third quarter of 2013. If approved, the licenses for both units would be extended by an additional 20 years to 2040 for Unit 1 and 2041 for Unit 2. On May 25, 2011, TVA amended its schedule and notified the NRC of its intent to submit license renewal applications for both Sequoyah units in the second quarter of 2013. In June 2011, TVA issued a final Supplemental Environmental Impact Statement ("SEIS") that addresses the impacts of renewing Sequoyah's operating licenses. On August 18, 2011, the TVA Board approved proceeding with the license renewal application development and submittal. The NRC's review of the applications is expected to take up to three years after their submission.

Completion of Nuclear Units. On August 1, 2007, the TVA Board approved the completion of Watts Bar Unit 2. This unit is expected to be completed in CY 2013 and to provide approximately 1,180 MW of summer net capability. In addition, on August 18, 2011, the TVA Board approved the completion of Bellefonte Nuclear Plant (“Bellefonte”) Unit 1. This unit is expected to be completed by 2020 and to provide approximately 1,260 MW of summer net capability. See Future Power Supply — Nuclear Generation for more information regarding these projects.

Other Nuclear Matters. See Fuel Supply — Nuclear Fuel below for a discussion of spent nuclear fuel and low-level radioactive waste, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — 2011 Challenges — Construction Projects for a discussion of challenges associated with the Watts Bar Unit 2 construction project, challenges associated with the construction of a cooling tower at Browns Ferry, a problem involving a Browns Ferry Unit 1 low pressure coolant injection valve, and the impact of extreme weather on the operation of Browns Ferry Unit 1, Note 20 — Contingencies for a discussion of TVA's nuclear decommissioning liabilities and the related trust and nuclear insurance, and Note 20 — Legal Proceedings for a discussion of legal and administrative proceedings related to TVA's nuclear program, which discussions are incorporated herein by reference.

Hydroelectric

TVA maintains 29 conventional hydroelectric dams throughout the Tennessee River system and one pumped-storage facility for the production of electricity. At September 30, 2011, these facilities accounted for 5,443 MW of summer net capability. The amount of electricity that TVA is able to generate from its hydroelectric plants depends on a number of factors, including the amount of precipitation, runoff, initial water levels, and the need for water for competing water management objectives. The amount of electricity generated also depends on the availability of TVA's hydroelectric generation plants. When these factors are unfavorable, TVA must increase its reliance on more expensive generation plants and purchased power. In addition, four hydroelectric dams owned by a third party on the Little Tennessee River and eight U.S. Army Corps of Engineers dams on the Cumberland River contribute to the TVA power system. See Weather and Seasonality.

TVA’s Hydro Modernization Program began in 1992 to address reliability issues on a majority of its conventional hydroelectric units and on its Raccoon Mountain pumped storage facility. At September 30, 2011, uprates to 57 hydroelectric units were completed. The capacity gain was 565 MW, and the average efficiency gain was approximately five percent. There are 38 units remaining to be uprated for reliability and/or capacity increases.

A preliminary analysis performed as part of an update to TVA’s hydrology model indicated that under "probable maximum flood" assumptions, four of TVA's dams would not be high enough to contain the flood waters. A "maximum flood” is an extremely unlikely event, and TVA is taking actions with the aim of ensuring that flood waters would pass safely. TVA implemented interim dam modifications in the second quarter of 2010. Permanent dam modifications are being assessed to

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determine appropriate changes needed at TVA dams.

As a result of the update to TVA's hydrology model, TVA is performing additional hydrological assessments at all of its other dams. The total financial impact of permanent modifications to any additional dams identified as a result of the assessment is being evaluated and should be completed during the later part of 2012.

Natural Gas and/or Oil-Fired

On August 31, 2011, TVA purchased the Magnolia Combined Cycle Plant ("Magnolia") for $436 million. The three-unit natural gas-fired plant is located in Benton County, Mississippi, and has a summer net capability of 909 MW. At September 30, 2011, TVA operated 98 combustion turbine units, 87 of which are simple-cycle and 11 of which are combined cycle. The 87 simple-cycle units provide a maximum of 5,236 MW of summer net capability. The 11 combined cycle units provide a maximum of 2,988 MW 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 11 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. TVA uses simple-cycle units as peaking or backup units. Their relatively low capital requirements and quick start-up capabilities make them favorable for intermittent operation to generate power in periods of high demand or to provide ancillary services. Additionally, low natural gas prices during 2011 have made these units more economical to operate. At September 30, 2011, 24 of the simple-cycle combustion turbine units were leased by private entities and leased back to TVA under long-term leases. TVA also leases the three Caledonia combined cycle units under a long-term lease. Since April 17, 2009, Seven States Southaven, LLC ("SSSL") has owned an undivided 90 percent interest in the three Southaven combined cycle units, and TVA has entered into an agreement under which TVA leases SSSL's undivided 90 percent interest in Southaven and operates the entire facility through April 23, 2013. For additional details, see Note 12.

Diesel Generators

TVA has two diesel generator plants consisting of nine units. At September 30, 2011, these facilities provided 13 MW of summer net capability.

Renewable Resources

TVA owns three wind turbines, capability for digester gas cofiring and biomass cofiring (located at coal-fired sites), and 14 solar energy sites. At September 30, 2011, the wind sites did not provide any summer net capability because they were not operational and the digester gas cofiring site and solar sites provided less than 1 MW of 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 2011, TVA acquired approximately 20 percent of the power that it purchased on the power spot market, six percent through short-term power purchase agreements (agreements with a duration of one year or less but longer than the term of spot market purchase), and approximately 74 percent through long-term power purchase agreements (agreements with a duration of more than one year).

A portion of TVA's capability provided by power purchase agreements is provided under contracts that expire between 2012 and 2032, and the most significant of these contracts are described below.
Power Purchase Contracts (Excluding Wind Contracts)

At September 30, 2011

Type of facility	Location	Summer Net Capability (MW)	Contract Termination Date
Natural gas	Alabama	720	2012
Natural gas	Alabama	500	2012
Natural gas	Mississippi	690	2013
Lignite	Mississippi	440	2032

Under federal law, 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. At September 30, 2011, there were five suppliers, with a combined capacity of 914 MW, whose power is purchased by TVA under this law.

At September 30, 2011, TVA was a party to nine contracts of approximately 20 years' duration for the purchase of up to 1,565 MW of energy from wind generation in various midwest states. TVA began receiving up to 415 MW of energy under these contracts during 2010 and expects to begin receiving energy under the remainder of the contracts during 2012 and 2013 as long as environmental and other contingencies in these contracts are satisfied. TVA may work with counterparties to renegotiate or

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even terminate existing arrangements based on its evaluation of the economics of the contracts given that bringing power from distant locations raises transmission issues and costs.

Renewable Wind Contracts
At September 30, 2011

Location of Wind Farm	Wind Farm Nameplate Capacity (in MW)	Date Delivery Began or Is Expected to Begin
Illinois	300 *	2010
Iowa	115	2010
Iowa	83	2012
Iowa	101	2012
Kansas	201	2012
Kansas	165	2013
Illinois	200	2012
Illinois	150	2012
South Dakota	250	2013

Note
*TVA is currently purchasing the energy output of this 300 MW of generation. The owner of the facility retains the renewable attributes, but TVA has the option to purchase the renewable attributes of this generation in the future.

In addition, TVA has contracted for 27 MW of nameplate renewable energy generation from 15 wind turbine generators located in Buffalo Mountain near Oak Ridge, Tennessee.

In 2003, TVA developed a Generation Partners program to test the interest and feasibility of renewable consumer-owned generation as a source of power for TVA. Since 2009, TVA has seen the program grow from 79 installations to nearly 700 installations in operation providing more than 30 MW of solar, wind, and biomass generation. In addition, there are more than 300 projects approved by TVA that are in various stages of construction. Those projects represent an additional 45 MW of renewable power.

The Renewable Standard Offer program is a pilot program that began in October 2010. Under the program, TVA will accept up to 100 MW of renewable energy. At September 30, 2011, TVA had 8 MW of renewable energy signed up under the program, including two landfill gas generation projects and two solar projects.

Technology advancements will be needed to address some of the operational issues associated with some renewable energy sources, such as energy storage to address intermittency. In addition, 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 more 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, 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 more 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.

During the past five years, TVA supplemented its power generation through power purchases as follows:
Purchased Power*
For the years ended September 30

	2011	2010	2009

Millions of kWh	27,168		28,782		22,088	
Percent of TVA’s Total Power Supply	15.9	%	16.3	%	13.1	%

Note

* Purchased power amounts include generation from Caledonia, which is currently a leased facility operated by TVA. Additionally, purchased power amounts include generation from Magnolia for 2009, 2010, and for a portion of 2011. On August 31, 2011, TVA acquired Magnolia.

Future Power Supply

During 2011, the TVA Board accepted an Integrated Resource Plan (“IRP”), the purpose of which is to create a framework for the analysis of alternatives to address the electricity needs in TVA's service area for the next 20 years. TVA has adopted a vision to lead the nation toward a cleaner energy future. TVA intends to balance production capabilities with power supply requirements by promoting the conservation and efficient use of electricity and, when necessary, buying, building and/or

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leasing assets or entering into purchased power agreements. TVA also intends to employ a diverse mix of energy generating sources and is working toward obtaining greater amounts of its power supply from clean (low or zero carbon emitting) or renewable resources.

Coal-Fired Generation

Consistent with its vision and IRP, TVA is planning to significantly reduce its reliance on coal-fired generation in the future. See Current Power Supply — Coal-Fired above.

Nuclear Generation

Watts Bar Unit 2. On August 1, 2007, the TVA Board approved the completion of Watts Bar Unit 2. The project was originally scheduled to be completed in CY 2012 for an anticipated cost of approximately $2.5 billion, excluding allowance for funds used during construction (“AFUDC”) and the cost of the initial fuel load. TVA has a license to receive and store new nuclear fuel for use in the unit. TVA has applied for an operating license from the NRC and plans to load the new fuel into the Watts Bar Unit 2 reactor following the receipt of the operating license. The project's schedule has experienced some delays as a result of lower than expected construction productivity. Additional delays are expected related to licensing, including a delay from a hearing to be scheduled to take place before an Atomic Safety and Licensing Board to resolve a pending aquatic contention. See Note 20 — Legal Proceedings — Administrative Proceedings Regarding Watts Bar Nuclear Plant Unit 2. As a result, the completion of Watts Bar Unit 2 will take longer than originally planned. As discussed above, on July 13, 2011, the NRC's Near-Term Task Force on the Fukushima Event released its review of insights from the Japanese nuclear events. The report and recommendations based upon it could result in TVA being required to make changes to its operating nuclear units and Watts Bar Unit 2. Such changes are expected to impact the cost and schedule of the project. As a result of one or more of the above developments, TVA believes that the Watts Bar Unit 2 completion date will extend into CY 2013, rather than the last quarter of CY 2012. The construction project and schedule for Watts Bar Unit 2 is currently being reviewed by TVA. Project costs are expected to significantly exceed the previous estimate of approximately $2.5 billion. Updates to the schedule and cost estimates are expected to be completed by the second quarter of FY 2012.

Bellefonte Units 1 and 2. On August 18, 2011, the TVA Board approved the completion of Bellefonte Unit 1. The project is expected to be completed by 2020 for anticipated additional costs of $4.9 billion, exclusive of AFUDC and the cost of the initial fuel load. Advance notification by TVA and additional reviews by both TVA and the NRC are required before construction activities resume. In addition, the TVA Board directed TVA staff not to resume construction activities until the initial loading of fuel at Watts Bar Unit 2 has been accomplished. See Note 20 — Legal Proceedings — Case Regarding Bellefonte Nuclear Plant Units 1 and 2. On September 29, 2011, the NRC extended the Unit 1 and Unit 2 construction permits for Bellefonte to October 2020. The extension is expected to provide the time necessary to complete engineering, licensing, and construction of Unit 1. Bellefonte's construction permits are currently in deferred plant status. TVA will provide notice to the NRC at least four months in advance of activating construction. Asset-preservation and equipment-maintenance activities for Units 1 and 2 are continuing at the site, as well as Unit 1 engineering design work, detailed plant system physical reviews, and assessments.

Bellefonte Units 3 and 4. In October 2007, TVA submitted a combined construction and operating license application ("CCOLA") to the NRC for two new designed Advanced Passive 1000 reactors to be located at the Bellefonte site and designated as Bellefonte Units 3 and 4. On September 29, 2010, TVA notified the NRC that the recently completed final SEIS had determined that completion of the partially constructed Bellefonte Unit 1 is the preferred alternative for near-term additional generating capacity at the Bellefonte site. Consequently, with the exception of the ongoing review of hydrology-related portions of the application, TVA requested that the NRC defer review of the Bellefonte Units 3 and 4 CCOLA pending a final decision of the TVA Board regarding new generation capacity at the Bellefonte site. Contentions have been filed with respect to this application. See Note 20 — Legal Proceedings — Administrative

Proceedings Regarding Bellefonte Units 3 and 4.

Extended Power Uprate. 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. Additional fuel would be added to the reactors during each refueling outage to support the increased steam production. The NRC license for each reactor must be modified to allow reactor operation at the higher power level. TVA has submitted license amendment requests and is currently in discussions with the NRC on selected technical issues affecting EPU licensing. The result of these discussions may impact the amount of power level increase realized by the EPU. Completion of the licensing process will determine the final implementation schedule.

Other Nuclear Initiatives. TVA signed a letter of intent to begin evaluating a site and perform studies for a small modular reactor ("SMR") at its Clinch River site in Oak Ridge, Tennessee. The SMR would have a scalable, modular design allowing utilities to add electrical generation capacity in increments of 150-300 MW. The SMR could be competitive with and able to be built more quickly than larger reactors on the market. TVA notified the NRC in August 2010 that it intends to submit a construction permit application for up to six SMR units on the Clinch River site by the third quarter of 2012.

Impact of Recent Events. TVA believes that the responses to the Japanese nuclear events could translate into changes in plant operations, design, or safety and the imposition of additional requirements by the NRC or other regulatory

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bodies. Should potential changes prove to be significant, the schedule for the commercial operation of Watts Bar Unit 2, as well as future plans for construction at Bellefonte Unit 1 or other facilities, could be affected. To date, several petitions have been filed with the NRC that seek to take actions in response to the Japanese nuclear events that could impact TVA nuclear operations or licensing activities if the requested actions are taken by the NRC. See Note 20 — Legal Proceedings — Petitions Resulting from Japanese Nuclear Events.

Natural Gas-Fired Generation

Part of TVA's strategy of portfolio diversification and reducing air emissions involves the addition of natural gas plants to its generation fleet in the near future. During 2011, TVA expanded its fleet of natural gas-fired units by purchasing Magnolia in Benton County, Mississippi. In addition, TVA is in the process of completing the John Sevier Combined Cycle Facility in northeastern Tennessee. TVA expects to complete this combined cycle facility by mid-CY 2012. The completed facility is expected to add approximately 880 MW of summer net capability to the TVA system at a cost of approximately $820 million. TVA may also decide to make further strategic investments in natural gas-fired facilities in the future. See Current Power Supply — Natural Gas and/or Oil-Fired and Note 19 — New Generation — Combined Cycle.

Hydroelectric Generation

Hydroelectric generation will continue to be an important part of TVA's energy mix as TVA strives to provide clean and low-cost energy. TVA through its Hydro Modernization Program continues to assess its conventional hydroelectric units for reliability and/or capacity increases through 2030. Annual hydroelectric generation is highly dependent on weather conditions and can vary significantly from year to year.

Future Wind Contracts

For a discussion of future wind contracts, see Current Power Supply — Purchased Power and Other Agreements.

Power Purchases

Purchasing power from others will likely remain a component of how TVA addresses the power needs of its service area. TVA intends to balance production capabilities with power supply requirements by promoting the conservation and efficient use of electricity and, when necessary, entering into purchased power agreements.

Energy Efficiency and Demand Response Programs

TVA, in partnership with its distributors and directly served customers, is developing a broad portfolio of energy efficiency and demand response programs designed to help reduce long-term energy supply costs in the TVA service area. An effective set of energy efficiency and demand response programs is consistent with TVA's vision to be one of the nation's leading providers of low-cost and cleaner energy by 2020 and its goal to become the regional leader in energy efficiency. TVA is currently working with its power distributors and directly served customers to develop a five-year plan for its energy efficiency and demand response programs building on success of its program in 2010 and 2011. TVA realized 210 gigawatt hour ("GWh") and 559 GWh of energy efficiency savings in 2010 and 2011, respectively, and expects those savings to continue to grow through 2015.

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 summarizes TVA’s expenses for various fuels for the years indicated:

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Fuel for TVA-Operated Facilities*
For the years ended September 30
(in millions)

	2011	2010	2009
Coal	$2,315	$2,126	$2,127
Natural gas	265	236	129
Fuel oil	54	38	38
Nuclear fuel	261	277	267
Total fuel	$2,895	$2,677	$2,561

Note
* Excludes effects of the fuel cost adjustment deferrals and amortization on fuel expense in the amount of $31 million, $(585) million, and $553 million for the years ended September 30, 2011, 2010, and 2009, respectively.

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)

	2011	2010	2009
Coal	3.17	2.90	2.81
Natural gas and fuel oil	3.96	4.37	3.77
Nuclear	0.53	0.52	0.50
Average fuel cost per kWh net thermal generation from all sources	2.21	2.01	1.92

Note
* Excludes effects of the fuel cost adjustment deferrals and amortization on fuel expense.

TVA also has tolling agreements under which it obtains electricity from outside suppliers. Under these tolling agreements, TVA supplies the fuel to the outside supplier, and the outside 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 kWh for the years indicated:

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

	2011	2010	2009
Cost of fuel (in millions)	$343	$381	$255
Average fuel expense (cents/kWh)	5.40	5.93	6.54

Coal

Coal consumption at TVA's coal-fired generating facilities during 2011 was approximately 36 million tons. At September 30, 2011, and 2010, TVA had 29 days and 36 days of system-wide coal supply at full burn rate, respectively, with net book values of $404 million and $465 million, respectively.

TVA utilizes both short-term and long-term (longer than one year) coal contracts. During 2011, long-term contracts made up 96 percent of coal purchases and short-term contracts accounted for the remaining four percent. TVA plans to continue using contracts of various lengths, terms, and coal quality to meet its expected consumption and inventory requirements. During 2011, TVA purchased coal by basin as follows:

- 38 percent from the Illinois Basin;

- 33 percent from the Powder River Basin in Wyoming;
- 18 percent from the Uinta Basin of Utah and Colorado; and
- 11 percent from the Appalachian Basin of Kentucky, Pennsylvania, Tennessee, Virginia, and West Virginia.

Total system coal inventories were at or below target levels for most of 2011. During 2011, 38 percent of TVA's coal supply was delivered by rail, 22 percent was delivered by barge, and 32 percent was delivered by a combination of barge and rail. The remainder was delivered by truck.

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Natural Gas and Fuel Oil

During 2011, TVA purchased substantially all of its natural gas requirements from a variety of suppliers under contracts with terms of one year or less but managed its exposure to spot market volatility through its Financial Trading Program ("FTP"). At September 30, 2011, all but 18 of TVA's gas generation units 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 2011, TVA purchased substantially all of its fuel oil on the spot market, but managed its exposure to spot market volatility through its FTP. At September 30, 2011, and 2010, the net book value of TVA's natural gas in inventory was $7 million and $8 million, respectively, and the net book value of TVA's fuel oil in inventory was $77 million and $66 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; the enrichment of uranium hexafluoride; and the fabrication of the enriched uranium hexafluoride into fuel assemblies. For its forward five-year (2012-2016) requirements, TVA currently has 100 percent of its uranium mining and milling, conversion services, enrichment services, and fabrication services requirements either in inventory or under contract. TVA anticipates being able to fill its needs beyond this period by normal contracting processes as market forecasts indicate that the fuel cycle components will be readily available.

TVA, the Department of Energy ("DOE"), and certain nuclear fuel contractors have entered into agreements providing for surplus DOE highly enriched uranium (uranium that is too highly enriched for use in a nuclear power plant) to be blended with other uranium. 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 at least 2016. BLEU fuel was loaded into Sequoyah Unit 2 in CY 2008, CY 2009 and CY 2011.

Under the terms of an interagency agreement between the DOE and TVA, in exchange for supplying highly enriched uranium materials for processing into usable BLEU fuel for TVA, the DOE participates to a degree in the savings generated by TVA's use of this blended nuclear fuel. 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. At September 30, 2011, and 2010, the net book value of this nuclear fuel was $1.1 billion.

Mixed Oxide Nuclear Fuel. TVA signed an interagency agreement with the DOE on February 25, 2010, for pre-planning and evaluation activities under which the DOE would reimburse TVA for its costs in investigating the potential use of mixed oxide ("MOX") fuel in TVA's Browns Ferry and Sequoyah nuclear reactors. The MOX fuel is a mixture of plutonium and depleted uranium oxide with the plutonium originating from surplus nuclear weapon material. The DOE is building a plant near Aiken, South Carolina to produce MOX fuel.

The DOE is completing a SEIS with TVA as a cooperating agency to evaluate the potential impact of MOX fuel at Sequoyah and Browns Ferry. TVA is in the evaluation phase and has not committed to using MOX fuel. TVA will only go forward with the program if TVA believes it is safe to do so and will result in a benefit to TVA customers. A decision on whether to go from the evaluation to a licensing phase is expected at the end of 2012. A significant regulatory and planning effort must be completed before the first potential delivery of MOX fuel in 2018.

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 has certain types of radwaste processed and shipped to a disposal facility in Clive, Utah, and TVA also stores some radwaste at its own facilities. In June 2011, TVA entered into a six year contract to enable shipments of radwaste to a new burial facility in Andrews, Texas. TVA is also capable of storing radwaste at its facilities for an extended period of time.

Spent Nuclear Fuel. Under the Nuclear Waste Policy Act of 1982, TVA (and other domestic nuclear utility licensees) entered into a contract with the DOE for the disposal of spent nuclear fuel. Payments to the DOE are based upon TVA's nuclear generation and charged to nuclear fuel expense. Although the contracts called for the DOE to begin accepting spent nuclear fuel from the utilities by January 31, 1998, the DOE has yet to establish a permanent disposal site for spent nuclear fuel. TVA, like other nuclear utilities, stores spent nuclear fuel at its nuclear sites. TVA would have had sufficient space to continue to store spent nuclear fuel in storage pools indefinitely had the DOE begun accepting spent nuclear fuel. The DOE's failure to do so in a timely manner required TVA to construct dry cask storage facilities at Sequoyah and Browns Ferry and to purchase special storage containers for the spent nuclear fuel. The Sequoyah and Browns Ferry dry cask storage facilities have been in use since 2004 and 2005, respectively, and are expected to provide storage capacity through 2026 at Sequoyah and 2018 at Browns Ferry. Watts Bar has sufficient storage capacity in its spent fuel pool to last until approximately 2015. In September 2010, the NRC announced its approval of final revisions to its waste confidence findings and regulations expressing the NRC's confidence that spent nuclear fuel can be safely stored for at least 60 years beyond the licensed life of any reactor and that sufficient

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repository capacity will be available when necessary.

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 offset partially the construction costs of the dry cask storage facilities that TVA incurred through 2004. The United States has also paid TVA approximately $35 million in damages to offset costs for on-site storage from 2005 to 2008. TVA entered into a settlement agreement with the United States in July 2011 that delineates recoverable and non-recoverable costs from the United States for the disposal of spent nuclear fuel and that sets forth a claim submittal and review process. TVA anticipates submitting additional claims to the DOE on an annual basis pursuant to the settlement agreement.

Tritium-Related Services. TVA and the DOE are engaged in a long-term interagency agreement under which TVA will, at the DOE's request, irradiate tritium producing burnable absorber rods to assist the DOE in producing tritium for the Department of Defense ("DOD"). This agreement, which ends in 2035, requires the DOE to reimburse TVA for the costs that TVA incurs in connection with providing irradiation services and to pay TVA an irradiation services fee at a specified rate per tritium-producing rod over the period when irradiation has occurred.

In general, tritium-producing rods are irradiated for a full fuel cycle, which lasts about 18 months. At the end of the cycle, TVA removes the irradiated rods and loads them into a shipping cask. The DOE then ships them to its tritium-extraction facility. TVA loads a fresh set of tritium-producing rods into the reactor during each refueling outage. Irradiating the tritium-producing rods does not affect TVA's ability to operate the reactors to produce electricity.

The interagency agreement provides for irradiation services to be performed in Watts Bar Unit 1 and Sequoyah Units 1 and 2. TVA has provided irradiation services using only Watts Bar Unit 1 since 2003. TVA believes it can meet the DOE and the DOD tritium requirements using Watts Bar Unit 1 while maintaining Sequoyah reactors as backups.

Transmission

The TVA transmission system is one of the largest in North America. TVA's transmission system has 62 interconnections with 14 neighboring electric systems, and delivered nearly 168 billion kWh of electricity to TVA customers in 2011. In carrying out its responsibility for grid reliability in the TVA service area, TVA has operated with 99.999 percent reliability over the last 12 years in delivering electricity to customers. See Item 2, Properties — Transmission Properties.

To the extent that federal law requires 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 separates its transmission functions from its marketing functions.

TVA is subject to federal reliability standards that are set forth by the North American Electric Reliability Corporation ("NERC") and approved by the FERC. These standards are designed to maintain the reliability of the bulk electric system, including TVA's generation and transmission system. These standards include areas such as maintenance, training, operations, planning, modeling, critical infrastructure, physical and cyber security, vegetation management, and facility ratings. TVA recognizes that reliability standards and expectations are becoming more complex and stringent for transmission systems. Compliance with these standards and expectations may necessitate additional personnel and expanded programs to address the associated exposure to risk of noncompliance. TVA continues to evaluate its options to meet these new measures.

Weather and Seasonality

Weather affects both the demand for and the market prices of electricity. TVA uses degree days to measure the impact of weather on its power operations. Degree days measure the extent to which average temperatures in the five largest cities in TVA's service area vary from 65 degrees Fahrenheit. During 2011, TVA had 280, or nearly eight percent, fewer heating degree days and 215, or over nine percent, fewer cooling degree days than in 2010.

	2011	Percent Change	2010	Percent Change	2009
Combined degree days (normal 5,223)	5,541	(8.2)%	6,036	15.9 %	5,209

TVA’s power system is generally a dual-peaking system where the demand for electricity peaks during the summer and winter months to meet cooling and heating needs. TVA met an all-time summer peak demand of 33,482 MW on August 16, 2007, at 102 degrees Fahrenheit and an all-time winter peak demand of 32,572 MW on January 16, 2009, at nine degrees Fahrenheit. As a result of a cold wave during the first week of January 2010, TVA set a number of energy demand records. A new total daily energy demand record of 701 GWh was set on January 8, 2010, and a total weekly energy demand record of 4,633 GWh was set for the seven-day period ended January 10, 2010, when TVA experienced an average demand of 27,582 MW per hour for the entire week.

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After several years of dry weather and drought conditions in the TVA service area, rainfall and runoff totals improved in the Tennessee Valley during 2011 and 2010. Rainfall in the Tennessee Valley was 96 percent of normal in 2011 and 93 percent of normal in 2010. Runoff was 95 percent of normal in 2011 and 111 percent of normal in 2010. Runoff is the amount of rainfall that is not absorbed by vegetation or the ground and actually reaches the rivers and reservoirs that TVA manages. TVA's conventional hydroelectric generation decreased nine percent in 2011 over 2010, and increased 21 percent in 2010 over 2009. Conventional hydroelectric generation was 94 percent of normal in 2011 and 103 percent of normal in 2010. See Item 1A, Risk Factors, for a discussion of the potential impact of weather on TVA.

TVA's service area experienced an unprecedented series of storms on April 27, 2011, and April 28, 2011, causing significant damage to the TVA power system. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — 2011 Challenges — Weather Extremes for more information regarding the impact of the storms on TVA. In addition, during the summer of 2011, as in prior years, TVA had to reduce generation from certain nuclear and coal-fired plants to prevent issues associated with high water temperatures in the Tennessee and Cumberland Rivers.

Competition

TVA provides 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: the fence and 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.

From time-to-time there have been efforts to erode the protection of the anti-cherrypicking provision, and the protection of the anti-cherrypicking provision could be limited and perhaps eliminated by Congressional legislation at some time in the future.

Research and Development

TVA makes investments in science and technological innovation to help enable TVA to meet future challenges in a variety of areas. TVA is currently focused on the following initiatives:

- Development of roadmaps for technologies, including smart grid for transmission, SMRs, and strategic transportation electrification;
- Development and testing of infrastructure and technologies to enable consumer awareness and access to demand response and energy efficiency tools;
- Development and demonstration of coal ash utilization technologies;
- Evaluation, demonstration, and implementation of clean and renewable energy technologies that reduce TVA's environmental footprint, including participation in technology evaluations for carbon capture and sequestration and biomass conversion;
- Evaluation, demonstration, and implementation of technologies that improve the operational efficiency and extend asset life of TVA's generation fleet (fossil, nuclear, and hydroelectric);
- Demonstration of Smartwires technology to enable control of individual transmission line power flow;
- Establishment of an integrated carbon sequestration and environmental stewardship pilot project to provide education about carbon cycle, carbon sequestration, and carbon offsets, bioenergy, and TVA's reforestation and environmental stewardship activities; and
- Development of techniques to secure critical cyber transmission assets.

TVA seeks to leverage research and development activities through partnerships with distributors of TVA power, the Electric Power Research Institute ("EPRI"), the DOE, Oak Ridge National Laboratory, other utilities, universities, and industry vendors. Some of these activities include developing technologies to make electric vehicles and the charging stations that fuel them work together efficiently, dealing with demands on the power grid caused by charging stations, finding ways to minimize demands on the power grid, including solar-assisted charging stations and distributed energy storage, and refining existing processes for power system control to maximize energy efficiency.

Environmental Stewardship Activities

TVA's mission includes managing 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 natural resource protection. There are 49 dams that comprise TVA's integrated reservoir system. The reservoir system provides 800 miles of commercially navigable waterways 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 provides objectives for an integrated approach related to providing cleaner, reliable, and 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,

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sustainable land use, and natural resource management. TVA also manages approximately 293,000 acres of reservoir lands for natural resource protection, recreation, and other purposes.

On August 18, 2011, the TVA Board accepted the Natural Resource Plan ("NRP"). The NRP is designed to enhance stewardship of public recreation facilities, water resources, wildlife and plants, and historic and cultural sites on TVA-managed reservoir lands by helping to guide TVA management to better meet public stewardship objectives while responding to the needs of the TVA region's communities and residents. Implementation of the NRP is expected to be staged over a 20-year period. It is expected to be reviewed and updated at least every five years.

Economic Development Activities

Since its creation in 1933, TVA has promoted 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 service area. 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 its distributor customers provide an incentive award to new and existing companies in TVA's 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 service area. Continued recruitment of desirable companies and retention of the current industrial and manufacturing base also continue to be critical to TVA's economic development mission.

Governance

TVA is governed by the TVA Board. The TVA Act provides that the TVA Board shall be composed of nine members, at least seven of whom shall 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. 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; develops long-range plans to guide TVA in achieving these goals, objectives, and policies; approves annual budgets; and establishes a compensation plan for employees. 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's ownership in TVA. To allow TVA to operate more flexibly than a traditional government agency, Congress exempted TVA from certain general federal laws that govern other agencies, such as federal labor relations laws and the 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 and protecting the environment, cultural resources, and civil rights.

Securities and Exchange Commission

Section 37 of the Securities Exchange Act of 1934 (the "Exchange Act") 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" and a "transmitting utility" as defined in the FPA and, thus, is directly subject to certain aspects of FERC's jurisdiction.

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- 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 rates provided that the order (1) does not impair the reliability of the TVA or surrounding systems and (2) 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 and that the terms and conditions of service are not unduly discriminatory or preferential. The anti-cherrypicking provision of section 212 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 (1) 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 (2) 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.

- Under section 215 of the FPA, TVA must comply with certain standards designed to maintain transmission system reliability. These standards are approved by FERC and enforced by the Electric Reliability Organization.

- 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 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. Criminal penalties may also result from such violations.

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 they are consistent with TVA's obligations under the TVA Act.

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 EPA in a variety of areas, including air quality control, water quality control, and management and disposal of hazardous wastes. See 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.

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Other Federal Entities

TVA's activities and records are also subject to review to varying degrees by other federal entities, including the Government Accountability Office and the Office of Management and Budget. There is also an Office of the Inspector General which reviews TVA's activities and records.

Taxation and Tax Equivalents

TVA is not subject to federal income taxation. In addition, neither TVA nor its property, franchises, or income is subject to taxation by states or their subdivisions. Section 13 of the TVA Act does, however, require TVA to make tax equivalent payments to states and counties in which TVA conducts power operations or in which TVA has acquired power-producing 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 most federal, state, and local environmental laws and regulations. Major areas of regulation affecting TVA's activities include clean air control, water quality control, and management and disposal of solid and hazardous wastes. In the future, regulations in all of these areas are expected to become more stringent and to apply to additional emissions and sources.

Clean Air Regulations

The CAA establishes a comprehensive program to protect and improve the nation's air quality and control sources of air emissions. The major CAA programs that affect TVA's power generation activities are described below.

National Ambient Air Quality Standards. The CAA requires the EPA to set minimum National Ambient Air Quality Standards ("NAAQS") for certain air emissions and the EPA has done this for ozone, particulate matter ("PM"), sulfur dioxide ("SO_2"), and nitrogen dioxide ("NO_2"). The CAA established two types of NAAQS: (1) primary standards, which set limits to protect public health, and (2) secondary standards, which set limits to protect public welfare. Most NAAQS require measurement over a defined period of time (typically one hour, eight hours, twenty-four hours, or one year) to determine the average concentration of the pollutant present in a defined geographic area.

When a NAAQS has been established, each state must recommend, and the EPA must designate, the areas within its boundaries that meet NAAQS ("attainment areas") and those that do not ("non-attainment areas"). Each state must develop a state implementation plan ("SIP") to bring non-attainment areas into compliance with NAAQS and maintain good air quality in attainment areas. Non-attainment designations can have serious repercussions by, among other things, causing states to impose stricter controls on industrial facilities, including TVA's power plants, and complicating the air permitting process for the construction, expansion, or modification of industrial facilities. If counties in which TVA facilities are located are designated as non-attainment for one or more types of emissions, TVA's expansion or modification plans could be affected, possibly resulting in increased costs or schedule delays. The NAAQS that affect or potentially affect TVA operations are summarized below.

NAAQS for Ozone. In March 2008, the EPA issued final rules adopting new, more stringent eight-hour NAAQS for ozone. The EPA lowered the primary standard from 84 parts per billion to 75 parts per billion and promulgated a new

secondary standard that is the same as the primary standard. Virtually all of the larger cities in the TVA service area, as well as those rural counties where ozone monitors are present, will likely be designated as non-attainment areas under the new standard. States must submit to the EPA no later than CY 2014 plans that demonstrate attainment with the standard. Areas must reach attainment by deadlines that vary (CY 2016 to CY 2030) depending on the severity of the ozone problem.

On January 19, 2010, the EPA published a proposed rule that would establish more stringent primary and secondary ozone NAAQS. The EPA announced that it planned to publish the final rule with the new ozone standards before the end of CY 2011. However, on September 2, 2011, the EPA decided to reconsider the proposal at the request of the White House. This effectively leaves the 75 parts per billion ozone standard in place until the required review in 2013. As the ozone standards become more stringent, utilities are expected to come under increasing pressure to further reduce nitrogen oxides ("NO_x") emissions from their existing fossil plants.

NAAQS for Particulate Matter. The EPA has developed annual NAAQS for coarse particulate matter (defined as particles of 10 micrometers or larger) and both annual and 24-hour NAAQS for fine particulate matter (particles with a size of up to 2.5 micrometers). The EPA has stated they will not be changing the current standard for coarse particulate matter. On October 8, 2009, the EPA issued non-attainment designations for areas not meeting the 24-hour NAAQS for fine particulate matter. In the TVA service area, some counties have been designated as non-attainment. TVA operates coal-fired power plants in Anderson and Roane Counties, which have been designated as

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non-attainment. TVA also operates a coal-fired plant in Jackson County, Alabama, and part of that county is designated non-attainment for the annual fine particulate standard. State and some local governments will be required to take steps to control fine particulate pollution affecting these non-attainment areas. Those steps may include stricter controls on industrial facilities, possibly including TVA's power plants, and additional planning requirements for transportation-related sources. States must submit their SIPs to the EPA within three years after the EPA makes final nonattainment area designations. Areas are required to attain the standard no later than five years after the effective date of the designations. The EPA may grant attainment date extensions for up to five additional years in areas with more severe fine particulate matter problems as well as in areas where emissions control measures are not available or feasible. The EPA is currently reconsidering the annual and 24-hour fine particulate standards, and if lowered as expected, it is likely that there will be additional non-attainment designations in the TVA service area.

NAAQS for SO_2. On June 2, 2010, the EPA established a new one-hour SO_2 NAAQS at 75 parts per billion and revoked the 24 hour and annual SO_2 NAAQS. The EPA expects to designate areas as attainment, non-attainment, or unclassifiable by January 2012 based on the existing monitoring network. The State of Tennessee has submitted two areas in the state to the EPA to be considered for non-attainment designations. These recommended designations are based on actual monitoring data from these areas. Non-attainment designations are expected to result in lower SO_2 emission limits for sources of SO_2 in or near these areas. The EPA expects to make attainment designations based on modeling by 2015. Several areas in the TVA service area are expected to be designated non-attainment, and the new standard is expected to make permitting for some new and modified sources, including TVA sources, more difficult. SO_2 emission reductions from some existing TVA and industrial sources may be required.

NAAQS for NO_2. On January 22, 2010, the EPA established a new one-hour NAAQS for NO_2 at the level of 100 parts per billion. To determine compliance with the new standard, the EPA is establishing new ambient air monitoring requirements near major roads as well as in other locations where maximum concentrations are expected. Although existing air quality monitors do not currently show exceedances of this new standard in the TVA service area, additional community and roadside monitoring is expected to result in the designation of new non-attainment areas. The EPA intends to re-designate areas in CY 2016 or CY 2017, as appropriate, based on the air quality data from the new monitoring network. This new short-term standard could make permitting new and modified sources, including TVA sources, more difficult. Several areas in the TVA service area are expected to be designated non-attainment. The EPA considers the TVA service areas as unclassifiable until the required monitoring is completed.

New Source Review. The NSR provisions of the CAA require persons constructing new major air emission sources or making major modifications to existing air pollution sources to obtain a permit prior to such construction or modifications. Major modifications are non-routine physical or operational changes that increase the emissions from an air emission source above specified thresholds. In order to proceed with a project, the facility must first obtain a permit which requires the identification and implementation of Best Available Control Technology ("BACT") for all regulated air pollutants emitted above the prescribed thresholds and an analysis of the ambient air quality impacts of the new construction or major modification. In 1999, the EPA announced plans to actively pursue NSR enforcement actions against electric utilities for making changes to their coal-fired power plants without obtaining an NSR permit. Under section 114 of the CAA, the EPA has the authority to request from any person who owns or operates an emission source information and records about operation, maintenance, and emissions as well as other data relating to such source for the purpose of developing regulatory programs, determining if a violation occurred (such as the failure to comply with NSR), or carrying out other statutory responsibilities. If violations are found to have occurred, the EPA or, possibly, other enforcement authorities could require the installation of new pollution control equipment and could impose fines and penalties. See Current Power Supply — Coal-Fired and Note 20 — Legal Proceedings — Environmental Agreements, — Case Involving Alleged Violations of the New Source Review Regulations at Bull Run, — John Sevier Fossil Plant Clean Air Act Permit, — Paradise Fossil Plant Clean Air Act Permit, — Shawnee Fossil Plant Clean Air Act Permit, and — Information Request from the EPA for a discussion of the Environmental Agreements into

which TVA entered that resolve most issues concerning NSR. Possible claims for NSR violations involving increases in greenhouse gases (“GHG”) and sulfuric acid mist from projects can still be pursued in the future.

Cross State Air Pollution Rule. On July 7, 2011, the EPA announced the final Cross State Air Pollution Rule ("CSAPR"). This rule, required by court order, will replace the existing Clean Air Interstate Rule ("CAIR") effective January 1, 2012. CSAPR will regulate SO_2 and NO_x emissions from upwind states that are negatively impacting ozone and fine particulate air quality in downwind states. This rule will affect electrical generating utilities within 27 states, including TVA coal and gas-fired plants in Alabama, Kentucky, Mississippi, and Tennessee. Stringent state level emission caps for SO_2 and NO_x will begin in 2012 with further reductions required in 2014 for some states. TVA is in the process of evaluating the impact of the rule. On October 6, 2011, the EPA proposed revisions to CSAPR which will allow slightly more ozone season NO_x emissions in Mississippi, where TVA has purchased a combined cycle natural gas plant. It also proposes to reduce the SO_2 and NO_x allowances allocated to coal-fired plants in Alabama, Kentucky, and Tennessee to match the more stringent requirements of the Environmental Agreements for the years 2013, 2018, and 2019.

Hazardous Air Pollutants from Industrial, Commercial, and Institutional Boilers. On March 21, 2011, the EPA published a final rule to establish standards for hazardous air pollutants emitted from industrial, commercial, and institutional boilers and process heaters. The final rule will have minor impacts beginning in CY 2014 for some of TVA’s startup and auxiliary boilers. Most boilers will require scheduled maintenance to ensure optimized combustion, and a few may require the installation of

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controls. Concurrently with the issuance of the rule, the EPA announced reconsideration of several elements in the rule. Until the reconsideration process is completed, final specific requirements are too uncertain to predict. The EPA expects to issue final standards by the end of April 2012.

Hazardous Air Pollutants from Steam Electric Utility Units. On March 16, 2011, the EPA released for public comment a proposed rule to establish standards for hazardous air pollutants emitted from steam electric utility units. As proposed, the rule would require additional controls for hazardous air pollutants including mercury, non-mercury metals, and acid gasses for many of TVA's coal-fired units in the 2015-2016 timeframe. Boiler combustion systems will require scheduled maintenance to ensure optimized combustion to minimize emissions of organic hazardous air pollutants. TVA may choose to idle or retire some units in lieu of investing in additional controls. The EPA also is proposing to revise the New Source Performance Standards ("NSPS") for new and reconstructed coal and oil-fired units for emissions of PM, SO_2, and NO_x. New PM and NO_x standards for modified units are also included in the NSPS. The EPA intends to issue the final rule for utility hazardous air pollutants in December 2011. Until the final rules are published, specific requirements are too uncertain to predict.

The Environmental Agreements. The Environmental Agreements became effective on June 13, 2011. These Agreements settled several outstanding legal challenges resulting in TVA agreeing to pay, among other payments, a total of $10 million in civil penalties to the EPA, Alabama, Kentucky, and Tennessee. In the agreements TVA agreed to retire 18 coal-fired units by the end of 2017 and to remove from service, control, convert, or retire an additional 16 units by June 20, 2019. See Note 20 — Legal Proceedings — Environmental Agreements.

Multi-Pollutant Legislation. The U.S. Congress has expressed interest in prior years 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, SO_2, NO_x, and, in some cases, carbon dioxide ("CO_2"). TVA cannot predict whether multi-pollutant legislation will ultimately become law. The legislative and regulatory landscape is continuing to change for these and other issues, and the outcome cannot be predicted accurately at this time.

Acid Rain Program. Congress established the Acid Rain Program to achieve reductions in emissions of SO_2 and NO_x, the primary causes of acid rain. The program includes a cap-and-trade emission reduction program for SO_2 emissions from power plants. By CY 2000, the program established a nationwide cap on power plant SO_2 emissions of 8.9 million tons per year. The program also contains requirements for power plants to reduce NO_x emissions through the use of available combustion controls. The EPA's CAIR and CSAPR programs are more stringent in the Tennessee Valley region than the Acid Rain Program legislation established by Congress. Therefore, TVA forecasts that the Acid Rain Program will have no impact on TVA other than administrative reporting.

Regional Haze Program. On June 15, 2005, the EPA issued the Clean Air Visibility Rule, amending its CY 1999 regional haze rule, which had established time lines for states to improve visibility in national parks and wilderness areas throughout the United States. Under the amended rule, certain types of older sources may be required to install best available retrofit technology. To comply with this requirement, certain utilities, including TVA, may have to install additional controls for particulate matter, SO_2, and NO_x emissions. TVA does not anticipate that this program has the potential to impact any unit other than Colbert Unit 5.

Opacity. Opacity, or visible emissions, 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 SO_2 and NO_x emissions can adversely affect opacity performance, and TVA and other utilities are addressing this issue. The evaluation of a utility's compliance with state opacity requirements is coming under increased scrutiny, especially compliance during periods of startup, shutdown, and malfunction. SIPs developed under the CAA typically exclude

periods of startup, shutdowns, and malfunctions. The EPA recently reversed its previous approval of Alabama's SIP for opacity and this has been challenged in court.

Climate Change

Legislation. Although it is unlikely that climate change legislation will pass during the 112th Congress, Congress may consider climate change and energy-related proposals. It is not unreasonable to anticipate that new EPA regulations or laws may set limits on GHG emissions for the electric utility sector. Prospects for future proposals becoming law, and the resulting potential impact on electric rates, are not clear at this time. However, if GHG emission reductions from electricity generating facilities become mandatory, the costs and impacts are expected to be significant, especially for coal-fired plants.

Regulation. On April 2, 2007, the U.S. Supreme Court issued a decision in Massachusetts v. EPA holding that GHG emissions, including CO_2, are “air pollutants” under the CAA and requiring the EPA to determine whether GHGs from new motor vehicles pose a threat to health and welfare. On December 15, 2009, the EPA published its finding under the CAA that six identified GHGs contribute to air pollution that may endanger public health or welfare, which triggered the statutory requirement that the EPA regulate emissions of GHGs from motor vehicles. CAA permitting programs for stationary sources must now, as of January 2011, also address GHGs.

PSD/Title V Permitting Programs. On May 13, 2010, the EPA issued a final rule to establish applicability thresholds that

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trigger reviews under the Prevention of Significant Deterioration ("PSD") and Title V permitting programs for GHG emissions from major stationary sources. The threshold levels established by this rule, known as the Tailoring Rule, include both a mass-based calculation and a metric known as the carbon dioxide equivalent ("CO_2e"), which incorporates the global warming potential for each of the six individual gases identified in the endangerment finding. This final rule "tailors" the requirements of these CAA permitting programs to designate which facilities will be required to obtain PSD and Title V permits. Under the Tailoring Rule, the EPA will phase in the CAA permitting requirements for emissions of GHG from stationary sources in at least three phases, the first two of which are relevant to large GHG sources such as TVA's coal-fired generation facilities.

The first phase of the Tailoring Rule became effective January 2, 2011, and applies only to sources that were already subject to PSD and/or Title V programs because of their emission levels of other regulated pollutants. Under the first phase, a source will be subject to PSD requirements for GHGs if (1) the source is already subject to PSD requirements for another pollutant and (2) the source increases its GHG emissions by at least 75,000 tons per year on a CO_2e basis. Those sources may be required to conduct a BACT review for their GHG emissions. The EPA has issued guidance on the technologies or operations that would constitute BACT for GHGs. Pending the commercial demonstration of technologies such as carbon capture and sequestration, it is expected that the use of energy efficiency measures will constitute BACT. Additionally, under the first phase, any source that was required to have a Title V permit for a non-GHG pollutant is required to address GHG requirements, including monitoring, record keeping, and reporting requirements, when it applies for, renews, or revises its Title V permit.

The second phase of the Tailoring Rule became effective July 1, 2011, and, unlike the first phase, is not limited to sources that are already subject to PSD and/or Title V programs. Under the second phase, the EPA has established different thresholds for construction and modification activities. Construction of a major source will become subject to PSD requirements for GHGs if the construction results in an increase in GHG emissions of at least 100,000 tons per year on a CO_2e basis. The modification of an existing major source will become subject to PSD requirements for GHGs if the modification results in an increase in GHG emissions of at least 75,000 tons per year on a CO_2e basis. Additionally, under the second phase, sources that emit GHGs in an amount equal to at least 100,000 ton per year on a CO_2e basis will be required to obtain a Title V permit if they do not have one already.

New Source Performance Standards for GHG Emissions. In December 2010, the EPA entered into a settlement agreement with various states and environmental groups that establishes a schedule for setting new standards for regulating GHG emissions from oil and coal-fired electric generating units. On June 13, 2011, the EPA and these states and environmental groups agreed to a two-month postponement of the EPA's deadline to propose GHG limits on new and modified power plants. The original deadline for the EPA to propose NSPS standards for power plants was July 26, 2011. The deadline was extended to September 30, 2011, but the EPA announced that it will miss that deadline and is working on developing a new schedule for the rule. The original deadline for the final rule was May 26, 2012, but it is possible that the EPA will request an extension for the final rule deadline. These rules will affect TVA, but the extent of the impact is not yet known.

Biomass CO_2 Emissions. On July 1, 2011, the EPA's final rule that determined that GHG emissions from biomass combustion will not be counted toward emission thresholds for PSD and Title V permitting under the second phase of the EPA's Tailoring Rule for a period of three years became effective. During this three-year interim period, the EPA will examine how to evaluate CO_2 emissions from biomass. The EPA released a companion document that provides guidance for the determination of BACT in PSD proceedings involving biogenic CO_2 emissions from bioenergy facilities.

GHG Emission Reporting. On October 30, 2009, the EPA published the final rule for mandatory monitoring and annual reporting of GHG emissions from various categories of facilities, including fossil fuel suppliers, industrial gas suppliers, direct GHG emitters (such as electric generating facilities), and manufacturers of heavy-duty and off-road

vehicles and engines. This rule does not require controls or limits on emissions, but requires data collection beginning January 1, 2010, with the first annual reports due on September 30, 2011. The requirements for monitoring, reporting, and record keeping with respect to GHG emissions from existing units should not have a material impact on TVA.

Executive Orders. In October 2009, President Obama signed Executive Order ("EO") 13514, which requires federal agencies to establish GHG emission reduction targets and prepare inventories of GHG emissions including emissions of CO_2, methane, nitrous oxide, hydroflourocarbons, perfluorocarbon gases, and sulfur hexafluoride. The White House Council on Environmental Quality ("CEQ") released final Federal Greenhouse Gas Accounting and Reporting Guidance on October 6, 2010, which is the basis for these inventories. TVA submitted its first Strategic Sustainability Performance Plan to OMB in June 2010 and updated it per the Executive Order.

In March 2011, the CEQ issued formal guidance to federal agencies on the development of climate change adaptation plans, intended to assist those agencies in fulfilling the requirements of EO 13514. Pursuant to EO 13514, TVA incorporated climate change-related considerations into its existing planning processes, including the development of measurable goals and performance metrics to guide adaptation efforts and assess whether efforts are achieving desired outcomes. TVA completed all 2011 EO 13514 requirements.

International Accords. The Kyoto Protocol was adopted in 1997 by the United Nations to address global climate change by reducing emissions of CO_2 and other GHGs. Although the United States has not adopted the Kyoto Protocol, the

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United States pledged to reduce its GHG emissions in the range of 17 percent below CY 2005 levels by CY 2020 in connection with the 15th Conference of the Parties to the United Nations Framework Convention on Climate Change. An act of the U.S. Congress is required to make such a reduction in GHG emissions enforceable. TVA is unable to predict whether any such climate-related legislation requiring such reductions in GHG emissions ultimately will become law.

Litigation. In addition to legislative activity, climate change issues are the subject of a number of lawsuits, including lawsuits against TVA. See Note 20 — Legal Proceedings — Cases Arising out of Hurricane Katrina and — Global Warming Cases, Southern District of New York.

Indirect Consequences of Regulation or Business Trends. Legal, technological, political, and scientific developments regarding climate change may create new opportunities and risks. The potential indirect consequences could include an increase or decrease in electricity demand, increased demand for generation from alternative energy sources, and subsequent impacts to business reputation and public opinion. See Future Power Supply.

Physical Impacts of Climate Change. The United States Global Change Research Program has concluded, in its 2009 Global Climate Change Impacts in the U.S., that warming of the climate is unequivocal and that the warming observed over the past 50 years is due primarily to human-induced emissions of GHGs. Climate change creates physical and financial risk. Physical risks from climate change may include an increase in sea level and changes in weather conditions, such as changes in precipitation and extreme weather events. TVA does not serve any coastal communities, so the possibility of sea level rise does not directly affect TVA or its customers. Changes in weather conditions, primarily temperature and humidity, will vary TVA's customers' energy needs. Energy use may increase or decrease depending on the duration and magnitude of the changes, having a positive or negative effect on TVA revenues. To the extent climate change impacts the economic health of the TVA service area, it will also impact TVA's revenues as TVA's financial performance is tied to the regional economies it serves.

In November 2009, EPRI published a report entitled Potential Impacts of Climate Change on Natural Resources in the Tennessee Valley Authority Region (the "EPRI Report"). TVA co-sponsored this report, with the objective of providing preliminary information on climate change impacts across the TVA service area. The EPRI Report was based on data from the Fourth Assessment Report of the Interagency Panel on Climate Change published in CY 2007. Subject to substantial uncertainties, the EPRI Report predicted that future (2020-2100) precipitation in the TVA service area will increase approximately three percent during the winter and will be unchanged over the summer in the eastern portion of the TVA service area, but will decline six to seven percent over the western portion of TVA's service area. In addition, extreme weather events such as droughts and floods are also expected to become more frequent, although their frequency is difficult to quantify. The EPRI Report also predicted that temperatures could increase across the TVA service area by approximately one degree Celsius by 2020, two degrees Celsius by 2050, and three to four degrees Celsius by 2100.

If realized, projected changes in precipitation and increasing temperatures could impact future TVA management of water resources in the Tennessee Valley in the following ways:

Power generation. Power generation depends on having sufficient water flow available for hydroelectric generation. Hydroelectric generation will depend on the precipitation runoff within each reservoir drainage basin and the upstream flow into each reservoir. Power generation also depends on having water available for cooling fossil and nuclear power plants. Cooling water is withdrawn and then returned to the source. Increasing water temperatures would require withdrawing more water to achieve the same amount of cooling at fossil and nuclear power plants, increasing the cooling capacities of plants, or reducing power generation to match the available water supply. See Water Quality Control Developments.

Agricultural, municipal, and industrial uses. Agricultural, municipal, and industrial water uses are driven by temperature and extreme weather. Warmer temperatures and drought will increase water demand for these purposes.

Navigation. Commercial navigation relies on maintaining the minimum channel depth as well as reasonable flow rates. Increasingly frequent extreme weather events (drought episodes and flooding) may create more challenges to maintaining the entire length of a commercial navigation channel.

Aquatic life. Water quality impacts the aquatic life dependent on the river system. Changes in water flow due to the increasing frequency of extreme weather events may impact the habitats and biodiversity of the Tennessee River system.

As changes in future precipitation and temperature develop, the current river management system employed by TVA may require periodic re-evaluations to balance the competing water use interests across the Tennessee Valley.

Actions Taken by TVA to Reduce GHG Emissions. TVA has taken significant voluntary steps to reduce GHG emissions, including the following:

- As discussed earlier in this Item 1, Business, TVA has increased its nuclear capacity, modernized its hydroelectric program, increased its purchases of renewable resources, and helped reduce demand for electricity through its

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energy efficiency initiatives.

In 2011, TVA began planting carbon sequestration test plots near Watts Bar Dam in Rhea County, Tennessee. The test plots are designed to demonstrate the beneficial use of two types of vegetation in the terrestrial sequestration of CO_2. While TVA has a long history of tree planting and reforestation efforts, this project is the first time TVA is planting trees to generate offsets from CO_2 sequestration. The project will also evaluate growing biomass as a sustainable energy crop and investigate how terrestrial CO_2 sequestration, wildlife habitat, and land protection can be integrated with environmental stewardship.

- TVA is a member of the Southeast Regional Carbon Sequestration Partnership and is working with EPRI and other electric utilities on projects investigating technologies for CO_2 capture and geologic storage, as well as CO_2 sequestration via reforestation. TVA is also a federal agency participant in the Southeast Climate Center and the Appalachian Landscape Conservation Cooperative.

- Under the Environmental Agreements, TVA agreed to significantly reduce its reliance on coal-fired generation in the future. See Current Power Supply — Coal-Fired for a discussion of the Environmental Agreements and TVA's plans with respect to coal-fired generation.

- In August 2011, the TVA Board approved the completion of Bellefonte Unit 1. This unit is expected to be completed by 2020 and to provide approximately 1,260 MW of capacity.

TVA's CO_2 Emissions. In FY 2011, TVA produced about 85 million tons of CO_2. Historically, TVA has produced about 100 million tons of CO_2 per year. TVA produced less CO_2 in 2011 because of a decrease in coal-fired generation.

Renewable Energy Standards

It is unclear whether the U.S. Congress will adopt a law that will require TVA to acquire a certain percentage of electric generation from a specified list of eligible renewable energy technologies. Under legislation proposing a federal renewable energy standard, TVA would likely be required to ensure that a certain percentage of the electricity it sells is produced by defined renewable energy sources. Although TVA considers all hydroelectric generation a renewable source, it is unlikely all hydroelectric generation will contribute to a future renewable portfolio standard requirement. Some proposals would allow utilities to count hydroelectric facility upgrade generation as renewables for these purposes. In addition, utilities may be allowed to pay alternative compliance payments if the required percentage of electricity generation by renewable energy sources could not be met because of certain restrictions.

Some states have established various requirements for electric utilities to generate a certain amount of electricity from renewable sources, including one state in the TVA service area (North Carolina). The North Carolina program does not apply directly to TVA but does apply to TVA distributor customers located in that state. TVA's policy is to provide compliance assistance to any distributor of TVA power, and TVA is providing assistance to the four distributors that sell TVA power in North Carolina.

Water Quality Control Developments

The EPA proposed a new rule on March 28, 2011, designed to minimize the adverse impacts to fish and shellfish from the design and operation of cooling water intake structures at existing power plants. The new rule identifies proposed changes in the operation of cooling water intakes and modifications to their design. All of the intakes at TVA's existing coal-fired and nuclear generating facilities are likely to be subject to the new rule. Because of the uncertainty of the final rule development, the impacts of the rulemaking are uncertain at this time. However, compliance with the

final rule could potentially result in significant increases in TVA's capital costs and operating and maintenance costs.

The EPA and many states are taking increased interest in potential effects of hydrothermal discharges. TVA is working with states and the EPA to demonstrate that the data collected in the vicinity of TVA plants is sufficient to assess the impacts of thermal discharges on the aquatic environment and validate existing thermal limits. TVA expects to collect substantially more in-stream biological and temperature data than in the past to justify current thermal limits. Specific data requirements in the future will be determined based on negotiations between TVA and regulators.

Water temperature issues at TVA's Cumberland Fossil Plant ("Cumberland") continue to be complicated by reduced flows in the Cumberland River due to ongoing repairs at Wolf Creek and Center Hill dams initiated by the U.S. Army Corps of Engineers in CY 2007. The greatly reduced flows, combined with thermal discharges at Cumberland, have resulted in increased stress to aquatic organisms and have contributed to a portion of Barkley Reservoir being included on the State of Tennessee's CY 2008 list of impaired waters. The lower river flows are expected to continue to impact TVA's ability to operate Cumberland at normal rates, which may result in increased spending for power purchases. TVA continues to work with the U.S. Army Corps of Engineers and TDEC to alleviate aquatic impacts in the Barkley Reservoir and to improve the conditions in the reservoir.

The effluent guidelines required by the Clean Water Act for the Steam Electric Power Generating Category were last

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revised by the EPA in CY 1982. The EPA is currently conducting studies and surveys of wastewater discharges from the industry, and is expected to issue a proposed rule to revise the existing guidelines in CY 2012. A future rule is expected to focus on wastewaters from ash handling and clean air control systems. The revised effluent guidelines are likely to require more restrictive discharge limitations through more advanced wastewater treatment, resulting in significant additional expenditures to meet the new requirements.

As is the case in other industrial sectors, TVA and other utilities are also facing more stringent requirements related to the protection of wetlands, reductions in storm water impacts from construction activities, new water quality criteria for nutrients and other pollutants, wastewater analytical methods, and regulation of herbicide discharges. In addition, other new environmental requirements under the Clean Water Act related to mountain top mining of coal in the Appalachian region may result in additional increases in the costs of fuel for TVA's coal-fired power plants.

Cleanup of Solid and Hazardous Wastes

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.

Non-TVA Sites. TVA is aware of alleged hazardous-substance releases at eight non-TVA areas for which it may have some liability. There is little or no known evidence that TVA contributed any significant quantity of hazardous substances to six of the non-TVA areas. There is evidence that TVA sent some materials to the remaining two non-TVA sites: the David Witherspoon site in Knoxville, Tennessee and the Ward Transformer site in Raleigh, North Carolina.

David Witherspoon Site. The David Witherspoon site in Knoxville, Tennessee, was contaminated with radionuclides, polychlorinated biphenyls ("PCBs"), and metals. The DOE admitted to being the main contributor of materials to the site and cleaned the site up at a reported cost of about $35 million. Although the DOE asked TVA to "cooperate" in completing the cleanup, TVA believes it sent only a relatively small amount of equipment to the site and that none of it was radioactive; accordingly, TVA believes that its liability for these cleanup costs is limited.

Ward Transformer Site. The Ward Transformer site in Raleigh, North Carolina, is contaminated by PCBs from electrical equipment. There is documentation showing that TVA sent a limited amount of electrical equipment containing PCBs to the site in CY 1974. A working group of potentially responsible parties (the "PRP Work Group") is cleaning up on-site contamination in accordance with an agreement with the 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 cost estimate for the first phase of soil cleanup is approximately $55 million. The cost estimate for the second phase of soil cleanup is $10 million. Estimates for cleanup of off-site contamination in the downstream drainage basin range from $6 million to $25 million. There are no reliable estimates for the supplemental groundwater remediation phase. On April 30, 2009, the PRP Work Group filed an amended complaint in federal court against potentially responsible parties who had not yet settled, including TVA, regarding the two phases of soil cleanup. TVA settled this lawsuit and its potential liability for the two phases of soil cleanup for $300 thousand and has been dismissed as a party. Although the settlement with respect to the first two phases does not prohibit TVA from having liability in connection with the other two phases or any natural resource damages, the U.S. Department of Justice is attempting to negotiate a government-wide settlement of the liability of all federal agencies (including TVA) for cleanup of offsite contamination in the downstream drainage basin and the investigative portion of the supplemental groundwater remediation.

TVA operations at some TVA facilities have resulted in oil spills and other contamination that TVA is addressing. At September 30, 2011, TVA's estimated liability for cleanup and similar environmental work for those sites for which sufficient information is available to develop a cost estimate is approximately $22 million and is included in Other liabilities on the Balance Sheet.

Coal Combustion Wastes

On May 4, 2010, the EPA released the text of a proposed rule describing two possible regulatory options it is considering under the Resource Conservation and Recovery Act ("RCRA") for the disposal of coal combustion wastes ("CCWs") generated from the combustion of coal by electric utilities and independent power producers. Under either option, the EPA would regulate the construction of impoundments and landfills, and seek to ensure both the physical and environmental integrity of disposal facilities. CCWs include fly ash, bottom ash, boiler slag, and flue gas desulfurization materials. If these materials are beneficially reused, they are referred to as coal combustion products ("CCP"). If these materials are destined for disposal, they are referred to as CCRs.

Under the first proposed regulatory option, the EPA would list CCRs destined for disposal in landfills or surface impoundments as "special wastes" subject to regulation under Subtitle C of RCRA. Subtitle C regulations set forth the EPA's hazardous waste regulatory program, which regulates management and disposal of wastes. The proposed rule would create a new category of waste so that CCRs would be subject to many of the Subtitle C regulatory requirements. Under this option, coal

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ash would be subject to technical requirements from the point of generation to final disposal. Transporters and treatment, storage, and disposal facilities would be subject to federal requirements and permits. The EPA is considering imposing disposal facility requirements such as liners, groundwater monitoring, fugitive dust controls, financial assurance, corrective action, closure of units, and post-closure care. This first option also proposes requirements for dam safety and stability for surface impoundments, land disposal restrictions, treatment standards for coal ash, and a prohibition on the disposal of treated CCRs below the natural water table. This first option would not apply to certain beneficial reuses of CCWs.

Under the second proposed regulatory option, the EPA would regulate the disposal of CCRs under Subtitle D of RCRA, the regulatory program for non-hazardous solid wastes. Under this option, the EPA is considering issuing national minimum criteria to ensure the safe disposal of CCRs, which would subject disposal units to location standards, composite liner requirements, groundwater monitoring, corrective action standards for releases, closure and post-closure care requirements, and requirements to address the stability of surface impoundments. This second option would not regulate the storage or treatment of CCRs prior to disposal, and no federal permits would be required.

The proposed rule also states that the EPA is considering listing CCRs as a hazardous substance under CERCLA, and includes proposals for alternative methods to adjust the statutory reportable quantity for CCRs. The extension of CERCLA to CCRs could significantly increase TVA's liability for cleanup of past and future CCR disposal.

The EPA has not announced which regulatory approach it will take with respect to the management and disposal of CCWs. TVA is therefore unable to determine the effects of this proposed rule at this time.

Kingston Ash Spill

See Note 8 for a discussion of the environmental issues associated with the Kingston ash spill.

Environmental Investments

From 1977 to 2011, TVA spent approximately $5.4 billion to reduce emissions from its power plants, including $34 million, $58 million, and $172 million in 2011, 2010, and 2009, respectively. Among other things, TVA has taken the following steps to reduce emissions:

SO_2 Emissions. To reduce SO_2 emissions, TVA installed scrubbers on 17 of its coal-fired units, and switched to lower-sulfur coals at 41 coal-fired units. In addition, in August 2011, the TVA Board approved adding scrubbers to three units at Allen Fossil Plant and four units at Gallatin Fossil Plant.

NO_x Emissions. To reduce NO_x emissions, TVA installed SCRs on 21 coal-fired units, installed selective non-catalytic reduction systems on two coal-fired units (although TVA is no longer operating one of these systems because of technical challenges), installed High Energy Reagent Technology systems on seven coal-fired units, installed low-NO_x burners or low-NO_x combustion systems on 46 coal-fired units, optimized combustion on 12 coal-fired units, and began operating NO_x control equipment year round when units are operating (except during maintenance periods) starting in October 2008.

Particulate Emissions. To reduce particulate emissions, TVA has equipped all of its coal-fired units with scrubbers, mechanical collectors, electrostatic precipitators, or baghouses.

Primarily on account of the actions described above, emissions of NO_x on the TVA system have been reduced by 86 percent below peak 1995 levels, and emissions of SO_2 on the TVA system have been reduced by 90 percent below

1977 levels. In addition, the actions described above have also provided a co-benefit of reducing hazardous air pollutants, including mercury, at some units.

TVA estimates that compliance with future CAA requirements (excluding GHG requirements) could lead to additional costs of $3.4 billion from 2012 to 2018. There could be additional material costs if reductions of GHGs, including CO_2, are mandated under the CAA or by 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 because of the uncertainty of such potential actions.

In addition to the costs described above, TVA is planning to invest between $1.5 billion and $2.0 billion to convert wet CCR facilities to dry storage facilities to be completed by 2022. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — 2011 Challenges — Regulatory Compliance — Coal Combustion Residuals.

Estimated Required Environmental Expenditures

The following table contains information about TVA's current estimates on projects related to environmental laws and regulations.

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Air, Water, and Waste Quality Estimated Potential Environmental Expenditures
At September 30, 2011
(in millions)

	Estimated Timetable	Total Estimated Expenditures
Site environmental remediation costs[1]	2012+	$22
Coal combustion residuals[2]	2012-2022	$1,542
Proposed clean air projects[3]	2012-2018	$3,436
Clean Water Act requirements[4]	2015-2020	TBD*

Notes
(1) Estimated liability for cleanup and similar environmental work for those sites for which sufficient information is available to develop a cost estimate.
(2) Includes closure of impoundments, construction of lined landfills, and construction of dewatering systems.
(3) Includes air quality projects that TVA is currently planning to undertake to comply with existing and proposed air quality regulations, but does not include any projects that may be required to comply with potential GHG regulations.
(4) Compliance plans to meet the requirements of a revised or new implementing rule under Section 316(b) of the Clean Water Act and the EPA's revised steam electric effluent guidelines will be determined upon finalization of the rules.
* TBD – to be determined as regulations become final.

Employees

On September 30, 2011, TVA had 12,893 employees, of whom 4,771 were trades and labor employees. Under the TVA Act, TVA is required to pay trades and labor workers hired by TVA and certain of its contractors 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 anticipated in forward-looking statements. Although the risk factors described below are the ones that TVA considers significant, additional risk factors that are not presently known to TVA or that TVA presently does not consider significant may also impact TVA's business operations. Although the TVA Board has the authority to set TVA's own rates and may thus mitigate some risks by increasing rates, there may be instances in which TVA would be unable to partially or completely eliminate one or more of these risks through rate increases over a reasonable period of time or at all. 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.

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.

Because TVA is a corporate agency and instrumentality established by federal law, it may be affected by a variety of laws, regulations, and administrative orders that do not affect other electric utilities. For example, Congress may enact legislation that expands or reduces TVA's activities, changes its governance structure, requires TVA to sell some

or all of the assets that it operates, reduces or eliminates the United States's ownership of TVA, or even liquidates TVA. Although it is difficult to predict exactly how new laws, regulations, and administrative orders may impact TVA, some of the possible effects are described below.

TVA may lose its protected service territory.

TVA's service area is defined by the fence and protected by the anti-cherrypicking provision. If Congress were to eliminate or reduce the coverage of the anti-cherrypicking provision but retain the fence, TVA could more easily lose customers that it could not replace within its specified service area. The loss of these customers could adversely affect TVA's cash flows, results of operations, and financial condition.

The TVA Board may 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 further review. If the TVA Board loses this authority or if the rates become subject to outside review, there could be material adverse effects on TVA including, but not limited to, the following:

The TVA Board might be unable to set rates at a level sufficient to generate adequate revenues to

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service TVA's 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 its ability to manage its business.

TVA may 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 its operations.

TVA may lose responsibility for managing real property currently under its control.

TVA's management of certain reservoir shorelines and real property containing power generation and transmission structures is important for navigation, flood control, and the effective operation of the power system. The integrated management of the shorelines and property assists TVA in fulfilling its overall mission. Restrictions on or the loss of the authority to manage these properties could negatively affect TVA's operations, change the way it conducts such operations, or increase costs.

TVA may become subject to additional environmental regulation.

New environmental laws, regulations, and orders may become applicable to TVA or the facilities it operates, and existing environmental regulations may be revised or reinterpreted in a way that adversely affects TVA. Possible areas of future regulation include, but are not limited to, the following:

Greenhouse gases. Costs to comply with future regulation of CO_2 and other GHGs may negatively impact TVA's cash flows, financial position, and results of operations. The cost impact of legislation or regulation cannot be determined at this time.

Coal combustion residuals. The federal government has proposed stronger regulations concerning coal-combustion residuals, and state governments may impose additional regulations. These regulations may require TVA to make additional capital expenditures, increase operating and maintenance costs, or even lead it to shut down certain facilities.

Renewable energy portfolio standards. TVA is not currently obligated to provide a percentage of the power it sells from renewable sources but may be required to do so in the future. Such developments could require TVA to make significant capital expenditures, increase its purchased power costs, or make changes in how it operates its facilities.

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

TVA is required to comply with comprehensive and complex laws, regulations, and orders. The costs of complying with these laws, regulations, and orders are expected to be substantial, and costs could be significantly more than TVA anticipates, especially in the environmental area. To settle the EPA and other claims involving the NSR violations, TVA agreed to retire 18 units and pay various penalties. The cost to install the necessary equipment to comply with existing environmental laws, regulations, settlement agreements, and orders at some other facilities may render some facilities uneconomical, which may cause TVA to retire or idle additional facilities. In addition, TVA is required to obtain numerous permits and approvals from governmental agencies that regulate its business, and TVA may be

unable to obtain or maintain all required regulatory approvals. If there is a delay in obtaining required regulatory approvals or if TVA fails to obtain or maintain any approvals or to comply with any law, regulation, or order, TVA may have to change how it operates certain facilities, may be unable to operate certain facilities, or may have to pay fines or penalties.

TVA may be responsible for environmental clean-up activities.

TVA may be responsible for on-site liabilities associated with the environmental condition of facilities or property that TVA has acquired or that TVA operates regardless of when the liabilities arose, whether they are known or unknown, and whether they were caused by TVA, prior owners or operators, or a third party. TVA may also be responsible for off-site liabilities associated with the off-site disposal of waste materials containing hazardous substances or hazardous wastes.

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The costs associated with remediating the Kingston ash spill as well as other CCR facilities may be significantly higher than TVA anticipates.

TVA estimates that the cost of remediating the Kingston ash spill will be between $1.1 billion and $1.2 billion. Actual costs could substantially exceed expected costs if, among other things, TVA has to remove more ash than currently anticipated, additional environmentally sensitive material is uncovered in the river sediment, there are delays in the ash removal process, or the methods of final remediation change. Also, certain costs that are currently either not probable or reasonably estimable are not included in this estimate, such as any additional penalties and natural resource damages, future lawsuits, future claims, and costs associated with new laws and regulations. In addition, TVA expects to spend between $1.5 billion and $2.0 billion to convert its wet CCR facilities to dry collection facilities. Actual costs may substantially exceed expected costs.

TVA may have to make significant contributions in the future to fund its pension plans.

At September 30, 2011, TVA's pension plans had assets of $6.5 billion compared to liabilities of $11.3 billion. The qualified plan is mature with nearly 24,000 retirees receiving benefits of approximately $600 million per year. The costs of providing pension benefits depend upon a number of factors, including, but not limited to:

- Provisions of the pension plans;
- Changing employee demographics;
- Rates of increase in compensation levels;
- Rates of return on plan assets;
- Discount rates used in determining future benefit obligations and required funding levels;
- Future government regulation; and
- Levels of contributions made to the plans.

Any of these factors or any number of these factors could keep at high levels or even increase the costs of providing pension benefits and require TVA to make significant contributions to the pension plans. Financial market conditions such as those experienced during the recession of CY 2008 - 2009 and an unfavorable fourth quarter of 2011 may result in lower expected rates of return on plan assets, loss in value of the investments, and lower discount rates used in determining future benefit obligations. These changes would negatively impact the funded status of the plans. Additional contributions to the plans and absorption of additional costs would negatively affect TVA's cash flows, results of operations, and financial condition.

Approaching or reaching TVA's debt ceiling could limit TVA's ability to carry out its business. Additionally, TVA's debt ceiling could be made more restrictive.

The TVA Act provides that TVA can issue Bonds in an amount not to exceed $30.0 billion outstanding at any time. At September 30, 2011, TVA had $24.7 billion of Bonds outstanding (not including noncash items of foreign currency exchange loss of $7 million and net discount on sale of Bonds of $235 million).

Approaching or reaching the debt ceiling may adversely affect TVA's business by limiting TVA's ability to access capital markets and increasing the amount of debt TVA must service. Also, Congress may lower TVA's debt ceiling

or broaden the types of financial instruments that are covered by the ceiling. Either of these scenarios may also restrict TVA's ability to raise capital to maintain power program assets, to construct additional generation facilities, to purchase power under long-term purchase power agreements, or to meet regulatory requirements. In addition, approaching or reaching the debt ceiling may lead to increased legislative or regulatory oversight of TVA's activities and could lead to negative credit rating actions.

Demand for electricity may be significantly reduced, negatively affecting TVA's cash flows, results of operations, and financial condition.

Some of the factors that could reduce the demand for electricity include the following:

Economic downturns. Renewed economic downturns 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 if TVA's industrial customers reduce their operations and thus their consumption of power.

Loss of customers. The loss of customers could have a material adverse effect on TVA's cash flows, results of

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operations, or financial condition, and could result in higher rates.

Change in technology. Research and development activities are ongoing to improve existing and alternative technologies to produce electricity, including gas turbines, wind turbines, fuel cells, microturbines, solar cells, and distributed generation devices. 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, negatively affecting TVA's cash flows, results of operations, and financial condition.

Catastrophic events may negatively affect TVA's cash flows, results of operations, and financial condition.

TVA's cash flows, results of operations, and financial condition may be adversely affected, either directly or indirectly, by catastrophic events such as fires, earthquakes, solar events, droughts, floods, tornadoes, wars, national emergencies, terrorist activities, pandemics, and other similar destructive events. Examples of such events include, but are not limited to, the effect of the Japanese nuclear events, the April 2011 storms in TVA's service area, and the August 2011 earthquake in the eastern United States. These events, the frequency and severity of which are unpredictable, may, among other things, lead to legislative or regulatory changes that affect the construction, operation, and decommissioning of nuclear units and the storage of spent fuel; limit or disrupt TVA's ability to generate and transmit power; reduce the demand for power; disrupt fuel or other supplies; require TVA to produce additional tritium; lead to an economic downturn; require TVA to make substantial capital investments for repairs, improvements, or modifications; and create instability in the financial markets. If costs to construct nuclear units significantly increase or the public determines that nuclear power is less desirable as a result of any of these events, TVA may be forced to forego any future construction at its nuclear facilities or shut them down. This would make it substantially more difficult for TVA to obtain greater amounts of its power supply from low or zero carbon emitting resources and to replace its generation capacity when faced with retiring or idling certain coal-fired units. Additionally, some studies have predicted that climate change may cause certain catastrophic events, such as droughts and floods, to occur more frequently in the Tennessee Valley region, which could lead to adverse impacts on TVA.

Weather conditions may influence TVA's ability to supply power and its customers' demands for power.

Extreme temperatures may increase the demand for power and require TVA to purchase power at high prices 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 below normal 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 systems for cooling at certain of TVA's generating facilities, thereby limiting its ability to operate these generating facilities.

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

TVA is completing the construction of Watts Bar Unit 2, planning to resume construction of Bellefonte Unit 1, completing construction of the John Sevier Combined Cycle Facility, scheduling major upgrades to and modernization of current generating plants, and evaluating construction of more generating facilities in the future. These activities involve risks of schedule delays and overruns in the cost of labor and materials. In addition, if TVA does not obtain the necessary regulatory approvals, 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, reduced transmission system integrity and reliability, and higher operating costs.

TVA is the sole power provider for its 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 additional 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, may negatively affect TVA's cash flows, results of operations, and financial condition.

TVA's assumptions about the future may be inaccurate.

TVA uses certain assumptions in order to develop its plans for the future. Such assumptions include economic forecasts, anticipated commodity prices, cost estimates, construction schedules, power demand forecasts, the

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appropriate generation mix to meet demand, and potential regulatory environments. Should these assumptions be inaccurate, or be superseded by subsequent events, TVA's plans may not be effective in achieving the intended results which could negatively affect TVA's ability to meet electricity demand, cash flows, results of operations, and financial condition, as well as the way TVA conducts its business.

Failure to meet TVA's energy efficiency and demand reduction goals may negatively impact TVA's cash flows, results of operations, and financial condition.

TVA's energy efficiency and demand reduction initiatives are important components of TVA's plan to meet future power needs in its service territory. It is possible, however, that results from these programs may be less favorable than TVA anticipates. If TVA fails to meet its energy efficiency and demand reduction goals, TVA may, among other things, need to purchase additional power from third parties or build or purchase additional generation facilities.

Owning and operating nuclear units subjects TVA to nuclear risks and may result in significant costs that adversely affect its cash flows, results of operations, and financial condition.

TVA has six operating nuclear units, has resumed construction of one nuclear unit that is scheduled to be placed in service in CY 2013, and is scheduled to resume construction on another unit to be placed in service by 2020. Risks associated with these units include the following:

Nuclear Risks. 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. Although TVA carries certain types of nuclear insurance, the amount that TVA is required to pay in connection with a nuclear incident could significantly exceed the amount of coverage provided by insurance. Also, any nuclear incident in the United States, even at a facility that is not operated 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 $705 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 insurance premiums, reducing the availability and affordability 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. Moreover, Congress could impose revenue-raising measures on the nuclear industry to pay claims exceeding the limit for a single incident under the Price-Anderson Act.

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

- The value of the investments in the trust declines significantly, as it did during the 2008-2009 recession, or the investments fail to achieve the assumed real rate of return;
- The decommissioning funding requirements are changed by law or regulation;
- The assumed real rate of return on plan assets, which is currently five percent, is lowered by the TVA Board or is overly optimistic;
- The actual costs of decommissioning are more than planned;
- 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 additional contributions to the NDT, the contributions may negatively affect TVA's cash flows, results of operations, and financial condition.

Increased Regulation. The NRC has broad authority to adopt requirements related to the licensing, operation, and decommissioning of nuclear generation facilities that can result in significant restrictions or requirements on TVA. If the NRC modifies existing requirements or adopts new requirements, TVA may be required to make substantial capital expenditures at its nuclear plants or make substantial contributions to the NDT. 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.

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TVA's generation and transmission assets or their supporting infrastructure 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 or their supporting infrastructure fail to operate as planned or if necessary repairs or upgrades are delayed, TVA, among other things:

- May have to invest a significant amount of resources to repair or replace the assets or the supporting infrastructure;
- May be unable to operate the assets for a significant period of time;
- May have to purchase replacement power on the open market;
- May not be able to meet its contractual obligations to deliver power;
- May not be able to maintain the integrity or reliability of the transmission system at normal levels;
- May have to remediate collateral damage caused by a failure of the assets or the supporting infrastructure;
- May have to increase its efforts to reduce vegetation intrusions onto transmission lines to comply with applicable regulations; and
- May be required to invest substantially to meet more stringent reliability standards.

In addition, the failure of TVA's generation and transmission assets or their supporting infrastructure to perform as planned may cause health, safety, and environmental problems and may even result in events such as the failure of a dam, the failure of a containment pond, or a nuclear incident. Any of these potential outcomes may negatively affect TVA's cash flows, results of operations, and financial condition.

TVA's information technology assets may not operate as planned.

TVA's operations are extensively computerized, and a failure of TVA's information technology assets may significantly disrupt operations. Among other things, such a failure may negatively impact TVA's accounting and administrative systems as well as TVA's ability to generate and transmit power, and may also lead to the loss or inappropriate release of critical data. Such a failure may be caused by, among other things, a cyber attack, a natural disaster, a solar event, an electromagnetic event, the age and condition of TVA's information technology assets, and human error. Any of these occurrences could negatively affect TVA's cash flows, results of operations, and financial condition.

TVA's organizational transformation efforts may fail.

TVA has been working to improve its control systems, operating standards, and corporate culture. The failure to achieve or maintain improvements in these areas may contribute to the likelihood of incidents such as the Kingston ash spill occurring or other operational or financial challenges that could adversely affect TVA's cash flow, results of operations, and financial condition.

TVA's reputation may be negatively impacted.

As with any company, TVA's reputation is a vital element of its ability to effectively conduct its business. TVA's reputation could be harmed by a variety of factors, including the failure of a generating asset or supporting

infrastructure, a failure of its organizational transformation efforts, acts or omissions of TVA management, or a significant dispute with a TVA distributor-customer. Any deterioration in TVA's reputation may harm TVA's relationships with its distributor-customers and stakeholders, may increase TVA's cost of doing business, and may potentially lead to the imposition of additional laws and regulations that negatively affect the way TVA conducts its business.

TVA's service reliability could be affected by problems at other utilities or at TVA facilities or by the increase in intermittent sources of power.

TVA's transmission facilities are directly interconnected with the transmission facilities of neighboring utilities and are thus part of the larger interstate power transmission grid. Accordingly, problems at other utilities or at TVA's facilities may cause interruptions in TVA's service to its customers. In addition, the increasing contribution of intermittent sources of power such as wind and solar may place additional strain on TVA's system as well as on surrounding systems. If TVA suffers a service interruption, TVA's cash flows, results of operations, financial condition, and reputation may be negatively affected.

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Events which affect the supply of water in the Tennessee River system and Cumberland River system may interfere with TVA's ability to generate power.

An inadequate supply of water in the Tennessee River system and Cumberland River system could negatively impact TVA's cash flows, results of operations, and financial condition by reducing generation not only at TVA hydroelectric plants but also at its coal-fired and nuclear plants, which depend on water from the river systems near which they are located for cooling and for use in boilers where water is converted into steam to drive turbines. An inadequate supply of water could result, among other things, from periods of low rainfall or drought, the withdrawal of water from the river systems by governmental entities or others, and incidents affecting bodies of water not managed by TVA. While TVA manages the Tennessee River and large portions of its tributary system in order to provide much of the water necessary for the operation of its power plants, 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's having insufficient water to meet the needs of its plants. If TVA has insufficient water to meet the needs of its plants, TVA may be required to reduce generation at its affected facilities to levels compatible with the available supply of water.

TVA's fuel and purchased power supplies may be disrupted.

TVA purchases coal, uranium, natural gas, fuel oil, and electricity from a number of suppliers. Disruption in the acquisition or delivery of fuel or purchased power may result from a variety of physical and commercial events, political developments, or environmental regulations affecting TVA's fuel and purchased power suppliers as well as from transportation or transmission constraints. If one of TVA's fuel or purchased power suppliers fails to perform under the terms of its contract with TVA, TVA might have to purchase replacement fuel or power, 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. In addition, any disruption of TVA's fuel and purchased power supplies could require TVA to operate higher cost plants, thereby adversely affecting TVA's cash flows, results of operations, and financial condition. Moreover, if TVA is unable to acquire enough replacement power or fuel and does not have enough reserve generation capacity available to offset the loss of power or fuel, TVA may not be able to supply enough power to meet demand, resulting in power curtailments, brownouts, or even blackouts.

Failure to attract and retain an appropriately qualified workforce may negatively affect TVA's results of operations.

TVA's business depends on its ability to recruit and retain key executive officers as well as skilled professional and technical employees. The inability to attract and retain an appropriately qualified workforce could adversely affect TVA's ability to, among other things, operate and maintain generation and transmission facilities, complete large construction projects such as Watts Bar Unit 2 and Bellefonte Unit 1, and successfully implement its organizational transformation efforts.

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, as a result of catastrophic events or otherwise. 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 of any such proceedings may require TVA to change its business practices or procedures and may require TVA to reduce emissions from its coal-fired units, including emissions of GHGs, to a greater extent than TVA had planned.

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

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

Commodity Price Risk. Prices of commodities critical to TVA's operations, including coal, uranium, natural gas, fuel oil, crude oil, construction materials, emission allowances, and electricity, have been extremely volatile in recent years. If prices of these commodities increase, TVA's rates may increase.

Investment Price Risk. TVA is exposed to investment price risk in its NDT, its asset retirement trust ("ART"), and its pension plan. If the value of the investments held in the NDT or the pension fund either decrease or fail to increase in accordance with assumed rates of return, TVA may be required to make substantial contributions to these funds.

Interest Rate Risk. Changes in interest rates may increase the amount of interest that TVA pays on new Bonds that it

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issues, decrease the return that TVA receives on its short-term investments, decrease the value of the investments in TVA’s pension fund and trusts, and increase the losses on the mark-to-market valuation of certain derivative transactions into which TVA has entered.

Counterparty Credit and Performance 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 may be adversely affected. In addition, the failure of a counterparty to perform may make it difficult for TVA to perform its obligations, particularly if the counterparty is a supplier of electricity or fuel.

Currency Exchange Rate Risk. Over the next several years, TVA plans to spend a significant amount of capital on clean air projects, capacity expansion, and other projects. A portion of this amount may be spent on contracts that are denominated in one or more foreign currencies. The value of the U.S. dollar compared with other currencies has fluctuated widely in recent years, and, if not effectively managed, foreign currency exposure could negatively impact TVA’s cash flows, results of operations, and financial condition.

TVA’s ability to use derivatives to hedge certain risks may be limited.

TVA currently uses derivatives to hedge a variety of risks. Depending on how regulatory agencies interpret and implement the provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act, TVA’s hedging costs may increase and its ability to use derivatives to hedge certain risks may be limited. These occurrences may, among other things, cause TVA to change its operations, increase the risks to which TVA is exposed, and negatively affect TVA’s cash flows.

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

TVA uses cash provided by operations together with proceeds from power program financings to fund its current cash requirements. It is critical that TVA continues 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 debt capital since TVA is not authorized to issue equity securities.

TVA's credit ratings may be impacted by Congressional actions or by a downgrade of the United States's sovereign credit ratings.

TVA's current credit ratings are not based solely on its underlying business or financial condition but are based to a large extent on the 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.

Although TVA Bonds are not obligations of the United States, TVA, as a corporate agency and instrumentality of the United States government, may be impacted if the sovereign credit ratings of the United States are downgraded. This occurred in August 2011, when one rating agency lowered its long-term rating on the United States and then lowered TVA's rating based on the application of the rating agency's government-related entities criteria. Among other things, an additional or further downgrade of the United States's sovereign credit ratings could have the following effects:

- TVA's access to funds held in United States Treasury accounts could be limited or denied.

- TVA's own credit ratings could be downgraded as a result of a downgrade of the United States's credit ratings.

- The economy could be negatively impacted, resulting in reduced demand for electricity, increased expenses for borrowings, and increased cost of fuels, supplies, and other material required for TVA's operations.

TVA, together with owners of TVA securities, may be impacted by additional or further downgrades of TVA’s credit ratings.

Additional or further downgrades of TVA’s credit ratings may 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 may have the following effects:

- A downgrade could 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 may reduce the amount of cash available for other purposes, which may result in the need to increase borrowings, to reduce other expenses or capital investments, or to increase power rates.

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

- A downgrade below a contractual threshold may prevent TVA from borrowing under three credit facilities totaling $2.5 billion.

- A downgrade may lower the price of TVA's securities in the secondary market, thereby hurting investors who sell TVA securities after the downgrade and diminishing the attractiveness and marketability of TVA Bonds.

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.

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. If TVA were to experience extreme financial difficulty and were unable to make payments of principal or interest on its Bonds, the federal government would not be legally obligated to prevent TVA from defaulting on its obligations. Principal and interest on TVA securities are payable solely from TVA's net power proceeds. Net power proceeds are 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 market for TVA's 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, the 2009 Series A and B power bonds, and the power bonds issued under TVA's electronotes® program, which is a 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 to sell their Bonds or as to 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, as well as the liquidity of the markets for those securities.

If a particular series of Bonds is offered through underwriters, those underwriters may attempt to make a market in the Bonds. Dealers other than underwriters may also make a market in TVA securities. However, the underwriters and dealers are not obligated to make a market in any TVA securities and may terminate any market-making activities 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 as an agent of the United States by negotiated purchase or by eminent domain.

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Generating Properties

At September 30, 2011, generating assets operated by TVA consisted of 53 active coal-fired units and six idled coal-fired units, six nuclear units, 109 conventional hydroelectric units, four pumped storage units, 11 combined cycle units, 87 simple cycle units, 9 diesel generator units, one wind energy site (currently nonoperational), and 14 solar energy sites. In addition, TVA has biomass cofiring capability at one of its coal-fired sites and digester gas cofiring capability at a second coal-fired site. See Item 1, Business — Current Power Supply — Net Capability for a chart that indicates the location, capability, and in-service dates for each of these properties, which chart is incorporated by reference into this Item 2, Properties. At September 30, 2011, 24 of the simple cycle combustion turbine units were leased to private entities and leased back to TVA under long-term leases, and TVA is leasing the three Caledonia combined cycle units under a long-term lease. In addition, since April 17, 2009, SSSL has owned an undivided 90 percent interest in the three Southaven combined cycle units, and TVA has entered into a lease with SSSL under which TVA leases SSSL's undivided 90 percent interest in the facility and operates the entire facility through April 23, 2013. For additional details, see Note 12. TVA is also in the process of constructing additional generating assets. For a discussion of these assets, see Item 1, Business — Future Power Supply.

Transmission Properties

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

- Approximately 15,940 circuit miles of transmission lines (primarily 500 kilovolt and 161 kilovolt lines);
- 498 transmission substations, power switchyards, and switching stations; and
- 1,240 customer connection points (customer, generation, and interconnection).

At September 30, 2011, certain qualified technological equipment and other software related to TVA's transmission system were leased to private entities and leased back to TVA under long-term leases.

Natural Resource Stewardship Properties

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

- Approximately 11,000 miles of reservoir shoreline;
- Approximately 293,000 acres of reservoir land;
- Approximately 650,000 surface acres of water; and
- Over 100 TVA managed recreation facilities (campgrounds, boat ramps, fishing piers, hiking trails, and day use areas).

As part of its stewardship responsibilities, TVA approval is required to be obtained before any obstruction affecting navigation, flood control, or public lands can be constructed in or along the Tennessee River and its tributaries. TVA manages licenses, leases or easements on United States property entrusted to TVA to over 250 commercial campgrounds and over 200 commercial marinas.

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 are the Knoxville Office Complex and the Chattanooga Office Complex. TVA purchased the majority of its Chattanooga Office Complex on January 1, 2011, and leases the remaining portion of this complex. TVA plans to purchase the remaining portion of this complex after the lease expires on September 30, 2012. TVA also has a significant number of buildings in Muscle Shoals, Alabama, and is currently evaluating strategies 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. The primary but not exclusive sources of TVA's 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 providing 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.

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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 (the "Basic Resolution"), 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

From time to time, TVA is party to or otherwise involved in lawsuits, claims, proceedings, investigations, and other legal matters ("Legal Proceedings") that have arisen in the ordinary course of conducting TVA's activities, as a result of catastrophic events or otherwise. While the outcome of the Legal Proceedings to which TVA is a party cannot be predicted with certainty, any adverse outcome to a Legal Proceeding involving TVA may have a material adverse effect on TVA's cash flows, results of operations, and financial condition.

For a discussion of Legal Proceedings involving TVA, see Note 20 — Legal Proceedings, which discussion is incorporated by reference into this Item 3.

ITEM 4. REMOVED AND RESERVED

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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 2007 through 2011 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 2007, 2008, 2009, and 2010 financial statement presentation to conform to the 2011 presentation.

Selected Financial Data[1], [2]
For the years ended, or at, September 30
(dollars in millions)

	2011	2010	2009	2008	2007
Sales (millions of kWh)	167,730	173,662	163,804	176,304	175,529
Peak load (MW)	31,434	31,778	32,572	32,027	33,482
Operating revenues	$11,841	$10,874	$11,255	$10,382	$9,326
Fuel expense	$2,926	$2,092	$3,114	$2,756	$2,249
Purchased power expense	$1,427	$1,127	$1,631	$1,420	$1,200
Operating and maintenance expense	$3,617	$3,232	$2,395	$2,307	$2,353
Net interest expense	$1,305	$1,294	$1,272	$1,376	$1,232
Net income	$162	$972	$726	$817	$423
Construction expenditures	$2,417	$2,015	$1,793	$1,984	$1,379
Total assets	$46,393	$42,753	$40,017	$37,137	$33,732
Financial obligations					
Net long-term statutory debt, excluding current maturities	$22,412	$22,389	$21,788	$20,404	$21,099
Discount notes	482	27	844	185	1,422
Current maturities of long-term debt, net	1,537	1,008	8	2,030	90
Total short-term statutory debt	2,019	1,035	852	2,215	1,512
Total statutory debt[3]	$24,431	$23,424	$22,640	$22,619	$22,611

Capital leases[4]	$5	$47	$77	$95	$104
Leaseback obligations	$1,282	$1,353	$1,403	$1,353	$1,072
Energy prepayment obligations	$717	$822	$927	$1,033	$1,138

Notes

(1) See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations for a description of special items in 2011, 2010, and 2009 affecting results in those years.

(2) See Item 1A, Risk Factors and Note 20 for a discussion of risks and contingencies that could affect TVA's future financial results.

(3) Statutory debt is debt subject to the $30.0 billion limit on bonds, notes, and other evidences of indebtedness as defined in the TVA Act of 1933, as amended.

(4) Included in Accounts payable and accrued liabilities and Other long-term liabilities 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

The Tennessee Valley Authority ("TVA") operates the nation's largest public power system. At September 30, 2011, TVA provided electricity to approximately 50 large industrial customers, six federal agency customers, and 155 distributor customers that serve over nine million people in parts of seven southeastern states. TVA generates virtually all of its revenues from the sale of electricity, and in 2011 revenues from the sale of electricity totaled $11.7 billion. As a wholly-owned agency and instrumentality of the United States, however, TVA differs from other electric utilities in a number of ways:

(1) TVA is a government corporation.

(2) The area in which TVA sells power is limited by the Tennessee Valley Authority Act of 1933, as amended, 16 U.S.C. §§ 831-831ee (as amended, the "TVA Act") under a provision known as the "fence"; however, another provision of federal law known as the "anti-cherrypicking" provision generally protects TVA from being forced to provide access to its transmission lines to others for the purpose of delivering power to customers within substantially all of TVA's defined service area.

(3) The rates TVA charges for power are not set or reviewed by another entity, such as a public utility commission. TVA's rates are set solely by the TVA Board. In setting rates, however, 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 be sold at rates as low as feasible.

(4) TVA 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 and is authorized by the TVA Act to issue bonds, notes, and other evidences of indebtedness ("Bonds") in an amount not to exceed $30.0 billion outstanding at any given time. Although TVA's operations were originally funded primarily with appropriations from Congress, TVA has not received any appropriations from Congress for any activities since 1999 and, as directed by Congress, has funded essential stewardship activities primarily with power revenues.

Executive Summary

Although the worst recession since the 1930s has technically ended, difficult economic conditions and decreased customer demand continued to persist in 2011. In addition, more stringent environmental regulations have impacted generating resources and production costs, and the timing and magnitude of pending regulations create uncertainty. Customers and stakeholders are also expecting power system operations to be cleaner and have less of an impact on the environment in the future. TVA is taking actions to address these challenges, such as idling or retiring older coal-fired generating units, changing the way coal combustion residuals are stored, continuing to install clean air equipment, and continuing its focus on the safe operation of its nuclear units in light of global events.

TVA Vision

TVA's renewed vision is to be one of the nation's leading providers of low-cost and cleaner energy by 2020. More specifically, TVA intends to be:

- The nation's leader in improving air quality;

- The nation’s leader in increased nuclear production;
- The Southeast’s leader in increased energy efficiency.

During 2011, the TVA Board accepted an integrated resource plan (“IRP”) which recommends a strategic direction focusing on a diverse mix of electricity generation sources, including nuclear power, renewable energy, natural gas and energy efficiency, as well as traditional coal and hydroelectric power. TVA intends to move toward more generation with low or no emissions. TVA considers fuel mix in making decisions about additional generation, and is expected to rely on nuclear, natural gas-fired capacity, and energy efficiency as the primary means to meet future electricity needs. The restart of Browns Ferry Nuclear Plant (“Browns Ferry”) Unit 1, the decision to complete Watts Bar Nuclear Plant (“Watts Bar") Unit 2, the reactivation of the construction permits for the existing Bellefonte Nuclear Plant ("Bellefonte") units, the decision to complete Bellefonte Unit 1, the filing of combined construction and operating license applications ("CCOLA") for two new units at Bellefonte, the purchase of the Magnolia Combined Cycle Plant ("Magnolia"), and the construction of the John Sevier Combined Cycle Facility are examples of TVA’s pursuit of generation sources with low or no emissions. These projects require capital investment in the current year and over the next several years. Another challenge in this area is that TVA must have sufficient generation capacity to meet peak demands. Consequently, TVA is exploring alternatives to reduce or shift peak energy demands.

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Linking the Vision to Performance

During 2011, TVA set measures and evaluated its operational performance by focusing on two key indicators. The first measure was net cash flow, which is cash flow from operations plus investing cash flow less net cash flow from change in the fuel cost adjustment deferral account. The second measure was equivalent availability factor, which measures the availability of TVA's generation units within the nuclear and fossil-fueled fleets. The 2011 results compared with targets for these key indicators are reflected in the following chart.

Corporate Measure	Target	Actual
Net cash flow	$(935) Million	$(774) Million
Equivalent availability factor	86.0%	85.1%

TVA exceeded its target for net cash flow by $161 million due to higher cash received from power sales and lower spending on construction expenditures than expected. These items were partially offset by the acquisition of the Magnolia facility which was not included in the 2011 target.

TVA did not meet its equivalent availability factor target for 2011 because of extended outages at two of its larger coal-fired plants as well as an extended outage at one of its combined cycle plants.

Beginning in 2012, TVA plans to measure success using a vision scorecard. Processes will be established to monitor progress in meeting the vision's objectives.

Net cash flow is not a measure of financial performance under accounting principles generally accepted in the United States ("GAAP"). Accordingly, it should not be considered as a substitute for cash flow data prepared in accordance with GAAP. However, TVA uses net cash flow as an indicator of TVA's ability to meet its debt service and availability of funds for capacity expansion and other business requirements.

TVA calculates net cash flow as Net cash provided by operating activities plus Net cash used from investing activities less net cash flow from change in fuel cost adjustment deferral. The following reconciles the net cash flow to Net cash provided by operating activities.

Non-GAAP Reconciliation
For the year ended September 30, 2011

Net cash provided by operating activities	$2,437	
Plus: Net cash used from investing activities	(3,142	)
Less: Net cash flow from change in fuel cost adjustment deferral	(69	)
Net cash flow	$(774	)

2011 Highlights

Financial

Power sales were three percent lower during 2011 than 2010. The lower demand for electricity was primarily weather-driven but was also affected by lower demand for electricity by TVA's largest industrial customer, which has been curtailing operations. See 2011 Challenges — Weather Extremes below.

TVA had net income for 2011 of $162 million as compared to $972 million for 2010. Revenues from the sale of electricity totaled $11.7 billion for 2011, and despite the decrease in sales, revenues were nine percent higher in 2011

as compared to 2010. The $1.0 billion increase in revenue was related to the recovery of fuel and purchased power costs in rates and substantially offset the $1.1 billion increase in fuel and purchased power costs. Expenses related to repair of damage caused by storms, higher operating and maintenance expenses related to nuclear refueling outages at generating facilities, the Environmental Agreements, and increases in the cost of employee benefit programs all contributed to the decrease in net income for 2011 as compared to 2010.

Rate Changes and Adjustments

In April 2011, TVA implemented a new wholesale rate structure, which includes seasonal demand and energy ("SDE") and time-of-use ("TOU") rates. The revised rate structures provide price signals intended to incentivize distributor and end-use customers to shift energy usage from high-cost periods to less expensive periods. The rates are not intended to provide additional revenue for TVA (although individual customers may see some effect on their bills), but are intended to more closely align TVA’s revenues with its costs.

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The new rate structure removed most fuel costs from the base rate. In conjunction with that change, the rate structure was also revised to establish a separate fuel rate that includes the costs of natural gas, fuel oil, purchased power, coal, emission allowances, nuclear fuel and other fuel-related commodities; realized gains and losses on derivatives purchased to hedge the costs of such commodities; and tax equivalents associated with the fuel cost adjustments. Instead of adjusting the energy rates as was the case with the previous rate structure where fuel costs were a component of the base rate, the fuel cost adjustment now establishes the separate fuel rate that is applicable for each month. The following table summarizes the impact that the fuel cost adjustment had on TVA's average wholesale firm rate during 2011.

Month	Base Fuel Rate (¢/kWh)	Fuel Cost Adjustment Rate (¢/kWh)	Total Fuel Rate (¢/kWh)	Impact on Total Average Wholesale Firm Rate
October 2010	1.851	1.127	2.978	6.4%
November 2010	1.851	0.735	2.586	(5.0)%
December 2010	1.851	0.476	2.327	(3.5)%
January 2011	1.851	0.548	2.399	1.0%
February 2011	1.851	0.436	2.287	(1.5)%
March 2011	1.851	0.613	2.464	2.5%
April 2011	n/a	n/a	2.376	(1.2)%
May 2011	n/a	n/a	2.347	(0.4)%
June 2011	n/a	n/a	2.366	0.3%
July 2011	n/a	n/a	2.689	4.5%
August 2011	n/a	n/a	2.741	0.7%
September 2011	n/a	n/a	2.664	(1.0)%

At its August 18, 2011 meeting, the TVA Board approved an adjustment addendum that increased existing base wholesale rate charges beginning in October 2011, and that is expected to result in an increase of approximately two percent in total existing wholesale rate charges. The adjustment to base rates was designed to generate an additional $234 million in revenue in 2012. This increase in revenue will help fund projects tied to TVA's vision, including increasing efficiency of operating assets, increasing energy efficiency/demand response initiatives and funding compliance with emerging regulatory requirements resulting from events like Fukushima.

Environmental Matters

In December 2010, the Environmental Protection Agency ("EPA") issued a report that evaluated progress under its Acid Rain Program (“ARP”). The ARP, established under Title IV of the 1990 Clean Air Act ("CAA") Amendments, requires major emission reductions of sulfur dioxide (“SO_2”) and nitrogen oxides (“NO_x”) by the electric power industry. The December 2010 report contains information examining emission reductions, reviewing compliance results and market activity, and comparing changes in emissions to changes in pollutant concentrations. Data contained in this report indicates TVA has reduced SO_2 emissions from its coal-fired generating plants at a faster rate than the national average for the industry during the past three decades and that TVA has significantly reduced SO_2 emissions during the past three decades. Furthermore, the report indicates that TVA’s NO_x emissions have been significantly reduced since CY 1990 and that the reduction in these emissions has been at a rate faster than the national average during the past two decades.

New Generation

Natural Gas-Fired Generation. Despite the impacts of the recession of 2008-2009, which reduced TVA sales by approximately seven percent at its peak, and the current relatively sluggish economy, TVA believes new generation sources will be needed to meet anticipated load growth. Load growth is a key planning assumption that was examined and approved by both the TVA Board and TVA external stakeholders through the IRP process in 2011. In keeping with its generation strategy to move toward more generation with low or no emissions, TVA continues to evaluate natural gas-fired resource options. Existing combined cycle plants located within or closely adjacent to the TVA service territory generally meet these criteria and provide suitable opportunities for acquisition or long-term purchased power contracts.

On August 31, 2011, TVA acquired Magnolia for $436 million. The Magnolia facility is a three-unit natural gas-fired combined cycle plant with approximately 900 MW of summer net capability located in Benton County, Mississippi, and has been a source of purchased power for TVA since the plant began operation in 2003. See Note 19 — New Generation.

Additionally, TVA is in the process of completing the John Sevier Combined Cycle Facility in northeast Tennessee. TVA expects to complete the combined cycle facility by mid-CY 2012. The completed facility is expected to add approximately 880 MW of summer net capability to the TVA system at a cost of approximately $820 million.

Nuclear Generation. On August 18, 2011, the TVA Board approved a plan to finish construction of Bellefonte Unit 1,

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located in Hollywood, Alabama. TVA began construction of Bellefonte Unit 1 in 1974 but placed the site in deferred status in 1988. Bellefonte Unit 1 is scheduled to be completed by 2020, at an estimated additional cost of $4.9 billion exclusive of Allowance for Funds Used During Construction ("AFUDC") and the cost of the initial fuel load. Construction of Bellefonte Unit 1 is planned to begin after initial fuel loading at Watts Bar Unit 2.

Stewardship Activities

On August 18, 2011, the TVA Board accepted the Natural Resource Plan ("NRP"). The NRP is designed to enhance stewardship of public recreation facilities, water resources, wildlife and plants, and historic and cultural sites on TVA-managed reservoir lands by helping to guide TVA management to better meet public stewardship objectives while responding to the needs of the TVA region’s communities and residents. Implementation of the NRP is expected to be staged over a 20-year period. It is expected to be reviewed and updated at least every five years.

Economic Development

TVA's economic development efforts helped recruit or expand over 140 companies into the TVA service area during 2011. These companies announced capital investments of over $4.9 billion and the expected creation and/or retention of over 43,000 jobs.

2011 Challenges

TVA faced several challenges during 2011 which impacted its operations and financial condition, including those discussed below.

Construction Projects

TVA had two major projects that experienced construction delays in 2011.

Watts Bar Unit 2. The project's schedule has experienced some delays as a result of lower than expected construction productivity and there will likely be a delay from licensing-related activities, including a delay resulting from a hearing scheduled to take place before an Atomic Safety and Licensing Board to resolve a pending aquatic contention.

On July 13, 2011, the Nuclear Regulatory Commission's ("NRC") Near-Term Task Force on the Fukushima Event released its review of insights following the Japanese nuclear events recommending that the NRC propose safety improvements in areas ranging from loss of power to earthquakes, flooding, spent fuel pools, containment venting, and preparedness. Actions taken upon the review could result in TVA being required to make changes to its operating nuclear units and Watts Bar Unit 2. Such changes are expected to possibly impact the cost and schedule of the project. See Item 1, Business — Current Power Supply — Nuclear — Response to Recent Events.

As a result of one or more of these developments, TVA believes that the Watts Bar Unit 2 completion date will extend into CY 2013, rather than the last quarter of CY 2012 as had been scheduled. The construction project and schedule for Watts Bar Unit 2 is currently being reviewed by TVA. Project costs are expected to significantly exceed the previous estimate of $2.5 billion. Updates to the schedule and cost estimates are expected to be completed by the second quarter of FY 2012.

TVA has received a license from the NRC to allow TVA to receive, inspect, and store new nuclear fuel at the Unit 2 site. The new fuel began arriving at the Watts Bar site during the summer of 2011. TVA plans to load the new nuclear fuel into the Unit 2 reactor following receipt of the operating license.

In November 2011, the NRC provided notice of its draft environmental report issued in connection with the licensing of Watts Bar Unit 2. In the draft report, the NRC staff concludes that the environmental impacts from the operation of Watts Bar Unit 2 are generally consistent with previous environmental reviews of the unit's operation and are in some cases less than previously identified.

For legal proceedings related to Watts Bar Unit 2, see Note 20 — Legal Proceedings — Administrative Proceedings Regarding Watts Bar Nuclear Plant Unit 2.

Browns Ferry Cooling Tower. A new cooling tower for Browns Ferry had been scheduled to go into operation in the summer of 2011. Completion of the project has been delayed, and TVA now expects the new cooling tower to be completed in the spring of 2012. As a result of not having the additional cooling capacity the new cooling tower would have provided, TVA was required to reduce generation at Browns Ferry during parts of the summer of 2011 to comply with permit requirements related to discharge water temperature.

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Regulatory Compliance

Environmental Agreements. On April 14, 2011, TVA entered into two agreements (collectively, the "Environmental Agreements") that generally absolve TVA until 2019 from any liability, subject to certain limitations and exceptions, under the New Source Review ("NSR") requirements of the CAA for maintenance, repair, and component replacement projects that were commenced at TVA's coal-fired units prior to the execution of the Environmental Agreements. Possible claims for NSR violations involving increases in greenhouse gases ("GHG") and sulfuric acid mist from projects can still be pursued in the future. Claims for increases in particulates also can be pursued except at TVA's Allen Fossil Plant, Bull Run Fossil Plant, Kingston Fossil Plant ("Kingston"), and Gallatin Fossil Plant and Unit 5 at TVA's Colbert Fossil Plant.

The Environmental Agreements provide for a civil penalty of $10 million which was paid in July 2011 and require TVA to provide $60 million to be divided by Alabama, Kentucky, North Carolina, and Tennessee to fund environmental projects with a preference for projects in the Tennessee River watershed, of which $4 million was paid in 2011. In addition, TVA will invest $290 million in energy efficiency projects, demand response projects, renewable energy projects, and other projects.

Certain legal and administrative proceedings have been terminated or will be narrowed in scope as a result of the Environmental Agreements. See Note 20 — Legal Proceedings — Environmental Agreements for more information regarding these proceedings.

In conjunction with the Environmental Agreements and TVA's movement towards more generation with low or no emissions, TVA announced plans to retire 2,700 MW of coal-fired capacity through the end of 2017.

Browns Ferry. TVA discovered a problem involving Browns Ferry Unit 1 low pressure coolant injection valve, which had failed because of a manufacturing deficiency, when the reactor was shut down for refueling in October 2010. TVA repaired the valve, and reported the problem to the NRC. Other similar valves were also inspected and improvements made to prevent future problems of this type. On May 9, 2011, the NRC notified TVA that it issued a red finding related to the valve's performance. The red finding denotes an issue of "high safety significance" and places Browns Ferry in the multiple/repetitive degraded cornerstone category of the NRC's Reactor Oversight Program. TVA appealed the red finding determination. A decision to uphold the finding was made following an NRC internal review. This red finding also means that all of the Browns Ferry units will be subject to increased oversight and inspection, including a maintenance inspection, and inspections focusing on reactor safety and safety culture. The inspections will continue through 2012. TVA is taking actions to address the performance deficiency, which could include mid-cycle outages to perform corrective work, as well as safety-related issues. TVA anticipates spending between $75 million and $120 million during 2012 related to the acceleration of material improvements at Browns Ferry. Estimates of costs related to additional corrective actions over the next several years are in the process of being developed, including improvements at Watts Bar and TVA's Sequoyah Nuclear Plant.

Kingston Ash Spill. Cleanup and recovery efforts related to the Kingston ash spill in conjunction with federal and state agencies continued during 2011. TVA currently estimates the recovery process will be substantially completed in 2014 although monitoring may continue beyond that date. TVA has accrued a portion of the estimated cost in current liabilities, with the remaining portion accrued as a long-term liability on TVA's balance sheets. Costs incurred since the event through September 30, 2011, totaled $749 million with a remaining estimated liability of $376 million. As work continues to progress and more information is available, TVA will review its estimates and revise them as appropriate. See Note 8.

TVA has not included the following categories of costs in the above estimate since it has determined that these costs are currently either not probable or not reasonably estimable: penalties (other than the penalties set out in the

Tennessee Department of Environment and Conservation ("TDEC") order), regulatory directives, natural resources damages (other than payments required under a memorandum of agreement with TDEC and the Fish and Wildlife Service establishing a process and a method for resolving the natural resource damages claim), future lawsuits, future claims, long-term environmental impact costs, final long-term disposition of ash processing area, costs associated with new laws and regulations, or costs of remediating any mixed waste discovered during ash removal process. There are certain other costs that will be incurred that have not been included in the estimate as they are appropriately accounted for in other areas of the financial statements. Associated capital asset purchases are recorded in property, plant, and equipment. Ash handling and disposition costs from current plant operations are recorded in operating expenses. A portion of the pond and dredge cell closure costs are also not included in the estimate as those costs are included in the non-nuclear asset retirement obligation liability.

TDEC issued a civil penalty order of approximately $12 million to TVA for the Kingston ash spill, citing violations of the Tennessee Solid Waste Disposal Act and the Tennessee Water Quality Control Act. Of the $12 million, TVA has already satisfied $8 million of the obligation and may also be credited up to $2 million for performing environmental projects approved by TDEC. The remaining obligation will be paid in installments through July 2012.

Coal Combustion Residuals ("CCRs"). On December 15, 2010, a leak was identified in the clay liner of the gypsum pond at Kingston. TVA submitted to the TDEC a two-phase Corrective Action Plan (“CAP”) to install a synthetic liner on the gypsum pond. The synthetic liner is being designed and installed to meet the requirements of the CAP, current TDEC regulations, and anticipated RCRA Subtitle D requirements for CCR storage. The gypsum pond was expected to be back in service by September 2011; however, due to weather and other unforeseeable conditions, implementation of the CAP was

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delayed. Under the Environmental Agreements, TVA is generally not allowed to operate Kingston after September 20, 2011, without the scrubbers in operation, and the scrubbers cannot be operated unless TVA has the ability to store the gypsum the scrubbers produce. Accordingly, TVA stopped operating Kingston on September 19, 2011, and began the fall maintenance outage to tie in the new dry fly ash handling system. Work on the first phase of the new gypsum storage facility was completed on October 21, 2011 and TDEC approval to place the facility back in operation was received on November 16, 2011. As the Kingston fall outage work is completed, and as power is needed, Kingston's units will be brought back on line. The approximate cost of the first phase of work for the gypsum facility is $24 million. The estimate and schedule for the second phase of work has not been established at this time.

TVA is studying the adequacy of storage capacity at other fossil-fuel plants. If it is found that remaining capacity is not adequate, interruptions in the capability of these plants to operate may also result.

Weather Extremes

TVA’s service area experienced an unprecedented series of storms on April 27, 2011, and April 28, 2011, causing significant damage to the TVA power system. The hardest hit areas were central and northern Mississippi, northern Alabama, and the eastern portion of Tennessee.

Browns Ferry, located in northern Alabama, and the switchyard at Browns Ferry sustained only minimal damage from the storms, but damage to the TVA transmission system at offsite locations resulted in the plant being without sufficient external electricity supply. Emergency backup power systems, including on-site diesel generators, provided power to safely cool down the reactors during the ensuing shutdown. All Browns Ferry units returned to full availability status by early June 2011. Additionally, transmission lines at Widows Creek Fossil Plant (“Widows Creek”), also located in north Alabama, were damaged as a result of this storm system.

TVA estimates the cost of the events to be $39 million for structural repairs including capitalized expenditures of $29 million and operating and maintenance expenditures of $10 million. The cost of power purchased to meet demand while Browns Ferry and other generating units were not connected to the electric grid was $95 million. The increase in TVA’s fuel rate from May 2011 to July 2011 is due in part to help recover the cost of the replacement power purchased as a result of these storms.

Investment Funds

Nuclear Decommissioning Trust Fund. The nuclear decommissioning trust (“NDT”) portfolio increased in value by $4 million in 2011. The balance at September 30, 2011, was less than the present value of the estimated future nuclear decommissioning costs under the NRC methodology and under GAAP. TVA submitted an NDT funding assurance plan to the NRC during 2009 utilizing the external sinking fund method as described in the NRC’s regulations. The plan is based on estimated positive long-term investment performance above an anticipated increase in the decommissioning liability over the remaining lives of TVA’s nuclear units. The funding assurance plan provides mechanisms to address any potential shortfalls under a schedule with the goal of ensuring sufficient funds are available when the nuclear plants are eventually decommissioned. At September 30, 2011, the NDT was 114 percent funded under the assurance plan that TVA submitted to the NRC.

Pension Plans. Although financial markets improved during the first part of 2011, they lost the majority of gains during a downturn in the last months of 2011. Net assets in the plans at September 30, 2011, were approximately $6.5 billion and obligations were approximately $11.3 billion for a net underfunded status of $4.7 billion at September 30, 2011. The ability of the qualified plan’s funded status to quickly improve is limited because the qualified pension plan pays approximately $600 million of benefits each year to nearly 24,000 retirees. TVA made a contribution to the plan of $270 million in September 2011.

In September 2011, the Tennessee Valley Authority Retirement System ("TVARS") Board approved a long-term investment plan which contains a “dynamic de-risking” strategy that calls for investments to be shifted into assets that better match the liability, such as long duration fixed income securities, over time as funding targets are met. See Risk Management Activities — Investment Price Risk and Note 18 — Plan Investments.

Future Challenges

Many of the challenges that TVA faced in 2011 will continue to be challenges in the future, including those related to constructing or acquiring new generating assets, converting TVA’s CCR facilities, idling, retiring, or adding emissions control equipment to TVA’s coal-fired units, funding new capital projects as TVA nears the $30.0 billion ceiling on Bonds outstanding, and funding TVA’s NDT and pension plan, as well as slower than expected economic recovery resulting in lower projected sales for 2012. In addition, TVA may face additional challenges discussed below.

Capital Investments

TVA faces potentially large capital requirements to maintain its power system infrastructure and invest in new power assets, including generation assets using cleaner energy sources. Due to the age, lower capacity, and lower efficiency of TVA’s

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older coal-fired units, it may not be economical to continue to operate some units in the future, particularly if new environmental laws or regulations become effective. However, discontinuing the use of some coal-fired units may be constrained by transmission expansion that will be required before the units are taken out of service. TVA is also planning to convert all of its wet CCR facilities to dry collection facilities and the estimated cost of this conversion is between $1.5 billion and $2.0 billion. See Item 1, Business — Current Power Supply and — Future Power Supply.

Pending Regulation and Legislation

Environmental. TVA anticipates that clean air regulations will eventually require all coal-fired units to install air quality controls, including scrubbers and selective catalytic reduction systems ("SCRs") for SO_2, NO_x, and mercury control. TVA also expects that legislation or regulations will eventually require it to reduce carbon dioxide ("CO_2") emissions or purchase CO_2 allowances. Furthermore, TVA believes it is likely that new laws or regulations will come into effect in the future that will require electric utilities to obtain a specified portion of their power supply from renewable resources. The cost of compliance with any such laws and regulations is currently unknown, but compliance could require significant expenditures by TVA. TVA would have to recover such costs in rates or pursue some other action which, among other options, might include idling or retiring additional coal-fired units. See Item 1, Business — Current Power Supply and — Future Power Supply.

Health Care. There is a risk of increased health care costs associated with federal health care reform legislation. TVA plans to continue to monitor the changes required by this legislation and to review its medical plan to comply with required changes in a cost-effective manner. During 2011, TVA experienced an 11 percent increase in health care cost provided to active and retired employees.

Generating Fleet

Nuclear Generation. TVA management has established a response team to analyze the Japanese nuclear events of 2011 and is also analyzing the ability of TVA's plants to safely shut down and safely remain in that state during simultaneous natural disasters such as floods, earthquakes, and/or tornadoes.

The team also provided short, intermediate, and long-term recommendations for TVA sites related to additional precautionary actions TVA may adopt. Short-term actions include adding additional satellite phones for emergency responders when normal communications are damaged and adding small portable electric generators for lights, charging batteries, and other vital equipment. Longer-term actions may include changes to the storage methods for spent nuclear fuel. Finally, TVA will further evaluate its switch-yards for seismic vulnerabilities and may provide additional backup power sources at its nuclear plants.

TVA believes that the Japanese nuclear events could translate into changes in plant operations, design, or safety and the imposition of additional requirements by the NRC or other regulatory bodies. Should potential changes prove to be significant, the schedule to complete and the costs associated with the commercial operation of Watts Bar Unit 2, as well as future plans for construction at Bellefonte Unit 1 or other facilities, could be affected. Several petitions have been filed with the NRC that seek to take actions in response to the Japanese nuclear events that could impact TVA nuclear operations or licensing activities if the requested actions are taken by the NRC. See Note 20 — Legal Proceedings — Petitions Resulting from Japanese Nuclear Events.

In addition to the anticipated changes from the Japanese nuclear events, the issuance of the red finding at Browns Ferry will also impact TVA's nuclear operations over the next few years. The red finding requires the NRC to conduct special inspections at Browns Ferry, the results of which could have ramifications for TVA's nuclear generation facilities. The results of the inspections will aid the NRC in deciding whether additional regulatory actions are necessary to assure public health and safety. The special inspections will look at the entire range of programs,

processes, and procedures in place for operating, maintaining, designing, and modifying Browns Ferry. The NRC will also review the results from a third-party assessment of Brown Ferry's safety culture. The NRC inspections and reviews related to the red finding are anticipated to occur over the next couple of years.

Coal-Fired Generation. Future environmental regulations could result in significant increases in capital expenditures and operating costs, which, in turn, could lead to increased liquidity needs and financing requirements. TVA currently has approximately 13,800 MW of coal-fired generation. Approximately 4,900 MW have neither scrubbers nor SCRs. Although TVA uses scrubbers on its largest generating units and low sulfur coal on other units to remove SO_2 and SCRs and other controls to reduce NO_x emissions, several of TVA’s older coal-fired plants do not have a complete set of modern clean air equipment, and their lower efficiency leads to higher CO_2 emission rates. As part of the Environmental Agreements, the TVA Board approved the retirement of 18 older coal-fired units at three power plants. Due to the age, lower capacity, and lower efficiency of some units, it may not be economical to install new emission control equipment; accordingly, TVA may choose to idle or retire additional coal-fired units. As TVA idles or retires coal-fired units, there may be some risks related to TVA’s ability to meet customer demand for low-cost power in the future. TVA is attempting to address these risks through a process which includes the diversification of fuel sources and fuel type, as well as physical and financial hedging programs for fuel and purchased power, and increased emphasis on investments in energy efficiency, demand response, and communication technologies and end-use customer devices. See Item I, Business — Current Power Supply — Coal-Fired and Environmental Matters.

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Thermal Issues. During the summer of 2011, as in prior years, TVA had to reduce generation from certain nuclear and coal-fired plants to prevent issues associated with high water temperatures in the Tennessee and Cumberland Rivers. As discussed above, an additional cooling tower is being constructed at Browns Ferry, but the potential for future reductions in generation exist at larger coal-fired plants such as Cumberland Fossil Plant.

Debt Ceiling

The TVA Act specifies that TVA may not have more than $30.0 billion Bonds outstanding at one time. At September 30, 2011, TVA had $24.7 billion of Bonds outstanding. Increased future capital expenditures along with a restrictive debt ceiling may pose a challenge to TVA's ability to maintain low and competitive power rates.

Inflation

The economy recently experienced a very deep recession which has led to increased unemployment and low industrial capacity utilization. Given the current low levels of capacity utilization and high unemployment, inflationary pressures should remain low. However, a strong, sustained recovery with increasing labor, construction, and commodity costs, as well as high interest rates, could result in higher costs for TVA and pressure to increase power rates.

Safeguarding Assets

Physical Security. TVA is responsible for the physical security of the assets entrusted to it across its service area. In seeking to protect these assets, TVA follows numerous regulatory requirements that set minimum standards for physical security and uses a combination of threat analysis, technology, and partnerships with the public to help deter, detect, and respond to specific threats to critical assets. In addition, training programs for TVA's workforce are being developed in order to help foster a strong culture of security awareness throughout TVA. TVA is likely to invest in future protective measures based on security assessments being performed through 2012 that are expected to identify opportunities for improvement.

Nuclear Security. Nuclear security is carried out in accordance with federal regulations as set forth by the NRC. These regulations are designed for the protection of TVA's nuclear power plants, the public, and employees from the threat of radiological sabotage and other nuclear-related terrorist threats. TVA has nuclear security forces to guard against such threats. TVA currently plans to spend between $100 million and $140 million between 2012 and 2013 on upgrades to its nuclear security infrastructure which includes amounts related to the implementation of the NRC recommendations from the Japanese nuclear event. See Part 1, Current Power Supply — Nuclear — Response to Recent Events.

Cyber Security. Cyber security is a serious and ongoing challenge for the energy sector. Cyber threats to energy delivery systems exist and can impact critical functions that, if lost or degraded, could result in an inability to generate or effectively transmit power, which could lead to lost revenue.

Cyber security and the protection of TVA operations and activities are a priority. TVA uses a defense-in-depth security model in an effort to prevent, detect, respond to, and recover from threats against its systems. TVA plans to modify and upgrade its protections as technology advances and threat environments and business requirements change. TVA currently plans to spend approximately $30 million to $40 million in cyber security updates between 2012 and 2015.

As part of the U.S. government, TVA coordinates with and works closely with the Department of Homeland Security ("DHS") and the United States Computer Emergency Readiness Team ("US-CERT"). US-CERT functions as a liaison between DHS and the public and private sector to coordinate responses to security threats from the internet.

Future Workforce Needs and Development

Although TVA has traditionally experienced low employee turnover, potential risks exist because of retirements and competition for talent from other companies. Attracting and retaining employees with the skills needed to achieve TVA's vision of becoming one of the nation's leading providers of low-cost and cleaner energy (skills related to new nuclear construction, installation of new environmental equipment, construction of additional environmental controls, and the implementation of new regulations, for example) also present workforce challenges, especially given the growing need to control costs and the salary freeze for federal employees enacted on December 22, 2010. (See Legislative and Regulatory Matters for a discussion of the salary freeze.) To ensure that TVA is able to attract and retain the workforce needed to achieve its vision, TVA established a new organization to focus on human capital, including recruiting programs and outreach to high school, trade school, and college students, in 2010 and revised its workforce planning program in 2011. The revised workforce planning program is targeted for implementation agency-wide in the first quarter of 2012.

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Liquidity and Capital Resources

Sources of Liquidity

To meet cash needs and contingencies, TVA depends on various sources of liquidity. TVA's primary sources of liquidity are cash from operations and proceeds from the issuance of short-term and long-term debt. Current liabilities may exceed current assets from time to time in part because TVA uses short-term debt to fund short-term cash needs as well as pay off scheduled maturities and other redemptions of long-term debt. The daily balance of cash and cash equivalents maintained is based on near-term expectations for cash expenditures and funding needs.

Financial markets have experienced higher than normal volatility from 2008 amid negative developments in housing and mortgage-related activities, weakness of major financial institutions, and negative economic developments. These conditions initially resulted in severe disruptions in credit and lending activities, particularly in the short-term credit markets through which corporate institutions borrow and lend to each other. In more recent periods, market volatility has been driven by slow economic growth, uncertainty related to the financial health of governments in the United States and Europe, and negative developments in sovereign debt markets.

Despite the disruptions in the credit and financial markets, TVA has not experienced difficulty in issuing short-term or long-term debt or in refunding maturing short-term or long-term debt. Disruptions in the short-term credit markets have the potential to very negatively impact TVA because TVA uses short-term debt to meet working capital needs. Throughout the period of market volatility, TVA has experienced strong demand for short-term borrowings issued under its discount notes program and long-term bonds, and has been able to issue debt at competitive rates. TVA issued $99 million of electronotes® and $1.5 billion of other power bonds in 2011. TVA expects continued demand for its debt securities.

In addition to 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, three long-term revolving credit facilities totaling $2.5 billion, and occasional proceeds from other financing arrangements including call monetization transactions, sales of assets, and sales of receivables and loans. Management expects these sources to provide adequate liquidity to TVA for the foreseeable future. However, the TVA Act authorizes TVA to issue Bonds in an amount not to exceed $30.0 billion outstanding at any time. Due to this limit on Bonds, TVA may not be able to use Bonds to finance all of the capital investments planned over the next decade. Capital spending needs could be met with a combination of Bonds, other forms of financing such as leasing and energy prepayments, additional power revenues through rate increases, cost reductions, or other ways. Additionally, energy efficiency and demand response initiatives may reduce generation requirements and thereby reduce capital needs. Certain sources of liquidity are discussed below.

Issuance of Debt. TVA Bonds are not obligations of the United States, and the United States does not guarantee the payments of principal or interest on Bonds. At September 30, 2011, 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 have a first priority and equal claim of payment out of 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. See Note 1 — 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 government’s appropriation investment in TVA’s power facilities (the "Power Program 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 Program 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. See Note 15 — Appropriation Investment.

The rate test for the one-year period ended September 30, 2011, was calculated after the end of 2011, and TVA met the test’s requirements.

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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 Program Appropriation Investment), or
- Investment in power assets.

The bondholder protection test for the five-year period ended September 30, 2010, was calculated after the end of 2010, and TVA met the test's requirements. TVA must next meet the bondholder protection test for the five-year period ending September 30, 2015.

As discussed above, TVA uses proceeds from the issuance of discount notes, in addition to other sources of liquidity, to fund short-term cash needs and scheduled maturities of long-term debt. The following table provides additional information regarding TVA's short-term borrowings.

Short-Term Borrowing Table

	At September 30, 2011	For Quarter Ended September 30, 2011	For Year Ended September 30, 2011	At September 30, 2010	For Year Ended September 30, 2010	At September 30, 2009	For Year Ended September 30, 2009
Amount Outstanding (at End of Period) or Average Amount Outstanding (During Period)							
Discount notes	$482	$680	$363	$27	$905	$844	$1,650
Weighted Average Interest Rate							
Discount notes	0.001 %	0.196 %	0.137 %	0.040 %	0.089 %	0.063 %	0.323 %
Maximum Month-End Amount Outstanding During Period							
Discount notes	N/A	$1,000	$1,401	N/A	$1,176	N/A	$2,637

TVA held a higher balance of short-term debt at September 30, 2011, than at September 30, 2010, due to the timing of cash flows and the desire to meet management's target for short-term cash on hand. The average balance of short-term debt was lower in 2011 than 2010 because TVA issued more long-term debt than it redeemed in 2011 to take advantage of the historically low interest rate environment by locking-in long-term lower borrowing rates. Some of those proceeds were used to redeem short-term debt. TVA held a lower balance of short-term debt at September 30, 2010, than September 30, 2009, primarily because it issued more long-term debt than it redeemed in 2010 and applied some of those proceeds to the redemption of short-term debt. The redemption of short-term debt also accounted for the average balance of short-term debt being lower in 2010 than in 2009. The variance in the average interest rate on discount notes is primarily due to changes in market conditions.

TVA uses a significant portion of its power bond proceeds to refinance previously-issued power bonds as they mature or are redeemed. From time to time, TVA also uses power bond proceeds for other power program purposes, including financing its construction projects, as was the case in 2011 and 2010.

During 2011 and 2010, TVA issued $1.6 billion and $1.7 billion of power bonds, respectively, and redeemed $1.0 billion and $69 million of power bonds, respectively. Power bonds outstanding, excluding unamortized discounts and premiums and net exchange losses from foreign currency transactions, at September 30, 2011 were $24.2 billion (including current maturities) and at September 30, 2010 were $23.6 billion (including current maturities). For additional information about TVA debt issuance activity and debt instruments issued and outstanding at September 30, 2011, and 2010, including rates, maturities, outstanding principal amounts, and redemption features, see Note 11 — Debt Securities Activity.

TVA Bonds are traded in the public bond markets. TVA's Bonds are listed on the New York Stock Exchange ("NYSE") except for TVA's discount notes and the power bonds issued under TVA's electronotes® program. TVA's Putable Automatic Rate Reset Securities are traded on the NYSE under the exchange symbols "TVC" and "TVE," respectively. Other NYSE-listed bonds are assigned various symbols by the exchange, which are noted on the NYSE's website. TVA has also listed certain bonds on foreign exchanges from time to time, including the Luxembourg, Hong Kong, and Singapore Stock Exchanges. See Item 1A, Risk Factors for additional information regarding the market for TVA's Bonds. At September 30, 2011, all of TVA's Bonds were rated by at least one rating agency except for two issues of power bonds and the discount notes. Ratings are not

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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.

On August 2, 2011, one of the rating agencies confirmed the Aaa rating of the United States and assigned a Negative rating outlook following the government's action to raise the debt limit in order to avoid a default on the government's obligations. On August 3, 2011, this same agency confirmed the Aaa senior secured and unsecured ratings of TVA Bonds and assigned a Stable rating outlook.

On August 5, 2011, one of the rating agencies lowered its long-term rating on the United States to AA+ from AAA and affirmed the A-1+ short-term rating. This action was based on concerns regarding the fiscal and economic position of the United States. The outlook on the long-term rating is Negative. The rating agency removed the short- and long-term ratings of the United States from review for possible downgrade. On August 8, 2011, this same rating agency lowered the long-term rating on TVA Bonds to AA+ from AAA and removed the rating from review for possible downgrade. The outlook on TVA's rating is Negative. The action taken on the rating on TVA Bonds was based on the application of the rating agency's government-related entities criteria.

The downgrade of the rating on TVA Bonds to AA+ by this one rating agency may increase TVA's interest expense by increasing the interest rates TVA pays on the short-term or long-term debt securities it issues. The downgrade required TVA to post $100 million of additional collateral under certain physical and financial contracts that contain rating triggers.

On August 16, 2011, the third national rating agency that provides a rating on TVA Bonds affirmed the AAA rating of the United States with a Stable outlook. Prior to this action, on June 15, 2011, this same rating agency affirmed the AAA rating on TVA Bonds with a Stable outlook.

Credit Facility Agreements. TVA and the U.S. Treasury have entered into a memorandum of understanding under which the U.S. Treasury provides TVA with a $150 million credit facility. This credit facility matures on September 30, 2012, and is expected to be renewed. This arrangement is pursuant to the TVA Act. Access to this credit facility or other similar financing arrangements has been available to TVA since the 1960s. TVA plans to use the U.S. Treasury credit facility as a secondary source of liquidity. The interest rate on any borrowing under this facility is based on the average rate on outstanding marketable obligations of the United States with maturities from date of issue of one year or less. There were no outstanding borrowings under the facility at September 30, 2011.

TVA also has funding available in the form of three long-term revolving credit facilities totaling $2.5 billion.

Summary of Long-Term Credit Facilities
At September 30, 2011
(in billions)

Maturity Date	Facility Limit	Letters of Credit Outstanding	Cash Borrowings	Availability
January 2014	$0.5	$0.5	$—	$—
January 2014	1.0	—	—	1.0
May 2014	1.0	0.1	—	0.9
	$2.5	$0.6	$—	$1.9

The credit facilities accommodate the issuance of letters of credit. The interest rate on any borrowing under these facilities is variable 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 $2.5 billion which TVA has not borrowed or committed under letters of credit. This fee, along with letter of credit fees, may fluctuate depending on

the rating of TVA's senior unsecured long-term non-credit enhanced debt. At September 30, 2011, there were $575 million of letters of credit outstanding under the facilities, and there were no borrowings outstanding. See Note 11 — Credit Facility Agreements.

Lease Financing. TVA expects to enter into a lease purchase arrangement for its John Sevier Combined Cycle Facility in 2012. Under a lease purchase arrangement, interest in a facility under construction is sold or otherwise conveyed to investors and then leased back to TVA through a long-term lease. At the end of the lease term, TVA would own the facility without making any additional payments. TVA may seek to enter into similar arrangements for other assets under construction in 2012 and thereafter. Other assets under construction for consideration for lease-purchase transactions or other leasing transactions may include natural gas units, nuclear units, or pollution control equipment.

While leasing allows TVA to diversify its asset financing program, financing an asset by using the proceeds of leasing transactions is typically more costly to TVA than financing an asset with the proceeds of Bonds.

Call Monetization Transactions. 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

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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, 2011, TVA had entered into four swaption transactions that generated proceeds of $261 million.

- In 2003, TVA monetized the call provisions on a $1.0 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 13 — Derivatives Not Receiving Hedge Accounting Treatment — Swaption and Interest Rate Swaps.

Sale of Interest in TVA Generating Facility. Seven States Power Corporation (“Seven States”), through its subsidiary, Seven States Southaven, LLC (“SSSL”), exercised Seven States’s option to purchase an undivided 90 percent interest in a combined cycle combustion turbine facility in Southaven, Mississippi. As part of interim joint-ownership arrangements, Seven States has the right at any time during the interim period, and for any reason, to require TVA to buy back Seven States's interest in the facility. The interim period under the original agreements was to expire on April 30, 2010. On April 22, 2010, TVA and Seven States, through SSSL, amended the joint ownership agreement, lease agreement, and buy-back arrangements to extend the term of the interim arrangements by approximately three years, until April 23, 2013. The other material terms and conditions of the agreements were not changed and remain in full force and effect. Under the amended agreements, TVA will buy back Seven States's interest if long-term operational and power sales arrangements for the facility among TVA, Seven States, and SSSL, or alternative arrangements, are not in place by April 23, 2013. TVA’s buy-back obligation will terminate if such long-term arrangements are in place by that date. In the event of a buy-back, TVA will re-acquire Seven States's interest in the facility and the related assets. At September 30, 2011, the carrying amount of the obligation was approximately $397 million.

On August 8, 2011, a nationally recognized credit rating agency lowered TVA's long-term rating from AAA to AA+. This downgrade constituted an event of default under the Amended and Restated Credit Agreement between Seven States and its lenders. Upon the occurrence of such an event of default, Seven States's lenders may either impose a higher default interest rate on the loan or exercise an option to require TVA to re-acquire its interest in the Southaven facility and the related assets.

On November 1, 2011, Seven States and its lenders, with the consent of TVA, executed an Amendment to the Amended and Restated Credit Agreement. In this amendment, Seven States' s lenders agreed to waive this event of default and thus waive their lenders' right to force TVA to re-acquire Seven States's interest in the Southaven facility and the related assets or to force Seven States to pay the default interest rate for this event of default. Also, the amendment ties the interest rate on Seven States's credit facilities to TVA's credit rating. Seven States will pay interest on the loan at either 1) LIBOR plus 62.5 basis points if TVA's corporate credit rating is AAA (or its equivalent) by all nationally recognized credit rating agencies, or 2) LIBOR plus 87.5 basis points if TVA's corporate credit rating is AA+ (or its equivalent) by one or more nationally recognized credit rating agencies and AAA (or its equivalent) by the other nationally recognized credit agencies. The amendment also states that any future downgrade of TVA's credit rating to below AA+ (or its equivalent) by any nationally recognized credit rating agency would constitute an event of default by Seven States. Because the monthly rent that TVA pays to Seven States for Southaven passes through to TVA the cost of Seven States's loan, TVA's rent payments will increase under this amendment by the amount that Seven States's interest payments on the loan increase, but because of the waiver, the event of default had no other effect on the terms of TVA's lease with Seven States. TVA will continue to present on its financial statements both current and long-term portions of its leaseback obligation to Seven States.

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

	2011	2010	2009
Cash provided by (used in):			
Operating activities	$2,437	$1,901	$2,163
Investing activities	(3,142)	(2,458)	(2,287)
Financing activities	884	684	112
Net increase (decrease) in cash and cash equivalents	$179	$127	$(12)

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Operating Activities

2011 Compared to 2010

Net cash flows from operating activities increased $536 million in 2011 compared to 2010. This increase was primarily due to the timing of revenues related to fuel cost recovery as well as a decrease in cash spent on the Kingston ash spill environmental cleanup costs as compared to the prior year. See 2011 Highlights.

2010 Compared to 2009

Net cash flows from operating activities decreased $262 million in 2010 compared to 2009. This decrease resulted from lower operating revenues as a result of rate decreases related to lower fuel costs, which reduced operating revenues by $1.7 billion. The decrease was nearly fully offset by a $1.0 billion advance contribution to TVA's pension fund in 2009 and a $707 million base rate increase. See Results of Operations.

Investing Activities

The majority of TVA's investing cash flows are related to investments in property, plant, and equipment for new generating assets as well as additions and upgrades to existing facilities. A summary of changes in investing cash flows is provided below.

2011 Compared to 2010

Net cash flows used in investing activities increased $684 million in 2011 compared to 2010. The increase resulted primarily from the purchase of Magnolia for $436 million and an increase of $402 million spent on major capital projects, including new combined cycle combustion turbine units, as well as ongoing construction on Watts Bar Unit 2 and CCR-related costs in 2011. The increase was partially offset by a decrease in nuclear fuels expenditures of $185 million resulting from less purchases of uranium and enrichment services in 2011 as compared to 2010. Nuclear reactors are refueled every 18 to 24 months and uranium is purchased in advance of the refueling date. In 2010, uranium was purchased to supply fuel for five nuclear reactors that were refueled in 2011, whereas in 2011 uranium purchases were made to supply two nuclear reactors that will be refueled in 2012.

2010 Compared to 2009

Net cash flows used in investing activities increased $171 million in 2010 compared to 2009. The increase resulted primarily from an additional $222 million spent on major capital projects including new combined cycle and combustion turbine units, as well as ongoing construction on Watts Bar Unit 2, in 2010.

Financing Activities

2011 Compared to 2010

Net cash flows provided by financing activities increased $200 million in 2011 compared to 2010. The change was primarily due to issuance of debt exceeding redemptions by $1.0 billion in 2011, as compared to issuance of debt exceeding redemptions by $793 million in 2010. The net increase in debt was due to funding of capacity expansion investments.

2010 Compared to 2009

Net cash flows provided by financing activities increased $572 million in 2010 compared to 2009. The change was primarily due to a decrease of $2.8 billion in redemptions and repurchases of long-term debt offset partially by a decrease of $1.5 billion in net issuances of short-term debt and a decrease of $690 million in long-term debt issuances. The increase in debt reflects the need for cash primarily to fund capital investments.

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Cash Requirements and Contractual Obligations

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		
	2011	2012	2013	2014
Watts Bar Unit 2 [2]	$669	$369	$100	$—
Other capacity expansion expenditures [3]	929	788	863	775
Environmental expenditures	52	181	860	1,160
Coal combustion residual	142	218	146	100
Transmission expenditures	246	278	316	333
Other capital expenditures [4]	787	850	777	775
Total construction expenditures	$2,825 [5]	$2,684	$3,062	$3,143

Notes
(1) TVA plans to fund these expenditures with cash from operations and proceeds from power program financings. This table shows only expenditures that are currently planned. Additional expenditures may be required, among other things, for TVA to meet growth in demand for power in its service area or to comply with new environmental laws, regulations, or orders.
(2) The construction project and schedule for Watts Bar Unit 2 are currently being reviewed by TVA. Updates to the schedule and cost estimates are expected to be completed by the second quarter of FY 2012.
(3) Other capacity expansion expenditures includes the purchase of Magnolia for $436 million.
(4) Other capital expenditures are primarily associated with short lead time construction projects aimed at the continued safe and reliable operation of generating assets.
(5) The numbers above exclude AFUDC related to construction expenditures of $97 million and include items accrued of $69 million.

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. 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. See Forward-Looking Information.

In the near term, TVA's cash flows may be negatively impacted by investments in new generation, such as Watts Bar Unit 2 and the John Sevier Combined Cycle Facility, that are not expected to provide a cash return until put into service.

TVA has certain obligations and commitments to make future payments under contracts, including contracts executed in connection with certain of the planned construction expenses. The following table sets forth TVA's estimates of future payments at September 30, 2011. See Note 11, Note 12, Note 15, and Note 20 for a further description of these obligations and commitments.

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Commitments and Contingencies

Payments due in the year ending September 30

	2012	2013	2014	2015	2016	Thereafter	Total
Debt[(1)]	$2,019	$2,308	$32	$1,032	$32	$19,236	$24,659
Interest payments relating to debt	1,372	1,227	1,142	1,141	1,096	19,212	25,190
Lease obligations							
Capital	6	—	—	—	—	3	9
Non-cancelable operating	74	59	34	24	24	147	362
Purchase obligations							
Power	223	158	158	161	168	4,212	5,080
Fuel	1,856	1,502	1,252	1,205	760	1,942	8,517
Other	109	73	62	58	57	574	933
Environmental Agreements	85	87	87	87	—	—	346
Litigation settlements	29	3	3	—	—	—	35
Environmental cleanup costs-Kingston ash spill	182	127	68	—	—	—	377
Payments on other financings	138	488	100	104	104	609	1,543
Payments to U.S. Treasury							
Return of Power Program Appropriation	20	20	10	—	—	—	50
Investment							
Return on Power Program Appropriation	22	20	19	18	18	217	314
Investment							
Total	$6,135	$6,072	$2,967	$3,830	$2,259	$46,152	$67,415

Note

(1) Does not include noncash items of foreign currency exchange loss of $7 million and net discount on sale of Bonds of $235 million.

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

Energy Prepayment Obligations

	2012	2013	2014	2015	2016	Thereafter	Total
Energy Prepayment Obligations	$105	$102	$100	$100	$100	$210	$717

Results of Operations

Sales of Electricity

Sales of electricity accounted for virtually all of TVA’s operating revenues in 2011, 2010, and 2009. TVA sells power at wholesale to distributor customers, consisting of municipalities and cooperatives that resell the power to their

customers at retail rates. TVA also sells power to directly served customers, consisting primarily of federal agencies and customers with large or unusual loads. In addition, power that exceeds the needs of the TVA system is sold under exchange power arrangements with other power systems. The following table compares TVA's electricity sales statistics for 2011, 2010, and 2009.

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Sales of Electricity
For the years ended September 30
(millions of kWh)

	2011	Percent Change	2010	Percent Change	2009
Municipalities and cooperatives	137,042	(3.1)%	141,448	6.3 %	133,078
Industries directly served	28,563	(5.1)%	30,099	4.8 %	28,718
Federal agencies and other	2,125	0.5 %	2,115	5.3 %	2,008
Total sales of electricity	167,730	(3.4)%	173,662	6.0 %	163,804
Weather normalized sales	167,654	(0.7)%	168,852	0.6 %	167,807
Heating degree days[(1)] (normal 3,360)	3,418	(7.6)%	3,698	8.0 %	3,423
Cooling degree days [(1)] (normal 1,863)	2,123	(9.2)%	2,338	30.9 %	1,786
Combined degree days [(1)] (normal 5,223)	5,541	(8.2)%	6,036	15.9 %	5,209

Note
(1) The prior years' degree day information has been adjusted in order to incorporate a change in TVA's current calculation of this information. Every five years this calculation is updated in order to incorporate the most recent 30 years of weather history. The most recent update, to incorporate CYs 2006-2010, occurred during the second quarter of 2011.

2011 Compared to 2010

The 4.4 billion kilowatt-hour ("kWh") decrease in sales to Municipalities and cooperatives was primarily due to a decrease in both heating and cooling degree days as a result of a warmer winter and cooler summer in 2011 than 2010.

The 1.5 billion kWh decrease in sales to Industries directly served was primarily due to a decrease in sales to TVA's largest directly served industrial customer, which has been curtailing operations.

The 10 million kWh increase in sales to Federal agencies and other was due to a 62 million kWh decrease in sales to federal agencies directly served and an increase of 72 million kWh sold off-system due to an increase in excess generation available for resale.

2010 Compared to 2009

The 8.4 billion kWh increase in sales to Municipalities and cooperatives was primarily due to an increase in residential sales as a result of a record number of degree days due to both a colder than normal winter and a hotter than normal summer during 2010, as well as an increase in sales to the commercial and industrial customers of TVA's distributor customers due to improving economic conditions.

The 1.4 billion kWh increase in sales to Industries directly served was primarily due to improving economic conditions.

The 107 million kWh increase in sales to Federal agencies and other was due to a 57 million kWh increase in sales to federal agencies directly served and an increase of 50 million kWh sold off-system due to an increase in excess generation available for resale.

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Financial Results

The following table compares operating results for 2011, 2010, and 2009:

Summary Statements of Operations
For the years ended September 30

	2011	2010	2009
Operating revenues	$11,841	$10,874	$11,255
Operating expenses	(10,404)	(8,632)	(9,282)
Operating income	1,437	2,242	1,973
Other income, net	30	24	25
Interest expense, net	(1,305)	(1,294)	(1,272)
Net income (loss)	$162	$972	$726

Operating Revenues.

Operating revenues during 2011, 2010, and 2009 consisted of the following:

Operating Revenue
For the years ended September 30

	2011	Percent Change	2010	Percent Change	2009
Sales of electricity					
Municipalities and cooperatives	10,144	9.4%	$9,275	(3.8)%	$9,644
Industries directly served	1,440	9.0%	1,321	(3.4)%	1,367
Federal agencies and other	139	18.8%	117	(10.7)%	131
Total sales of electricity	11,723	9.4%	10,713	(3.9)%	11,142
Other revenue	118	(26.7)%	161	42.5%	113
Total operating revenues	$11,841	8.9%	$10,874	(3.4)%	$11,255

Operating revenues increased $967 million in 2011 compared to 2010, and decreased $381 million in 2010 compared to 2009 due to the following:

	Variance 2011 vs. 2010	Variance 2010 vs. 2009
Fuel rate	$1,312	$(1,714)
Volume	(360)	580
Base rates	49	707
Off system sales and other	9	(2)
Other revenue	(43)	48
Total	$967	$(381)

2011 Compared to 2010

Operating revenues increased $967 million year over year due primarily to an increase in the fuel rate from 2010 to 2011 resulting in a $1.3 billion impact. The main driver behind the increase in the fuel rate was the unusually low rate in 2010 which resulted from the liquidation of the fuel cost adjustment liability. This fuel cost adjustment liability was the product of over collection of fuel costs in 2009 through the fuel cost adjustment formula. Prior to October 2009 the fuel cost adjustment formula was updated quarterly resulting in the potential for larger positive and negative swings. Starting in 2010 the TVA Board revised the operation of this formula so that it was updated monthly and the TVA Board also approved the liquidation of the remaining liability through rates charged to rate payers over the nine-month period from October 1, 2009 to June 30, 2010, thereby decreasing the fuel rate charged to customers for

that period. If not for this decrease to the fuel rate, 2010 revenues would have been $822 million higher. Fuel rates also increased in 2011 as a result of the recovery of a $300 million increase in purchased power with approximately $95 million of this increase resulting from the issues related to the April 2011 storms and the remaining increase relating to TVA's decision to purchase lower-cost power as opposed to running its higher cost peaking units. Finally, fuel rates increased year over year by approximately $180 million as a result of an increase in average fuel cost per kWh of net thermal generation of approximately 10 percent.

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Base rates also resulted in a $49 million increase in operating revenues. This increase was due to a change in overall customer product mix rather than a scheduled base rate increase. These increases were partially offset by sales volume decreases which reduced operating revenues by $360 million. This volume decrease related primarily to municipalities and cooperatives and was mainly due to milder weather conditions in 2011 as evidenced by the eight percent decrease in heating degree days and the nine percent decrease in cooling degree days from 2010. Additionally, TVA's largest directly served industrial customer continued to curtail operations, and as a result, revenues related to this customer decreased by approximately $70 million over 2010.

2010 Compared to 2009

Operating revenues decreased $381 million year over year due primarily to a decrease in the fuel rate from 2009 to 2010 resulting in a $1.7 billion impact. The main driver behind the decrease in the fuel rate was the unusually low rate in 2010 which resulted from the liquidation of the fuel cost adjustment liability. The fuel cost adjustment liability was the product of over collection of fuel costs in 2009 through the fuel cost adjustment formula. Prior to October 2009 the fuel cost adjustment formula was updated quarterly resulting in the potential for larger positive and negative swings. Starting in 2010 the TVA Board revised the operation of this formula so that it was updated monthly and the TVA Board also approved the liquidation of the remaining liability through rates charged to rate-payers over the nine-month period from October 1, 2009 to June 30, 2010, thereby decreasing the fuel rate charged to customers for that period. If not for this decrease to the fuel rate, 2010 revenues would have been $822 million higher. Fuel rates also decreased as a result of a $504 million reduction in purchased power and to a lesser extent as a result of overall decreases in the actual cost of fuel burned in TVA's generating units resulting in lower costs charged to customers through the current year portion of the fuel cost adjustment formula.

These decreases in operating revenues were offset by increases related primarily to sales volume of $580 million and a base rate increase resulting in an additional $707 million in revenues. The volume increase is due primarily to a six percent increase in kWhs sold to municipalities and cooperatives as a result of a colder than normal winter and a hotter than normal summer. This is evidenced by an increase in heating degree days of eight percent and an increase in cooling degree days of 31 percent over 2009. The increase related to the base rate change is a result in the TVA Board's approval of a nine percent base rate increase for 2010. Additionally, other revenues increased by $48 million primarily due to additional revenue related to fiber optic leases.

Operating Expenses. Operating expenses during 2011, 2010, and 2009 consisted of the following:

TVA Operating Expenses
For the years ended September 30

	2011	Percent Change	2010	Percent Change	2009
Fuel	$2,926	39.9 %	$2,092	(32.8)%	$3,114
Purchased power	1,427	26.6 %	1,127	(30.9)%	1,631
Operating and maintenance	3,617	11.9 %	3,232	34.9 %	2,395
Depreciation and amortization	1,772	2.8 %	1,724	7.9 %	1,598
Tax equivalents	662	44.9 %	457	(16.0)%	544
Total operating expenses	$10,404	20.5 %	$8,632	(7.0)%	$9,282

2011 Compared to 2010

The fuel cost adjustment provides a means to regularly alter rates to reflect changing fuel and purchased power costs, including realized gains and losses relating to transactions under TVA's Financial Trading Program (“FTP”). See Risk Management Activities — Commodity Price Risk. There is typically a lag between the occurrence of a change in fuel and purchased power costs and the reflection of the change in rates due to a portion of the fuel rate being based on

forecasted information. A “true-up” between actual and forecasted costs is performed on a monthly basis, and the difference is recorded as a regulatory liability or asset. These amounts represent overcollected revenues (regulatory liabilities) or undercollected revenues (regulatory assets), which are subsequently used to offset fuel and purchased power costs and are recovered or refunded in fuel rates. See Note 1 — Cost-Based Regulation and Note 7 — Fuel Cost Adjustment Receivable.

The $834 million increase in fuel expense was driven by several factors including the dispatch of generating plants and effects of prior year fuel cost adjustments. $219 million of the increase in fuel expense in 2011 over 2010 resulted from reduced nuclear generation as a result of extended refueling outages and the April 27, 2011 and April 28, 2011 storms, which caused Browns Ferry to go offline for nearly a month; reduced hydro generation due to lower precipitation levels during 2011; and the replacement of lower-cost generation from Paradise and Cumberland Fossil Plants due to outages with generation from plants which burn higher-cost natural gas or higher-cost coal. Another driver behind TVA's increased fuel costs resulted from an increase in the average fuel cost for coal-fired generation. See Item 1, Business — Fuel Supply.

The remaining $615 million increase in fuel cost was driven by the fuel cost adjustment. In 2009 TVA over recovered

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fuel costs through the fuel cost adjustment. The over collection of fuel costs was recorded as a regulatory liability with a corresponding increase in 2009 fuel expense. TVA “returned” the over collection during 2010 by lowering the fuel cost adjustment, the effect of which was to reduce revenue. As the refunds were made, the regulatory liability was reduced by a corresponding reduction in fuel expense. See Operating Revenues — 2011 Compared to 2010 above.

Purchased power expense also increased $300 million in 2011 from 2010 primarily because of the accounting for the fuel cost adjustment, described above. The fuel cost adjustment accounted for $340 million of the increase. In addition, the average price of purchased power increased three percent, which increased purchased power expense by $40 million.

The increases in purchased power expense were offset by a six percent decrease in the amount of power purchased in 2011 over 2010. This change in volume decreased purchased power expense by $80 million.

Operating and maintenance expense increased $385 million in 2011 over 2010 for several reasons. A major contributor to the increase was related to operation of TVA's nuclear fleet with nearly $200 million additional expense in 2011 over 2010, largely due to having five refueling outages in 2011 as compared to three during 2010. The scope and duration of these outages was greater in 2011 and included projects to increase plant reliability and increased security costs due to regulatory requirements. Also, prior to 2010, nuclear refueling outage costs were deferred and recognized in expense on a straight line basis over the estimated period until the next routine outage, which was usually between 18 and 24 months. Beginning in 2010, and continuing into 2011, however, outage costs have been expensed as incurred resulting in an overlap of refueling outage costs between prior and current years. Previously deferred outage costs continue to be amortized as the remaining amounts are collected in rates. Because a greater amount of expense was amortized in 2010, there was a decrease in expenses related to prior year outages of $60 million in 2011 over 2010. See Note 7 — Deferred Outage Costs.

Declines in the financial markets in prior years combined with a reduction in the assumed discount rate used to estimate post-retirement liabilities caused pension and post-retirement plan expenses to increase over $100 million between 2010 and 2011. See Critical Accounting Policies and Estimates — Pension and Post-Retirement Benefits. Other costs related to post-employment benefits decreased over $80 million primarily due to assumptions used in the actuarial valuation of the liability related to workers' compensation claims.

Expenses related to TVA's fossil fuel-fired plants increased nearly $70 million in 2011 as compared to 2010. Projects undertaken to improve the efficiency and effectiveness of generating assets increased expenses by nearly $40 million. Additional increases in expenses included larger writeoffs of obsolete inventory identified during 2011 and writeoffs of capital assets of $16 million. The 2011 expenses also included a full year of operating expenses of nearly $9 million related to the operation of Lagoon Creek Combined Cycle Plant which came on-line in August 2010.

Additional expenditures during 2011 over 2010 related to other initiatives to support TVA's vision including $27 million related to performance initiatives, $25 million to support economic development initiatives, and $14 million to support efficiency and demand response initiatives.

Depreciation and amortization expense increased $48 million primarily because of an increase in net plant additions and the implementation of accelerated depreciation rates on certain coal-fired units due to the long-term idling of those units.

Tax equivalents expense increased $205 million. This change primarily reflects an increase in the accrued tax equivalent expense. The accrued tax equivalent expense, which is equal to five percent of the fuel-cost related revenues, increased in 2011 due to the new wholesale rate structure implemented on April 1, 2011, whereby a portion of the fuel rate was separated out from the base rate. Due to regulatory accounting, tax equivalents related to fuel-cost

related revenues are recognized in the same period the revenues are recognized. Tax equivalents related to all other revenues are recognized in the year paid.

2010 Compared to 2009

The primary reason for the $1.0 billion decrease in fuel expense was related to the accounting for the overcollection of fuel costs from customers in 2009 and the refund of those fuel costs in 2010. The overcollection of revenues was initially recorded as a liability in 2009 and a reduction of fuel expense. TVA subsequently “returned” the overcollection during 2010 by giving customers credit on their power bills with the effect of reducing revenues and also reducing fuel costs in the same period. See Operating Revenues — 2010 Compared to 2009.

The decrease in fuel expense related to the fuel cost adjustment was offset by a $120 million increase in fuel expense. The increase in fuel expense was primarily driven by significantly more gas generation due to extreme temperatures in summer and winter, which increased utilization of higher-cost generating resources as well as increased the cost of fuels.

Purchased power expense also decreased in 2010 from 2009 primarily because of the accounting for the fuel cost adjustment, described above. The fuel cost adjustment accounted for $580 million of the decrease. In addition, the average price of purchased power decreased approximately 19 percent, which decreased purchased power expense by $330 million.

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The decreases in purchased power expense were partially offset by a 30 percent increase in the amount of power purchased in 2010 over 2009 due to three percent lower generation from TVA facilities. This change in volume increased purchased power expense by $400 million.

Operating and maintenance expense increased $837 million due to several conditions. Declines in the financial markets in prior years combined with a reduction in the assumed discount rate used to estimate post-retirement liabilities caused pension and post-retirement plan expenses to increase over $200 million between 2009 and 2010. See Critical Accounting Policies and Estimates — Pension and Post-Retirement Benefits. Other costs related to post-employment benefits increased nearly $100 million primarily due to assumptions used in the actuarial valuation of the liability related to workers' compensation claims. The assumption changes include a reduction of the discount rate along with the recognition of increased developing trends in claims experience.

Prior to 2010, nuclear refueling outage costs were deferred and recognized in expense on a straight line basis over the estimated period until the next routine outage which was usually between 18 and 24 months. Beginning in 2010, however, outage costs have been expensed as incurred resulting in an overlap of refueling outage costs between prior and current years. Previously deferred outage costs continue to be amortized as the remaining amounts are collected in rates. This accounting change as well as other outage work resulted in an increase in expenses of over $170 million in 2010 over 2009.

Expenses related to TVA's fossil-fueled plants increased nearly $80 million in 2010 over 2009. These expenses included costs associated with coal combustion residual handling due to increased activities related to converting from wet storage facilities to dry storage facilities; costs related to the TVA Board's cancellation of upgrades to the Gleason Combined Cycle Plant; and additional expenses related to forced maintenance outages at Paradise and Shawnee Fossil Plants and other maintenance projects.

TVA continued to amortize the environmental clean-up costs related to the Kingston ash spill. The increase in 2010 over 2009 was over $60 million. See Note 8.

Additional expenditures related to other initiatives during 2010 over 2009 included $50 million to support efficiency and demand response initiatives; $30 million to support economic development initiatives; and $20 million for on-going studies related to the future uses of the Bellefonte site.

Depreciation and amortization expense increased $126 million primarily because of an increase in net plant additions.

Tax equivalents expense decreased $87 million. This change primarily reflects a decrease in the accrued tax equivalent expense. The accrued tax equivalent expense, which is equal to five percent of the fuel-cost related revenues, decreased in 2010, since the fuel-cost related revenues were lower in 2010 than 2009.

Interest Expense. Interest expense and interest rates during 2011, 2010, and 2009 were as follows:

Interest Expense
For the years ended September 30

	2011	Percent Change	2010	Percent Change	2009
Interest expense	$1,431	4.2 %	$1,373	4.6 %	$1,312
Allowance for funds used during construction and nuclear fuel expenditures	(126)	59.5 %	(79)	97.5 %	(40)
Net interest expense	$1,305	0.9 %	$1,294	1.7 %	$1,272

	2011	Percent Change	2010	Percent Change	2009
Interest rates (average)					
Long-term [1]	5.80	(1.9)%	5.91	(1.2)%	5.98
Discount notes	0.14	55.6 %	0.09	(71.9)%	0.32
Blended [1]	5.71	0.5 %	5.68	2.0 %	5.57

Note

(1) The average interest rates on long-term debt reflected in the table above are calculated using an average of long-term debt balances at the end of each month in the fiscal years depicted and interest expense for those periods. Interest expense is interest on long-term debt, including amortization of debt discounts, issue, and reacquisition costs, net.

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2011 Compared to 2010

The $11 million increase in net interest expense was primarily attributable to an increase in interest on debt as a result of an increase in the average balance of long-term debt in 2011 compared to 2010. This increase was partially offset by a greater amount of capitalized interest due to an increase in the construction work in progress base used to calculate AFUDC as a result of ongoing construction activities at Watts Bar Unit 2.

2010 Compared to 2009

The $22 million increase in net interest expense was primarily due to an increase in interest on debt as a result of an increase in the average balance of long-term debt in 2010 compared to 2009. This increase was offset partially by the greater amounts of capitalized interest in 2010 compared to 2009 due to an increase in the construction work in progress base used to calculate AFUDC as a result of ongoing construction activities at Watts Bar Unit 2.

Off-Balance Sheet Arrangements

At September 30, 2011, TVA had no off-balance sheet arrangements.

Critical Accounting Policies and Estimates

The preparation of financial statements requires TVA to estimate the effects of various matters that are inherently uncertain as of the date of the financial statements. Although the financial statements are prepared in conformity with GAAP, TVA is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the amounts of revenues and expenses reported during the reporting period. Each of these estimates varies in regard to the level of judgment involved and its potential impact on TVA's financial results. Estimates are deemed critical either when a different estimate could have reasonably been used, or where changes in the estimate are reasonably likely to occur from period to period, and such use or change would materially impact TVA's financial condition, results of operations, or cash flows. TVA's accounting policies are also discussed in Note 1.

Regulatory Accounting

The TVA Board is authorized by the TVA Act to set rates for power sold to its customers; thus, TVA is "self regulated." Additionally, TVA's regulated rates are designed to recover its costs of providing electricity. In view of demand for electricity and the level of competition, TVA has assumed that rates, set at levels that will recover TVA's costs, can be charged and collected. As a result of these factors, TVA records certain assets and liabilities that result from the regulated ratemaking process that would not be recorded under GAAP for non-regulated entities. Regulatory assets generally represent incurred costs that have been deferred because such costs are probable of future recovery in customer rates. Regulatory liabilities generally represent obligations to make refunds to customers for previous collections for costs that are not likely to be incurred or deferral of gains that will be credited to customers in future periods. The timeframe over which the regulatory assets are recovered from customers or regulatory liabilities are credited to customers is subject to annual TVA Board approval. TVA assesses whether the regulatory assets are probable of future recovery by considering factors such as applicable regulatory changes, potential legislation, and changes in technology. Based on these assessments, TVA believes the existing regulatory assets are probable of recovery. This determination reflects the current regulatory and political environment and is subject to change in the future. If future recovery of regulatory assets ceases to be probable, or any of the other factors described above cease to be applicable, TVA would be required to write off these costs and recognize them in earnings. See Note 7.

Environmental Cleanup Costs – Kingston Ash Spill

Environmental clean-up costs related to the Kingston ash spill are based upon estimates of the incremental direct costs of the remediation effort, including costs of compensation and benefits for those employees who are expected to devote a significant amount of time directly to the remediation effort. Such amounts are included in the estimate when it is probable that a liability has been incurred as of the financial statement date and the amount of loss can be reasonably estimated. When both of those recognition criteria are met and the estimated loss is a range, TVA accrues the amount that appears to be a better estimate than any other estimate within the range, or accrues the minimum amount in the range if no amount within the range is a better estimate than any other amount. If the actual costs materially differ from the estimate, TVA's results of operations, financial condition, and cash flows could be affected materially.

At September 30, 2011, the costs included in the environmental cleanup estimate for Kingston included ash dredging and processing, ash disposition, infrastructure repair, dredge cell repair, root cause analysis, certain legal and settlement costs, environmental impact studies and remediation, human health assessments, community outreach and support, regulatory oversight, cenosphere recovery, skimmer wall installation, construction of temporary ash storage areas, dike reinforcement, project management, and certain other remediation costs associated with the clean up. At September 30, 2011, TVA estimates that these costs will range from $1.1 billion to $1.2 billion. TVA has incurred $749 million of remediation costs through September 30, 2011. TVA deferred the $1.1 billion cost estimate as a regulatory asset and is amortizing such costs into operating expenses over a 15-year period beginning in 2010 as such amounts are collected in rates. See Note 8 — Financial

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Impact.

The following categories could have a significant effect on estimates related to the Kingston ash spill remediation costs:

- Final Closure Design – TVA is still in the process of designing the final closure of the failed dredge cell, other cells on-site, and the lateral expansion of the failed cell. Until the final design is completed and contracts for the work are awarded, costs estimates are subject to change.

- Excluded Costs – TVA has not included the following categories of costs because it has determined that these costs are currently either not probable or not reasonably estimable: penalties (other than the penalties set out in the TDEC order) or regulatory directives, natural resource damages (other than payments required under a memorandum of agreement with TDEC and the Fish and Wildlife Service establishing a process and a method for resolving the natural resource damages claim), future lawsuits and future claims, long-term environmental impact costs, final long-term disposition of ash processing area, costs associated with new laws and regulations, or costs of remediating any mixed waste discovered during the ash removal process. See Note 8.

Revenue Recognition

Revenues from power sales are recorded as power is delivered to customers. TVA is primarily a wholesale provider of power to distributor customers that resell the power to end users at retail rates. TVA accrues estimated unbilled revenues for power sold to distributor customers for the period of time from the meter-read date to the end of the month. The methodology for estimating unbilled revenue from electricity sales uses the distributor customers' meter readings for the current billing period and actual demand and energy rates. See Note 1 — Revenues.

Asset Retirement Obligations

TVA recognizes legal obligations associated with the future retirement of certain tangible long-lived assets. These obligations relate to fossil-fired generating plants, nuclear generating plants, hydroelectric generating plants/dams, transmission structures, and other property-related assets. These other property-related assets include, but are not limited to, leases. Activities involved with retiring these assets could include decontamination and demolition of structures, removal and disposal of wastes, and site reclamation. Revisions to the amount and timing of certain cash flow estimates of AROs may be made based on engineering studies. For nuclear assets, the studies are performed annually in accordance with the NRC requirements. For non-nuclear obligations, revisions are made whenever factors indicate that the timing or amounts of estimated cash flows have changed. Any accretion or depreciation expense related to these liabilities and assets are charged to a regulatory asset. See Note 10.

Nuclear Decommissioning. Utilities that own and operate nuclear plants are required to use different procedures in estimating nuclear decommissioning costs under GAAP than those that are used in estimating nuclear decommissioning costs that are reported to the NRC. The two sets of procedures produce different estimates for the costs of decommissioning primarily because of the difference in the discount rates used to calculate the present value of decommissioning costs. At September 30, 2011, the present value of the estimated future nuclear decommissioning cost under GAAP was $2.1 billion and was included in AROs, and the unamortized regulatory asset of $1.0 billion was included in Regulatory assets. Under the NRC's regulations, the present value of the estimated future nuclear decommissioning cost was $828 million at September 30, 2011. This decommissioning cost estimate is based on the NRC's requirements for removing a plant from service, releasing the property for unrestricted use, and terminating the operating license. The actual decommissioning costs may vary from the derived estimates because of changes in current assumptions, such as the assumed dates of decommissioning, changes in regulatory requirements, changes in technology, and changes in the cost of labor, materials, and equipment.

TVA maintains an NDT to provide funding for the ultimate decommissioning of its nuclear power plants. The trust's funds are invested in securities generally designed to achieve a return in line with overall equity market performance. The assets of the trust are invested in debt and equity securities and certain derivative instruments. The derivative instruments are used across various asset classes to achieve a desired investment structure. The balance in the trust at September 30, 2011, is less than the present value of the estimated future nuclear decommissioning costs under both the NRC methodology and GAAP, but more than the level set forth in the assurance plan that TVA submitted to the NRC.

The following key assumptions can have a significant effect on estimates related to the nuclear decommissioning costs reported in TVA's nuclear ARO liability:

- Timing – In projecting decommissioning costs, two assumptions must be made to estimate the timing of plant decommissioning. First, the date of the plant's retirement must be estimated. (At a multiple unit site, the estimated retirement date is based on the unit with the longest license period remaining, or an assumption could be made that the plant will be relicensed and operate for some time beyond the original license term.) Second, an assumption must be made on the timing of decommissioning. Currently TVA uses the assumption that decommissioning will occur within the first seven years after plant shut down. While the impact of these assumptions cannot be determined with precision, either assuming license extension or

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extending the timing of decommissioning can significantly decrease the present value of these obligations.

- Technology and Regulation – There is limited experience with actual decommissioning of large nuclear facilities. Changes in technology and experience as well as changes in regulations regarding nuclear decommissioning could cause cost estimates to change significantly. TVA's cost studies assume current technology and regulations.

- Discount Rate – TVA uses rates between 5.15 percent and 5.66 percent to calculate the present value of the weighted estimated cash flows required to satisfy TVA's decommissioning obligation.

- Cost Escalation Factors – TVA's decommissioning estimates include an assumption that decommissioning costs will escalate over present cost levels by four percent annually.

Non-Nuclear Decommissioning. The present value of the estimated future non-nuclear decommissioning cost was $1.0 billion at September 30, 2011. This decommissioning cost estimate involves estimating the amount and timing of future expenditures and making judgments concerning whether or not such costs are considered a legal obligation. Estimating the amount and timing of future expenditures includes, among other things, making projections of the timing and duration of the asset retirement process and how costs will escalate with inflation. The actual decommissioning costs may vary from the derived estimates because of changes in current assumptions, such as the assumed dates of decommissioning, changes in regulatory requirements, changes in technology, and changes in the cost of labor, materials, and equipment.

TVA maintains an asset retirement trust ("ART") to help fund the ultimate decommissioning of its power assets. The trust's funds are invested in securities generally designed to achieve a return in line with equity and fixed-income market performance. The assets of the fund are invested in securities directly and indirectly through commingled funds. Estimates involved in determining if additional funding will be made to the ART include inflation rate and rate of return projections on the fund investments.

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

- Timing – In projecting non-nuclear decommissioning costs, the date of the asset's retirement must be estimated. TVA uses a probability-weighted scenario approach based on management assumptions, type of asset, and other factors to estimate the expected retirement time period. In instances where the retirement of a specific asset differs from the anticipated retirement date, the anticipated retirement date of that specific asset is used. Additionally, TVA expects to incur certain ongoing costs subsequent to the initial asset retirement.

- Technology and Regulation – Changes in technology and experience as well as changes in regulations regarding non-nuclear decommissioning could cause cost estimates to change significantly. TVA's cost studies generally assume current technology and regulations. With respect to the CCR facilities, TVA assumes that any future closures will require more costly materials and processes than what is legally required at September 30, 2011.

- Discount Rate – TVA uses its incremental lending rate over a period consistent with the remaining timeframe until the costs are expected to be incurred to calculate the present value of the weighted estimated cash flows required to satisfy TVA's non-nuclear decommissioning obligation. At September 30, 2011, the discount rates used in the calculations range from 0.64 percent to 5.66 percent.

- Cost Escalation Factors – TVA's non-nuclear decommissioning estimates include an assumption that decommissioning costs will escalate over present cost levels at rates between 1.88 percent and 4.00 percent annually.

Pension and Other Post-Retirement Benefits

TVA sponsors a defined benefit pension plan that is qualified under IRS rules and covers substantially all of its full-time annual employees. TVARS, a separate legal entity governed by its own board of directors, administers the qualified defined benefit pension plan. TVA also provides a Supplemental Executive Retirement Plan ("SERP") to certain executives in critical positions, which provides supplemental pension benefits tied to compensation levels that exceed limits imposed by IRS rules applicable to the qualified defined benefit pension plan. Additionally, TVA provides post-retirement health care benefits for most of its full-time employees who reach retirement age while still working for TVA. TVA's costs of providing these benefits are impacted by numerous factors including the provisions of the plans, changing employee demographics, and various actuarial calculations, assumptions, and accounting mechanisms. The most significant of these factors are discussed below.

Expected Return on Plan Assets. The qualified defined benefit pension plan is the only plan that is funded with qualified plan assets. The expected returns on pension plan assets used to develop net pension expense were 7.50 percent,

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7.75 percent, and 8.00 percent during 2011, 2010, and 2009, respectively, and are determined at the beginning of the period. Changes in the expected return rates are generally based on studies performed by third party professional investment consultants. A higher expected rate of return decreases net periodic pension expense. A lower expected rate of return increases net periodic pension expense. TVA adjusted the expected rate of return on pension plan assets to 7.25 percent for 2012 based on a recent asset/liability study performed by third party professional investment consultants. The expected rate of return had been reduced for 2010 based on a similar study and upon a June 2009 change in the TVARS policy allocating the investment mix of plan assets. The change in 2010 shifted a portion of target asset investment allocations from equities to fixed income. The change in the TVARS investment allocation policy was based on a recommendation by the TVARS investment consultant. The recent changes in the expected rate of return on pension plan assets discussed above do not affect TVA's post-retirement benefits plan because TVA does not separately set aside assets to fund such benefits. TVA funds its post-retirement plan benefits on an as-paid basis. These changes in the expected rate of return on pension plan assets also do not impact the SERP as any assets set aside for that plan are not considered plan assets under GAAP. The actuarial loss related to the difference between expected and actual return on pension plan assets for 2011 was $444 million. This amount was recognized as an increase to the related regulatory asset.

Compensation Increases. Assumptions related to compensation increases are based on the results obtained from an actual company experience study performed during the most recent six years for retirees as well as other plan participants. TVA obtained an updated study in 2008 and determined that future compensation would increase at rates between 3.30 percent and 10.10 percent per year, depending upon the employee's age. Based upon the current active participants, the average assumed compensation increase used to determine benefit obligations for 2011 and 2010 was 4.43 percent and 4.41 percent, respectively.

Discount Rate. In the case of selecting an assumed discount rate, TVA reviews market yields on high-quality corporate debt and long-term obligations of the U.S. Treasury and endeavors to match, through the use of a hypothetical bond portfolio, instrument maturities with the maturities of its pension obligations in accordance with the prevailing accounting standards. In addition, TVA looks at published pension spot yield curves and applies expected cash flows to the curve to approximate the rate expected to settle the projected benefit payments. The discount rates used to determine net pension cost were 5.00 percent, 5.75 percent, and 7.50 percent during 2011, 2010, and 2009, respectively. The discount rate is determined at the beginning of the period. TVA plans to use a discount rate of 4.50 percent in the determination of 2012 net periodic pension expense and also used this rate to value plan obligations at the end of 2011. Changes in the discount rate for 2011 were due to decreased long-term interest rates. The discount rate is somewhat volatile because it is determined based upon the prevailing rate as of the measurement date. The discount rate used to determine the post-retirement benefits costs is the same rate used to determine pension benefits costs due to a similar expected duration of the post-retirement and pension benefit obligations. A higher discount rate decreases the plan obligations and correspondingly decreases the net periodic pension and post-retirement benefits expense for those plans where actuarial losses are being amortized. On the other hand, a lower discount rate increases net periodic pension and post-retirement benefits costs.

Mortality. Mortality assumptions are based on the results obtained from a recent actual company experience study performed which included retirees as well as other plan participants. TVA obtained an updated study in 2008 and, accordingly, adjusted the mortality rates from the 1983 Group Annuity Mortality Tables to the RP-2000 Mortality Tables. During 2010, company experience was reexamined and it was determined that TVA's mortality experience has continued to improve. As a result, TVA adjusted the mortality rates to RP-2000 Combined Healthy Mortality table projected to 2013 using scale AA at September 30, 2010. There were no changes to the mortality assumptions in 2011.

Health Care Cost Trends. TVA reviews actual recent cost trends and projected future trends in establishing health care cost trend rates. The assumed health care trend rate used for 2011 and 2010 was 8.0 percent. The 2011 health care cost trend rate of 8.0 percent used to determine benefit obligations is assumed to gradually decrease each successive

year until it reaches a 5.0 percent annual increase in health care costs in the years beginning October 1, 2017, and beyond.

Cost of Living Adjustment. The qualified defined benefit pension plan includes a cost of living adjustment ("COLA") that is generally indexed against the Consumer Price Index ("CPI"), subject to a floor and ceiling. The CPI fell during 2009, and market-based measures of inflation expectations at the end of 2009 projected slow growth in the CPI through 2015. Additionally, the COLA was temporarily reduced for a four-year period beginning January 1, 2010 for current retirees, and eligibility for the COLA was changed to age 60 for employees retiring on or after January 1, 2010. The COLA assumption has been 2.50 percent since 2009. Due to stabilizing long-term expectations, TVA determined the COLA assumption should be held at 2.50 percent at September 30, 2011.

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Sensitivity of Costs to Changes in Assumptions. The following chart reflects the sensitivity of pension costs to changes in certain actuarial assumptions:

Sensitivity to Certain Changes in Pension Assumptions
At September 30, 2011

Actuarial Assumption	Change in Assumption	Impact on 2012 Pension Cost	Impact on 2011 Projected Benefit Obligation
Discount rate	(0.25)%	$18	$332
Rate of return on plan assets	(0.25)%	$15	N/A

Each fluctuation above assumes that the other components of the calculation are held constant and excludes any impact for unamortized actuarial gains or losses.

The following chart reflects the sensitivity of post-retirement benefit costs to changes in the health care cost trend rate:

Sensitivity to Changes in Assumed Health Care Cost Trend Rates
At September 30, 2011

	1% Increase	1% Decrease
Effect on total of service and interest cost components	$5	$(6)
Effect on end-of-year accumulated post-retirement benefit obligation	$293	$(132)

Each fluctuation above assumes that the other components of the calculation are held constant and excludes any impact for unamortized actuarial gains or losses.

Accounting Mechanisms. In accordance with current accounting methodologies, TVA utilizes a number of accounting mechanisms that reduce the volatility of reported pension expense. Differences between actuarial assumptions and actual plan results are deferred and are amortized into periodic expense only when the accumulated differences exceed 10 percent of the greater of the projected benefit obligation or the market-related value of plan assets. If necessary, the excess is amortized over the average remaining service period of active employees.

Additionally, TVA recognizes the impact of asset performance on pension expense over a three-year phase-in period through a “market-related” value of assets calculation. Since the market-related value of assets recognizes investment gains and losses over a three-year period, the future value of assets will be impacted as previously deferred gains or losses are recognized. As a result, losses that the pension plan assets experience may have an adverse impact on pension expense in future years depending on whether the actuarial losses at each measurement date exceed 10 percent of the greater of the projected benefit obligation or the market-related value of plan assets in accordance with current accounting methodologies. See Note 18 for a discussion of obligations and funded status.

Expected Contributions. In 2011, TVA made contributions of $270 million to the defined benefit pension plan, $4 million to the SERP, and $38 million to the other post-retirement benefit plans. In addition, TVA expects to contribute $6 million to the SERP and $40 million to the other post-retirement benefit plans in 2012. The TVA Board has authorized the Chief Executive Officer to approve TVA making a discretionary contribution to the defined benefit pension plan of up to $300 million in 2012, subject to a review by the Finance, Rates and Portfolio Committee of the TVA Board. However, at this time, it has not been determined whether any contribution will be made.

Fair Value Measurements

Investments

Investments classified as trading consist of amounts held in the NDT, the ART, and the SERP. These assets are generally measured at fair value based on quoted market prices or other observable market data such as interest rate indices. These investments are primarily U.S. equities, international equities, real estate investment trusts, fixed income investments, high-yield fixed income investments, U.S. Treasury inflation-protected securities, commodities, currencies, derivative instruments, and other investments. TVA has classified all of these trading securities as either Level 1, Level 2, or Level 3 valuations. See Note 14 — Valuation Techniques for a discussion of valuation levels of the investments. See Note 18 — Fair Value Measurements for disclosure of fair value measurements for investments held by TVARS that support TVA's qualified defined benefit pension plan.

Prices provided by third-parties for the investments are subjected to automated tolerance checks by the investment portfolio trustee to identify and avoid, where possible, the use of inaccurate prices. Any such prices identified as outside the tolerance thresholds are reported to the vendor which provided the price. If the prices are validated, the primary pricing source is used. If not, a secondary source price which has passed the applicable tolerance check is used (or queried with the vendor if it is out of tolerance), resulting in either the use of a secondary price, where validated, or the last reported default price, as in the

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case of a missing price. For monthly valued accounts, where secondary price sources are available, an automated inter-source tolerance report identifies prices with an inter-vendor pricing variance of over two percent at an asset class level. For daily valued accounts, each security is assigned, where possible, an indicative major market index, against which daily price movements are automatically compared. Tolerance thresholds are established by asset class. Prices found to be outside of the applicable tolerance threshold are reported and queried with vendors as described above.

Derivatives

Commodity derivatives under the Financial Trading Program ("FTP") are classified as Level 1 and Level 2 valuations. Currency swaps and interest rate swaps are classified as Level 2 valuations. The swaption and certain coal contract derivatives are classified as Level 3 valuations.

Currency Swaps, Swaption, and Interest Rate Swaps. TVA has three currency swaps, one swaption, and three "fixed for floating" interest rate swaps. The currency swaps and interest rate swaps are classified as Level 2 valuations as the rate curves and interest rates affecting the fair value of the contracts are based on observable data. While most of the fair value measurement is based on observable inputs, volatility for TVA's swaption is generally unobservable and it is classified as a Level 3 valuation. Therefore, the valuation is derived from an observable volatility measure with adjustments. The application of credit valuation adjustments ("CVAs") resulted in a decrease of $1.7 million in the fair value of the swaption and interest rate swaps, and did not materially affect the fair values of the currency swaps, at September 30, 2011.

Commodity Contracts. The fair value of this derivative portfolio is valued using internal models. The significant inputs to these models are price indications such as quoted spot prices and implied forward prices. The pricing model is based on significant unobservable inputs, similar products, or products priced in different time periods. TVA designs price curves and valuation models based on the best available information and industry accepted practices. As a result, these valuations are classified as Level 3 valuations. Additionally, any settlement fees related to early termination of coal supply contracts are included at the contractual amount. The application of CVAs resulted in a decrease of $108 million in the fair values of coal contracts in an asset position at September 30, 2011.

Commodity Derivatives under the Financial Trading Program. TVA uses quoted Chicago Mercantile Exchange ("CME") prices in its determination of the fair value of these contracts. Contracts settled on the CME are classified as Level 1 valuations. These are primarily natural gas futures, fuel oil futures, crude oil futures, and natural gas option contracts. Contracts where nonperformance risk exists outside of the exit price are measured with the incorporation of CVAs and are classified as Level 2 valuations. These are primarily natural gas, fuel oil, and crude oil swap contracts. The application of CVAs did not materially affect the fair value of these assets and liabilities at September 30, 2011.

TVA maintains policies and procedures to value commodity contracts using what is believed to be the best and most relevant data available. In addition, TVA's risk management group reviews valuations and pricing data. TVA retains independent pricing vendors to assist in valuing certain instruments without market liquidity.

Fair Value Considerations

In determining the fair value of its financial instruments, TVA considers the source of observable market data inputs, liquidity of the instrument, credit risk, and risk of nonperformance of itself or the counterparty to the contract. The conditions and criteria used to assess these factors are described below.

Sources of Market Assumptions. TVA derives its financial instrument market assumptions from market data sources (e.g., CME, Moody's Investors Service ("Moody's")). In some cases, where market data is not readily available, TVA uses comparable market sources and empirical evidence to derive market assumptions and determine a financial instrument's fair value.

Market Liquidity. Market liquidity is assessed by TVA based on criteria as to whether the financial instrument trades in an active or inactive market. A financial instrument is considered to be in an active market if the prices are fully transparent to the market participants, the prices can be measured by market bid and ask quotes, the market has a relatively high trading volume as compared to TVA's current trading volume, and the market has a significant number of market participants that will allow the market to rapidly absorb the quantity of the assets traded without significantly affecting the market price. Other factors TVA considers when determining whether a market is active or inactive include the presence of government or regulatory control over pricing that could make it difficult to establish a market based price upon entering into a transaction.

Nonperformance Risk. In determining the potential impact of nonperformance risk, which includes credit risk, TVA considers changes in current market conditions, readily available information on nonperformance risk, letters of credit, collateral, other arrangements available, and the nature of master netting arrangements. TVA is a counterparty to derivatives which subject TVA to nonperformance risk. Nonperformance risk on the majority of investments and certain exchange-traded instruments held by TVA is incorporated into the exit price that is derived from quoted market data that is used to mark the investment to market.

Nonperformance risk for most of TVA's derivative instruments is an adjustment to the initial asset/liability fair value. TVA

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adjusts for nonperformance risk, both of TVA (for liabilities) and the counterparty (for assets), by applying a CVA. TVA determines an appropriate CVA for each applicable financial instrument based on the term of the instrument and TVA's or the counterparty's credit rating as obtained from Moody's. For companies that do not have an observable credit rating, TVA uses internal analysis to assign a comparable rating to the company. TVA discounts each financial instrument using the historical default rate (as reported by Moody's for CY 1983 to CY 2010) for companies with a similar credit rating over a time period consistent with the remaining term of the contract.

All derivative instruments are analyzed individually and are subject to unique risk exposures. At September 30, 2011, the aggregate counterparty credit risk adjustments applied to TVA's derivative asset and liability positions were decreases of $108 million and $2 million, respectively.

Collateral. TVA's interest rate swaps, its currency swaps, and its swaption contain contract provisions that require a party to post collateral (in a form such as cash or a letter of credit) when the party's liability balance under the agreement exceeds a certain threshold. See Note 13 — Other Derivative Instruments — Collateral for a discussion of collateral related to TVA's derivative liabilities. Additionally, TVA's credit rating downgrade required TVA to post $100 million of additional collateral under certain physical and financial contracts that contain rating triggers.

Level 3 Information. Unrealized gains and/or losses on contracts classified as Level 3 valuations are included in regulatory assets and/or liabilities until the contracts are settled. TVA experienced unrealized gains on coal contracts with volume options due to changes in coal market prices during the year ended September 30, 2011. TVA also experienced unrealized losses on the swaption liability due to decreases in interest rates during the year ended September 30, 2011. Unrealized losses on these instruments did not have a material effect on liquidity or capital resources. There were no realized gains or losses during the year ended September 30, 2011 on any contract classified as Level 3 valuation. At September 30, 2011, Level 3 valuations represented 29 percent of total assets measured at fair value and 61 percent of total liabilities measured at fair value.

New Accounting Standards and Interpretations

The following accounting standards and interpretations became effective for TVA during the presented periods.

Noncontrolling Interests. In December 2007, the Financial Accounting Standards Board ("FASB") issued guidance that introduces significant changes in the accounting for noncontrolling interests (formerly minority interests) in a partially-owned consolidated subsidiary. The guidance also changes the accounting for and reporting for the deconsolidation of a subsidiary. The guidance requires that noncontrolling interests in a consolidated subsidiary be displayed in the consolidated statement of financial position as a separate component of equity. The guidance also requires that earnings attributed to noncontrolling interests be reported as part of consolidated earnings, and requires disclosure of the attribution of consolidated earnings to the controlling and noncontrolling interests on the face of the consolidated income statement. These changes became effective for TVA as of October 1, 2009. The adoption of this guidance did not materially impact TVA's financial condition, results of operations, or cash flows but will impact the accounting for any future noncontrolling interests.

Transfers of Financial Assets. In June 2009, FASB issued guidance regarding accounting for transfers of financial assets. This guidance eliminates the concept of a qualifying special-purpose entity ("QSPE") and subjects those entities to the same consolidation guidance as other variable interest entity ("VIEs"). The guidance changes the eligibility criteria for certain transactions to qualify for sale accounting and the accounting for certain transfers. The guidance also establishes broad disclosure objectives and requires extensive specific disclosure requirements related to the transfers. These changes became effective for TVA for any transfers of financial assets occurring on or after October 1, 2010. The adoption of this guidance did not materially affect TVA's financial condition, results of operations, or cash flows.

Variable Interest Entities. In June 2009, FASB issued guidance that changes the consolidation guidance for VIEs. The guidance eliminates the consolidation scope exception for QSPEs. The guidance amends the triggering events to determine if an entity is a VIE, establishes a primarily qualitative model for determining the primary beneficiary of the VIE, and requires on-going assessment of whether the reporting entity is the primary beneficiary. These changes became effective for TVA on October 1, 2010, and apply to all entities determined to be VIEs as of and subsequent to the date of adoption. The adoption of this guidance did not materially affect TVA's financial condition, results of operations, or cash flows.

In May 2011, the FASB issued an accounting standard that creates consistency between GAAP and International Financial Reporting Standards ("IFRS") on the definition of fair value and on the guidance on how to measure fair value and on what to disclose about fair value measurements. This guidance is effective for TVA on October 1, 2012. Although this standard may require additional disclosure, TVA does not expect the adoption of this guidance to have a material impact on its financial statements.

In June 2011, FASB issued guidance that will require adjustments to the presentation of TVA's financial information. The guidance eliminates the current option to report comprehensive income and its components in the statement of changes in proprietary capital. The guidance allows for presentation of net income and other comprehensive income in one continuous statement or in two separate, but consecutive statements. These changes become effective for TVA on October 1,

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2012.

Legislative and Regulatory Matters

In December 2010, Congress passed the Continuing Appropriations and Surface Transportation Extensions Act, 2011, which included a two-year freeze on statutory pay adjustments for all executive branch pay schedules and a two-year freeze by executive agencies on base salary increases to all senior executives. These two-year freezes apply to calendar years 2011 and 2012. The directors of the TVA Board are covered by the first freeze and TVA's officers (Vice President and above) are covered by the second freeze. TVA will comply with these legislative freezes. Accordingly, TVA's officers will not receive any salary increases, including performance-based salary increases, during calendar years 2011 and 2012. Any salary increases that TVA's officers received for 2011, based on performance during 2010, were effective October 1, 2010, prior to the effective date of the salary freeze legislation and were not affected by the two-year freeze requirement.

Following the passage of the legislation described above, the President of the United States issued a memorandum to Federal agencies not directly covered by the legislation, which includes TVA, requesting that these agencies also comply with the terms of the salary freeze. In response, TVA has chosen to voluntarily implement a salary freeze for manager, specialist and excluded employees during calendar years 2011 and 2012 in accordance with the spirit in which the President and Congress approved the salary freeze. The federal salary freeze does not apply to TVA's represented employees, whose salary increases are governed by the terms of collective bargaining agreements, certain promotions and changes in positions, and other forms of non-salary compensation such as lump-sum and incentive-based awards.

A bill has been introduced in Congress, through which Congress would approve TVA's transfer, on behalf of the United States, of the Yellow Creek Port properties to Mississippi. The property was acquired to be part of a river terminal, a railroad, and industrial sites on the Pickwick Reservoir in Tishomingo County, Mississippi. The transfer would be made under section 4(k)(b) of the TVA Act that allows TVA to dispose of land for the purpose of erecting docks and buildings for shipping purposes or the manufacture or storage of products for the purpose of trading or shipping. Transfers under this section of the TVA Act require congressional approval.

For a discussion of environmental legislation and regulation, see Item 1, Business — Environmental Matters.

Environmental Matters

See Item 1, Business — Environmental Matters, which discussion is incorporated by reference into this Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations.

Legal Proceedings

From time to time, TVA is a party to or otherwise involved in lawsuits, claims, proceedings, investigations, and other legal matters (“Legal Proceedings”) that have arisen in the ordinary course of conducting TVA’s activities, as a result of a catastrophic event or otherwise. TVA had accrued approximately $391 million with respect to Legal Proceedings at September 30, 2011. 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.

For a discussion of certain current material Legal Proceedings, see Note 20 — Legal Proceedings, which discussion is incorporated by reference into this Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations.

Risk Management Activities

TVA is exposed to various market risks. These market risks include risks related to commodity prices, investment prices, interest rates, currency exchange rates, inflation, and counterparty credit and performance risk. To help manage certain of these risks, TVA has entered into various derivative transactions, principally commodity option contracts, forward contracts, swaps, swaptions, futures, and options on futures. Other than certain derivative instruments in its trust investment funds, it is TVA's policy to enter into these derivative transactions solely for hedging purposes and not for speculative purposes. See Note 13.

Risk Governance

The Enterprise Risk Council ("ERC") was created in 2005 to strengthen and formalize TVA's enterprise-wide risk management efforts. The ERC is responsible for the highest level of risk oversight at TVA and is also responsible for communicating enterprise-wide risks with policy implications to the TVA Board or a designated TVA Board committee. The ERC's current members are the President and Chief Executive Officer (chair); Chief Financial Officer; Group President, Strategy and External Relations; Chief Information Officer; Executive Vice President for People and Performance; Executive Vice President and General Counsel; Vice President, Office of the CEO; Chief Risk Officer; and a designated representative from Office of the Inspector General as an advisory member.

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The ERC has established a subordinate Risk Management Steering Committee ("RMSC"). The RMSC is responsible for (1) reviewing risk management policies to ensure their consistency with TVA's Enterprise Risk Management ("ERM") policies and guidelines, (2) reviewing Strategic Business Unit risks and emerging issues, (3) providing executive guidance and support in enterprise risk assessments and risk management plans, (4) presenting enterprise risks for consideration by the ERC, (5) recommending general risk management processes and methodologies for the enterprise, and (6) sponsoring special projects related to cross-functional risk management activities.

TVA has a designated ERM organization within its Financial Services organization responsible for (1) coordinating risk assessment efforts at TVA organizations, (2) facilitating enterprise risk discussions with the risk subject matter experts at the RMSC, ERC, and TVA Board levels, and (3) developing and improving risk governance structure and risk assessment processes and methodologies.

TVA has cataloged major short-term and long-term enterprise level risks across the organization. A discussion of significant risks is presented in Item 1A, Risk Factors.

Commodity Price Risk

TVA is exposed to effects of market fluctuations in the price of commodities that are critical to its operations, including coal, uranium, natural gas, fuel oil, crude oil, construction materials, reagents, emission allowances, and electricity. TVA's commodity price risk is substantially mitigated by its cost-based rates, including its total fuel rate mechanism. To manage cost volatility for its wholesale and directly served customers, TVA has established a FTP. Under the FTP, TVA currently hedges the risks associated with the price of natural gas, fuel oil, crude oil, and coal. TVA is prohibited from taking speculative positions in its FTP.

Following is a discussion of the impact on the value of TVA's natural gas, coal, fuel oil, and crude oil derivative positions in its FTP that would result from hypothetical changes in commodity prices:

Natural Gas. A hypothetical 10 percent decline in the market price of natural gas on September 30, 2011, and 2010, would have resulted in decreases of approximately $101 million and $32 million, respectively, in the fair value of TVA's natural gas trading derivative instruments at these dates.

Coal. A hypothetical 10 percent decline in the market price of coal on September 30, 2011, and 2010, would have resulted in decreases of approximately $1 million and $3 million, respectively, in the fair value of TVA's financial coal derivative instruments at these dates.

Fuel Oil. A hypothetical 10 percent decline in the market price of fuel oil on September 30, 2011, and 2010, would have resulted in decreases of approximately $4 million and $6 million, respectively, in the fair value of TVA's fuel oil derivative instruments at these dates.

Crude Oil. A hypothetical 10 percent decline in the market price of crude oil on September 30, 2011, and 2010, would have resulted in decreases of approximately $9 million and $8 million, respectively, in the fair value of TVA's crude oil derivative instruments at these dates.

Investment Price Risk

TVA's investment price risk relates primarily to investments in TVA's NDT, ART, pension fund, and SERP.

Nuclear Decommissioning Trust. The NDT is generally designed to achieve a return in line with overall equity market performance. The assets of the trust are invested in debt and equity securities and certain derivative instruments including forwards, futures, options, and swaps, and through these investments the trust has exposure to U.S. equities, international equities, real estate investment trusts, high-yield debt, U.S. Treasury inflation-protected securities, commodities, currencies, and private partnerships. At September 30, 2011, and 2010, an immediate 10 percent decrease in the price of the investments in the trust would have reduced the value of the trust by $95 million and $94 million, respectively. See Results of Operations — Critical Accounting Policies and Estimates — Asset Retirement Obligations — Nuclear Decommissioning for more information regarding TVA’s NDT.

Asset Retirement Trust. The ART is presently invested to achieve a return in line with equity and fixed income market performance. The assets of the trust are invested in securities directly and indirectly through commingled funds. At September 30, 2011, and 2010, an immediate 10 percent decrease in the price of the investments in the trust would have reduced the value of the trust by $19 million and $16 million, respectively.

Qualified Pension Plan. In September 2011, the TVARS Board approved a long-term investment plan which contains a "dynamic de-risking" strategy that calls for investments to be shifted into assets that better match the liability, such as long duration fixed income securities, over time as funding targets are met. The new policy sets an initial target of 50 percent equity

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securities including U.S. and non U.S. equities, 38 percent fixed income securities, and 12 percent alternative investments including private equity, private real estate, distressed debt, and timber. The qualified pension plan assets are invested in equity securities, debt securities, U.S. equities, international equities, real estate investment trusts, private real estate, timber, investment-grade debt, high-yield debt, U.S. Treasury inflation-protected securities, commodities, currencies, and derivative instruments such as futures, options, swaps, and forwards. Under the derivative policy, investment managers may not use derivative financial instruments to fundamentally change the risk/return profile of their portfolio relative to their benchmarks. At September 30, 2011, and 2010, an immediate 10 percent decrease in the value of the net assets in the fund would have reduced the value of the fund by approximately $655 million and $680 million, respectively. See Results of Operations — Critical Accounting Policies and Estimates — Pension and Other Post-Retirement Benefits and Note 18 — Fair Value Measurements.

Supplemental Executive Retirement Plan. The SERP is a non-qualified defined benefit pension plan similar to those typically found in other companies in TVA's peer group and is provided to a limited number of executives. TVA's SERP was created to recruit and retain key executives. The plan is designed to provide a competitive level of retirement benefits in excess of the limitations on contributions and benefits imposed by TVA's qualified defined benefit plan and Internal Revenue Code section 415 limits on qualified retirement plans. The SERP currently targets an asset allocation policy for its plan assets of 65 percent equity securities, which includes U.S. and non U.S. equities, and 35 percent fixed income securities. The SERP plan assets are invested in equity and debt securities. At September 30, 2011, and 2010, an immediate 10 percent decrease in the value of the SERP investments would have reduced the value by approximately $3 million.

Interest Rate Risk

TVA’s interest rate risk is related primarily to its short-term investments, short-term debt, long-term debt, swaption transaction, and interest rate swaps related to three of TVA’s swaption transactions.

Short-Term Investments. At September 30, 2011, TVA had $507 million of cash and cash equivalents, and the average balance of cash and cash equivalents for 2011 was $909 million. The average interest rate that TVA received on its short-term investments during 2011 was less than one percent. If the rates of interest that TVA received on its short-term investments during 2011 were zero percent, TVA would have received $1 million less in interest from its short-term investments during 2011. At September 30, 2010, TVA had $328 million of cash and cash equivalents, and the average balance of cash and cash equivalents for 2010 was $234 million. The average interest rate that TVA received on its short-term investments during 2010 was less than one percent. If the rates that TVA received on its short-term investments during 2010 were zero percent, TVA would have received $1 million less in interest on short-term investments during 2010. In addition to affecting the amount of interest that TVA receives from its short-term investments, changes in interest rates could affect the value of the investments in its pension fund, ART, NDT, and SERP. See Results of Operations — Risk Management Activities — Investment Price Risk.

Short-Term Debt. At September 30, 2011, TVA’s short-term borrowings were $482 million, and the current maturities of long-term debt were $1.5 billion. Based on TVA’s interest rate exposure at September 30, 2011, an immediate one percentage point increase in interest rates would have resulted in an increase of $20 million in TVA’s short-term interest expense. At September 30, 2010, TVA’s short-term borrowings were $27 million, and the current maturities of long-term debt were $1.0 billion. Based on TVA’s interest rate exposure at September 30, 2010, an immediate one percentage point increase in interest rates would have resulted in an increase of $10 million in TVA’s short-term interest expense.

Long-Term Debt. At September 30, 2011, and 2010, the interest rates on all of TVA’s outstanding long-term debt were fixed. Accordingly, an immediate one percentage point increase in interest rates would not have affected TVA’s interest expense associated with its long-term debt. When TVA’s long-term debt matures or is redeemed, however,

TVA typically refinances this debt by issuing additional long-term debt. Accordingly, if interest rates are high when TVA issues this additional long-term debt, TVA's cash flows, results of operations, and financial condition may be adversely affected. This risk is somewhat mitigated by the fact that TVA's debt portfolio is diversified in terms of maturities and has a long average life. At September 30, 2011, and 2010, the average life of TVA's debt portfolio was 17.6 years and 18.2 years, respectively. A schedule of TVA's debt maturities is contained in Note 11 — Debt Outstanding.

Swaption and Interest Rate Swap Agreements. Changes in interest rates also affect the mark-to-market valuation of TVA's swaption agreement and interest rate swaps. Net unrealized gains and losses on these transactions are reflected on TVA's balance sheets in a regulatory asset account, and realized gains and losses are reflected in earnings. Based on TVA's interest rate exposure at September 30, 2011, an immediate one percentage point decrease in interest rates would have increased the interest rate swap liabilities by $194 million and a half percentage point decrease in interest rates would have increased the swaption liability by $197 million. Based on TVA's interest rate exposure at September 30, 2010, an immediate one percentage point decrease in interest rates would have increased the interest rate swap liabilities by $112 million and the swaption liability by $346 million.

Currency Exchange Rate Risk

At September 30, 2011, and 2010, TVA had three issues of Bonds outstanding whose principal and interest payments were denominated in British pounds sterling. TVA issued these Bonds in amounts of £200 million, £250 million, and £150 million in 1999, 2001, and 2003, respectively. When TVA issued these Bonds, it hedged its currency exchange rate risk by entering into

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currency swap agreements. Accordingly, at September 30, 2011, and 2010, a 10 percent change in the British pound sterling-U.S. dollar exchange rate would not have had a material impact on TVA's cash flows, results of operations, or financial position.

Counterparty Credit Risk

Counterparty credit risk is the exposure to economic loss that would occur as a result of a counterparty's nonperformance of its contractual obligations. Where exposed to counterparty credit risk, TVA analyzes the counterparty's financial condition prior to entering into an agreement, establishes credit limits, monitors the appropriateness of those limits, as well as any changes in the creditworthiness of the counterparty, on an ongoing basis, and employs credit mitigation measures, such as collateral or prepayment arrangements and master purchase and sale agreements, to mitigate credit risk.

Credit of Customers. The majority of TVA's counterparty credit risk is limited to trade accounts receivable from delivered power sales to municipal and cooperative distributor customers, all located in the Tennessee Valley region. To a lesser extent, TVA is exposed to credit risk from industries and federal agencies directly served and from exchange power arrangements with a small number of investor-owned regional utilities related to either delivered power or the replacement of open positions of longer-term purchased power or fuel agreements. As previously mentioned in Item 1, Business — Customers — Other Customers, power sales to United States Enrichment Corp ("USEC") represented four percent of TVA's total operating revenues in 2011. USEC's senior unsecured credit ratings are currently CCC- by Standard & Poor's and Caa2 by Moody's. As a result of its credit rating, USEC has provided credit assurance to TVA under the terms of its power contract. TVA also buys a significant amount of uranium enrichment services from USEC.

TVA had concentrations of accounts receivable from three customers that represented 26 percent of total accounts receivable at September 30, 2011. TVA had concentration of accounts receivable from five customers that represented 36 percent of total accounts receivable at September 30, 2010.

The table below summarizes TVA's customer credit risk from trade accounts receivable at September 30, 2011 and 2010:

Customer Credit Risk
At September 30

	2011	2010
Trade accounts receivable *		
Investment grade		
Municipalities and cooperative distributor customers	$995	$994
Exchange power arrangements	2	3
Industries and federal agencies directly served	51	40
Internally rated - investment grade		
Municipalities and cooperative distributor customers	573	542
Industries and federal agencies directly served	11	7
Non-investment grade		
Industries and federal agencies directly served	1	11
Internally rated - non-investment grade		
Exchange power arrangements	—	—
Industries and federal agencies directly served	5	4
Total trade accounts receivable	1,638	1,601
Other accounts receivable		
Miscellaneous accounts	102	40

Provision for uncollectible accounts	(1)	(2)
Total other accounts receivable	101	38
Accounts receivable, net	$1,739	$1,639

Note

* Includes unbilled power receivables of $10 million and $1.0 billion at September 30, 2011 and September 30, 2010, respectively.

Counterparty Performance Risk. In addition to being exposed to economic loss due to the nonperformance of TVA's customers, TVA is exposed to economic loss because of the nonperformance of its other counterparties, including suppliers and counterparties to its derivative contracts. Where exposed to performance risk, TVA analyzes the counterparty's financial condition prior to entering into an agreement and employs performance assurance measures, such as parent guarantees, letters

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of credit, cash deposits, or performance bonds, to mitigate the risk.

TVA has various agreements under which it has exposure to various financial institutions with which it does business. Most of these are not material on a net exposure basis. TVA believes its policies and procedures for counterparty performance risk reviews have generally protected TVA against significant exposure to financial institutions impacted by recent market and economic conditions.

Credit of Suppliers. If one of TVA's fuel or purchased power suppliers fails to perform under the terms of its contract with TVA, TVA might lose the money that it paid to the supplier under the contract and have to purchase replacement fuel or power on the spot market, perhaps at a significantly higher price than TVA was entitled to pay under the contract. In addition, TVA might not be able to acquire replacement fuel or power in a timely manner and thus might be unable to satisfy its own obligations to deliver power. TVA has a power purchase agreement with a supplier that expires on March 31, 2032. The supplier's senior secured credit ratings are currently CCC- by Standard & Poor's and B2 with Moody's. As a result of the supplier's credit ratings, the company has provided credit assurance to TVA under the terms of its agreement.

Credit of Derivative Counterparties. TVA has entered into derivative contracts for hedging purposes, and TVA's NDT and qualified pension plan have entered into derivative contracts for investment purposes. If a counterparty to one of TVA's hedging transactions defaults, TVA might incur substantial costs in connection with entering into a replacement hedging transaction. If a counterparty to the derivative contracts into which the NDT and the qualified pension plan have entered for investment purposes defaults, the value of the investment could decline significantly, or perhaps become worthless.

Credit of TVA

On August 8, 2011, one rating agency lowered the long-term rating on TVA Bonds to AA+ from AAA. A further downgrade in TVA's credit rating could have material adverse effects on TVA's cash flows, results of operation, and financial condition and could harm investors in TVA securities. Among other things, a downgrade could have the following effects:

- A downgrade could 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 may reduce the amount of cash available for other purposes, which may result in the need to increase borrowings, to reduce other expenses or capital investments, or to increase power rates.

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

- A downgrade below a contractual threshold could prevent TVA from borrowing under three credit facilities totaling $2.5 billion.

- A downgrade could lower the price of TVA securities in the secondary market, thereby hurting investors who sell TVA securities after the downgrade and diminishing the attractiveness and marketability of TVA Bonds.

For a discussion of risk factors related to TVA's credit rating, see Item 1A, Risk Factors.

Subsequent Events

See Note 23, which discussion is incorporated by reference into Results of Operations.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Quantitative and qualitative disclosures about market risk are reported in Results of Operations — Risk Management Activities, which discussion is incorporated into this Item 7A, Quantitative and Qualitative Disclosures About Market Risk.

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ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

TENNESSEE VALLEY AUTHORITY
STATEMENTS OF OPERATIONS
For the years ended September 30
(in millions)

	2011	2010	2009
Operating revenues			
Sales of electricity	$11,723	$10,713	$11,142
Other revenue	118	161	113
Total operating revenues	11,841	10,874	11,255
Operating expenses			
Fuel	2,926	2,092	3,114
Purchased power	1,427	1,127	1,631
Operating and maintenance	3,617	3,232	2,395
Depreciation and amortization	1,772	1,724	1,598
Tax equivalents	662	457	544
Total operating expenses	10,404	8,632	9,282
Operating income	1,437	2,242	1,973
Other income (expense), net	30	24	25
Interest expense			
Interest expense	1,431	1,373	1,312
Allowance for funds used during construction and nuclear fuel expenditures	(126)	(79)	(40)
Net interest expense	1,305	1,294	1,272
Net income (loss)	$162	$972	$726

See Note 21 for detail of related party transactions.
The accompanying notes are an integral part of these financial statements.

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TENNESSEE VALLEY AUTHORITY
BALANCE SHEETS
At September 30
(in millions)

ASSETS

	2011	2010
Current assets		
Cash and cash equivalents	$507	$328
Restricted cash and investments	11	—
Accounts receivable, net	1,739	1,639
Inventories, net	1,028	1,012
Regulatory assets	543	791
Other current assets	215	78
Total current assets	4,043	3,848
Property, plant, and equipment		
Completed plant	44,187	42,997
Less accumulated depreciation	(20,643)	(19,326)
Net completed plant	23,544	23,671
Construction in progress	4,662	3,008
Nuclear fuel	1,073	1,102
Capital leases	26	49
Total property, plant, and equipment, net	29,305	27,830
Investment funds	1,168	1,128
Regulatory and other long-term assets		
Regulatory assets	11,505	9,756
Other long-term assets	372	191
Total regulatory and other long-term assets	11,877	9,947
Total assets	$46,393	$42,753
LIABILITIES AND PROPRIETARY CAPITAL		
Current liabilities		
Accounts payable and accrued liabilities	$1,840	$1,698
Environmental cleanup costs - Kingston ash spill	182	220
Accrued interest	403	407
Current portion of leaseback obligations	80	74
Current portion of energy prepayment obligations	105	105
Regulatory liabilities	280	63
Short-term debt, net	482	27
Current maturities of long-term debt	1,537	1,008
Total current liabilities	4,909	3,602
Other liabilities		
Post-retirement and post-employment benefit obligations	6,007	4,729
Asset retirement obligations	3,138	2,963
Other long-term liabilities	2,405	1,526

Leaseback obligations	1,202	1,279
Energy prepayment obligations	612	717
Environmental cleanup costs - Kingston ash spill	194	305
Regulatory liabilities	285	106
Total other liabilities	13,843	11,625
Long-term debt, net	22,412	22,389
Total liabilities	41,164	37,616
Commitments and contingencies (Note 20)		
Proprietary capital		
Power program appropriation investment	308	328
Power program retained earnings	4,429	4,264
Total power program proprietary capital	4,737	4,592
Nonpower programs appropriation investment, net	630	640
Accumulated other comprehensive income (loss)	(138)	(95)
Total proprietary capital	5,229	5,137
Total liabilities and proprietary capital	$46,393	$42,753

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

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TENNESSEE VALLEY AUTHORITY
STATEMENTS OF CASH FLOWS
For the years ended September 30
(in millions)

	2011	2010	2009
Cash flows from operating activities			
Net income (loss)	$162	$972	$726
Adjustments to reconcile net income (loss) to net cash provided by operating activities			
Depreciation and amortization	1,792	1,743	1,618
Nuclear refueling outage amortization cost	42	102	122
Amortization of nuclear fuel cost	225	238	216
Non-cash retirement benefit expense	465	364	146
Prepayment credits applied to revenue	(105)	(105)	(105)
Fuel cost adjustment deferral	69	(898)	850
Fuel cost tax equivalents	135	(89)	81
Environmental cleanup costs – Kingston ash spill – non cash	76	62	—
Changes in current assets and liabilities			
Accounts receivable, net	(62)	(342)	90
Inventories and other, net	(110)	(119)	(182)
Accounts payable and accrued liabilities	60	308	23
Accrued interest	(4)	6	(40)
Pension contributions	(274)	(6)	(1,005)
Refueling outage costs	—	—	(128)
Environmental cleanup costs – Kingston ash spill, net	(108)	(369)	(231)
Other, net	74	34	(18)
Net cash provided by operating activities	2,437	1,901	2,163
Cash flows from investing activities			
Construction expenditures	(2,417)	(2,015)	(1,793)
Combustion turbine asset acquisition	(436)	—	—
Nuclear fuel expenditures	(216)	(401)	(432)
Change in restricted cash and investments	(11)	—	(17)
Purchases of investments, net	(56)	(42)	(42)
Loans and other receivables			
Advances	(21)	(25)	(13)
Repayments	11	21	11
Other, net	4	4	(1)
Net cash used in investing activities	(3,142)	(2,458)	(2,287)
Cash flows from financing activities			
Long-term debt			
Issues	1,599	1,679	2,369
Redemptions and repurchases	(1,021)	(69)	(2,874)
Short-term debt issues (redemptions), net	455	(817)	659
Proceeds from sale/leaseback financing	5	11	104
Payments on leases and leaseback financing	(118)	(94)	(79)
Bond premium received	—	28	—
Financing costs, net	(20)	(23)	(33)

Payments to U.S. Treasury	(27)	(29)	(33)
Other	11	(2)	(1)
Net cash provided by financing activities	884	684	112
Net change in cash and cash equivalents	179	127	(12)
Cash and cash equivalents at beginning of year	328	201	213
Cash and cash equivalents at end of year	$507	$328	$201

See Note 17 for supplemental cash flow information.

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

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TENNESSEE VALLEY AUTHORITY
STATEMENTS OF CHANGES IN PROPRIETARY CAPITAL
For the years ended September 30
(in millions)

	Power Program Appropriation Investment	Power Program Retained Earnings	Nonpower Programs Appropriation Investment, Net	Accumulated Other Comprehensive Income (Loss)	Total	Comprehensive Income (Loss)
Balance at September 30, 2008	$368	$2,571	$661	$(37)	$3,563	
Net income (loss)	—	733	(7)	—	726	$726
Other comprehensive income (loss)						
Net unrealized loss on future cash flow hedges	—	—	—	(146)	(146)	(146)
Reclassification to earnings from cash flow hedges	—	—	—	108	108	108
Total other comprehensive income (loss)	—	—	—	(38)	(38)	(38)
Total comprehensive income (loss)						$688
Return on power program appropriation investment	—	(13)	—	—	(13)	
Return of power program appropriation investment	(20)	—	—	—	(20)	
Balance at September 30, 2009	$348	$3,291	$654	$(75)	$4,218	
Net income (loss)	—	982	(10)	—	972	$972
Other comprehensive income (loss)						
Net unrealized loss on future cash flow hedges	—	—	—	(37)	(37)	(37)
Reclassification to earnings from cash flow hedges	—	—	—	17	17	17
Total other comprehensive income (loss)	—	—	—	(20)	(20)	(20)
Total comprehensive income (loss)						$952
Return on power program appropriation investment	—	(9)	—	—	(9)	
Return of power program appropriation investment	(20)	—	(4)	—	(24)	
Balance at September 30, 2010	$328	$4,264	$640	$(95)	$5,137	
Net income (loss)	—	172	(10)	—	162	$162
Other comprehensive income (loss)						
Net unrealized loss on future cash flow hedges	—	—	—	(50)	(50)	(50)
	—	—	—	7	7	7

Reclassification to earnings from cash flow hedges						
Total other comprehensive income (loss)	—	—	—	(43)	(43)	(43)
Total comprehensive income (loss)						$119
Return on power program appropriation investment	—	(7)	—	—	(7)	
Return of power program appropriation investment	(20)	—	—	—	(20)	
Balance at September 30, 2011	$308	$4,429	$630	$(138)	$5,229	

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

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NOTES TO FINANCIAL STATEMENTS
(Dollars in millions except where noted)

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1. Summary of Significant Accounting Policies

General

In response to a request by President Franklin D. Roosevelt, the U.S. Congress in 1933 enacted legislation creating the Tennessee Valley Authority (“TVA”), a corporate agency and instrumentality of the United States. TVA was created to, among other things, 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 over nine million people.

TVA also manages the Tennessee River, its tributaries, and certain shorelines 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, natural resource protection, and economic development.

The power program has historically been separate and distinct from the stewardship programs. It is required to be self-supporting from power revenues and proceeds from power financings, such as proceeds from the issuance of bonds, notes, and other evidences of indebtedness (“Bonds”). Although TVA does not currently receive congressional appropriations, it is required to make annual payments to the U.S. Treasury in repayment of, and as a return on, the government’s appropriation investment in TVA's power facilities (the "Power Program Appropriation Investment"). In the 1998 Energy and Water Development Appropriations Act, Congress directed TVA to fund essential stewardship activities related to its management of the Tennessee River system and TVA properties with power revenues in the event that there were insufficient appropriations or other available funds to pay for such activities in any fiscal year. Congress has not provided any appropriations to TVA to fund such activities since 1999. Consequently, during 2000, TVA began paying for essential stewardship activities primarily with power revenues, with the remainder funded with user fees and other forms of revenues derived in connection with those activities. The activities related to stewardship properties do not meet the criteria of an operating segment under accounting principles generally accepted in the United States of America ("GAAP"). Accordingly, these assets and properties are included as part of the power program, TVA’s only operating segment.

Power rates are established by the TVA Board of Directors (“TVA Board”) as authorized by the Tennessee Valley Authority Act of 1933, as amended, 16 U.S.C. §§ 831-831ee (as amended, the “TVA Act”). The TVA Act requires TVA to charge rates for power that 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 Power Program 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 Program 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. Rates set by the TVA Board are not subject to review or approval by any state or federal regulatory body.

Fiscal Year

TVA's fiscal year ends September 30. Years (2011, 2010, etc.) refer to TVA's fiscal years unless they are proceeded by "CY," in which case the references are to calendar years.

Cost-Based Regulation

Since the TVA Board is authorized by the TVA Act to set rates for power sold to its customers, TVA is "self regulated." Additionally, TVA's regulated rates are designed to recover its costs of providing electricity. In view of demand for electricity and the level of competition, TVA assumes that rates, set at levels that will recover TVA's costs, can be charged and collected. As a result of these factors, TVA records certain assets and liabilities that result from the regulated ratemaking process that would not be recorded under GAAP for non-regulated entities. Regulatory assets generally represent incurred costs that have been deferred, because such costs are probable of future recovery in customer rates. Regulatory liabilities generally represent obligations to make refunds to customers for previous collections for costs that are not likely to be incurred or deferral of gains that will be credited to customers in future periods. TVA assesses whether the regulatory assets are probable of future recovery by considering factors such as applicable regulatory changes, potential legislation, and changes in technology. Based on these assessments, TVA believes the existing regulatory assets are probable of recovery. This determination reflects the current regulatory and political environment and is subject to change in the future. If future recovery of regulatory assets ceases to be probable, or any of the other factors described above cease to be applicable, TVA would no longer be considered to be a regulated entity and would be required to write off these costs. Most regulatory asset write-offs would be required to be recognized in earnings in the period in which future recovery ceases to be probable.

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Use of Estimates

The preparation of financial statements requires TVA to estimate the effects of various matters that are inherently uncertain as of the date of the financial statements. Although the financial statements are prepared in conformity with GAAP, TVA is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the amounts of revenues and expenses reported during the reporting period. Each of these estimates varies in regard to the level of judgment involved and its potential impact on TVA's financial results. Estimates are deemed critical either when a different estimate could have reasonably been used, or where changes in the estimate are reasonably likely to occur from period to period, and such use or change would materially impact TVA's financial conditions, results of operations, or cash flows.

Reclassifications

Certain reclassifications have been made to the 2009 and 2010 financial statements to conform to the 2011 presentation. Assets of $1.2 billion previously reported as Nuclear fuel and capital leases on the September 30, 2010 Balance Sheet have been reclassified as Nuclear fuel of $1.1 billion and Capital leases of $49 million. Liabilities of $4.7 billion previously reported as Other long-term liabilities on the September 30, 2010 Balance Sheet have been reclassified as Post-retirement and post-employment benefit obligations.

In the Net cash provided by operating activities section of the Statement of Cash Flows, $(81) million and $81 million previously reported as changes in Accounts payable and accrued liabilities for the years ended September 30, 2010 and 2009, respectively, and $(8) million previously reported in Other, net cash provided by operating activities for the year ended September 30, 2010 were reclassified as Fuel cost tax equivalents for the years ended September 30, 2010 and 2009, respectively. Additionally, $(10) million and $10 million previously reported in Other, net cash provided by operating activities for the years ended September 30, 2010 and 2009, respectively, were reclassified as changes in Accounts payable and accrued liabilities.

Operating expenses of $3.2 billion and $4.7 billion at September 30, 2010, and September 30, 2009, respectively, previously reported as Fuel and purchased power on the Statements of Operations, have been reclassified as follows:

	Year Ended September 30, 2010	Year Ended September 30, 2009
Fuel	$2,092	$3,114
Purchased power	1,127	1,631

Interest on debt and leaseback obligations and Amortization of debt discount, issue, and reacquisition costs, net were combined for the year ended September 30, 2011 and are shown as Interest expense on the Statements of Operations.

Allowance for Uncollectible Accounts

The allowance for uncollectible accounts reflects TVA's estimate of probable losses inherent in its accounts and loans receivable balances. TVA determines the allowance based on known accounts, historical experience, and other currently available information including events such as customer bankruptcy and/or a customer failing to fulfill payment arrangements after 90 days. It also reflects TVA's corporate credit department's assessment of the financial condition of customers and the credit quality of the receivables.

The allowance for uncollectible accounts was $1 million and $2 million at September 30, 2011, and 2010, for accounts receivable. Additionally, loans receivable of $74 million and $68 million at September 30 2011, and 2010,

respectively, are included in Other long-term assets, and reported net of allowances for uncollectible accounts of $11 million and $13 million at September 30, 2011, and 2010.

Revenues

Revenues from power sales are recorded as power is delivered to customers. In addition to power sales invoiced and recorded during the month, TVA accrues estimated unbilled revenues for power sales provided to customers for the period of time from the meter-read date to the end of the month. Exchange power sales are presented in the accompanying Statements of Operations as a component of Sales of electricity. Exchange power sales are sales of excess power after meeting TVA native load and directly served requirements. (Native load refers to the customers on whose behalf a company, by statute, franchise, regulatory requirement, or contract, has undertaken an obligation to serve.)

From time-to-time TVA transfers fiber optic capacity on TVA's network to telecommunications service carriers and TVA distributor customers. These transactions are structured as indefeasible rights of use ("IRUs") which are the exclusive right to use a specified amount of fiber optic capacity for a specified term. TVA accounts for the consideration received on transfers of

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fiber optic capacity for cash and on all of the other elements deliverable under an IRU as revenue ratably over the term of the agreement. TVA does not recognize revenue on any contemporaneous exchanges of its fiber optic capacity for an IRU of fiber optic capacity of the counterparty to the exchange.

TVA engages in a wide array of arrangements in addition to power sales. TVA records revenue when it is realized or realizable and earned when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the price or fee is fixed or determinable; and collectability is reasonably assured. Revenues from activities related to TVA's overall mission are recorded as other operating revenue versus those that are not related to the overall mission, which are recorded in Other income (expense), net.

Inventories

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

Allowance for Inventory Obsolescence. TVA reviews supply and material inventories by category and usage on a periodic basis. Each category is assigned a probability of becoming obsolete based on the type of material and historical usage data. Based on the estimated value of the inventory, TVA adjusts its allowance for inventory obsolescence.

Emission Allowances. TVA has emission allowances for sulfur dioxide ("SO_2") and nitrogen oxides ("NO_x") which are accounted for as inventory. The average cost of allowances used each month is charged to operating expense based on tons of SO_2 and NO_x emitted during the respective compliance periods. Allowances granted to TVA by the Environmental Protection Agency ("EPA") are recorded at zero cost.

Property, Plant, and Equipment, and Depreciation

Property, Plant, and Equipment. Additions to plant are recorded at cost, which includes direct and indirect costs and an allowance for funds used during construction ("AFUDC"). The cost of current repairs and minor replacements is charged to operating expense. Nuclear fuel inventories, which are included in Property, plant, and equipment, are valued using the average cost method for raw materials and the specific identification method for nuclear fuel in a reactor. Amortization of nuclear fuel in a reactor is calculated on a units-of-production basis and is included in fuel expense.

Depreciation. TVA accounts for depreciation of its properties using the composite depreciation convention of accounting. Accordingly, the original cost of property retired, less salvage value, is charged to accumulated depreciation. Except as described below, depreciation is generally computed on a straight-line basis over the estimated service lives of the various classes of assets. Depreciation expense expressed as a percentage of the average annual depreciable completed plant was 3.21 percent for 2011, 2.92 percent for 2010, and 2.81 percent for 2009. Average depreciation rates by asset class are as follows:

Property, Plant, and Equipment Depreciation Rates
At September 30

	2011	2010	2009
Asset Class	(percent)		
Nuclear	2.58	2.59	2.59
Coal-Fired	3.80	3.22	3.22
Hydroelectric	1.43	1.43	1.43

Gas and oil-fired	3.70	4.09	4.09
Transmission	3.39	3.40	3.40
Other	7.39	6.03	4.91

Depreciation rates are determined based on an external depreciation study. TVA obtained and implemented a new study during the fourth quarter of 2008. Rates were changed prospectively as a change in estimate. Depreciation expense for the years ended September 30, 2011, 2010, and 2009, was $1.3 billion, $1.2 billion, and $1.2 billion, respectively. Depreciation rates were adjusted to ensure that those coal-fired units which have been identified to be idled will be fully depreciated by the applicable idle dates. In September 2010, TVA idled Widows Creek Fossil Plant ("Widows Creek") Unit 2, and in October 2010 TVA idled Widows Creek Unit 5 as well as Shawnee Fossil Plant Unit 10. The accelerated depreciation expense of the three units in 2010 was $35 million. In June 2011, TVA idled Widows Creek Units 1 and 3, and in August 2011 TVA idled Widows Creek Unit 4. The accelerated depreciation of these three units in 2011 was $29 million. An additional 15 coal-fired units are expected to be idled by 2017, including Widows Creek Unit 6, which was idled in October 2011. John Sevier Fossil Plant ("John Sevier") Units 1-4 are currently expected to be idled by 2012, and Johnsonville Fossil Plant ("Johnsonville") Units 1-10 are

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currently expected to be idled by 2017. The accelerated depreciation expense on these 15 units in 2011 was $44 million and in 2010 was $2 million.

Capital Lease Agreements. Property, plant, and equipment also includes assets recorded under capital lease agreements which primarily consist of office facilities of $9 million and $27 million at September 30, 2011, and 2010, respectively, and fuel fabrication and blending facilities of $17 million and $22 million at September 30, 2011, and 2010, respectively.

Allowance for Funds Used During Construction. AFUDC capitalized during the year ended September 30, 2011, was $126 million as compared with $79 million capitalized during the year ended September 30, 2010. TVA capitalizes interest as AFUDC, based on the average interest rate of TVA's outstanding debt. The allowance is applicable to construction in progress related to certain projects and certain nuclear fuel inventories. Interest on funds invested in capital projects has been capitalized only for projects with (1) an expected total project cost of $1.0 billion or more, and (2) an estimated construction period of at least three years in duration.

The Watts Bar Nuclear Plant ("Watts Bar") Unit 2 construction and the Bellefonte Nuclear Plant ("Bellefonte") Unit 1 construction met the AFUDC criteria during the year ended September 30, 2011. The accumulated balance of costs for qualifying projects, which is used to calculate AFUDC, averaged approximately $1.8 billion for the year ended September 30, 2011.

Software Costs. TVA capitalizes certain costs incurred in connection with developing or obtaining internal-use software. Capitalized software costs are included in Property, plant, and equipment on the balance sheet and are amortized primarily over five years. At September 30, 2011, and 2010, unamortized computer software costs totaled $153 million and $145 million, respectively. Amortization expense related to capitalized computer software costs was $29 million, $29 million, and $22 million for 2011, 2010, and 2009, respectively. Software costs that do not meet capitalization criteria are expensed as incurred.

Impairment of Assets. TVA evaluates long-lived assets for impairment when events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. For long-lived assets, TVA bases its evaluation on impairment indicators such as the nature of the assets, the future economic benefit of the assets, any historical or future profitability measurements, and other external market conditions or factors that may be present. If such impairment indicators are present or other factors exist that indicate that the carrying amount of an asset may not be recoverable, TVA determines whether an impairment has occurred based on an estimate of undiscounted cash flows attributable to the asset as compared with the carrying value of the asset. If an impairment has occurred, the amount of the impairment recognized is measured as the excess of the asset's carrying value over its fair value. Additionally, TVA regularly evaluates construction projects. If the project is canceled or deemed to have no future economic benefit, the project is written off as an asset impairment.

Decommissioning Costs

TVA recognizes legal obligations associated with the future retirement of certain tangible long-lived assets. These obligations relate to fossil-fired generating plants, nuclear generating plants, hydroelectric generating plants/dams, transmission structures, and other property-related assets. These other property-related assets include, but are not limited to, easements, leases, and coal rights. Activities involved with retiring these assets could include decontamination and demolition of structures, removal and disposal of wastes, and site reclamation. Revisions to the estimates of asset retirement obligations ("AROs") are made whenever factors indicate that the timing or amounts of estimated cash flows have changed. Any accretion or depreciation expense related to these liabilities and assets is charged to a regulatory asset. See Note 7 — Nuclear Decommissioning Costs and Non-Nuclear Decommissioning Costs.

Blended Low Enriched Uranium Program

Under the blended low enriched uranium (“BLEU”) program, TVA, the Department of Energy (“DOE”), and certain nuclear fuel contractors have entered into agreements providing for surplus the DOE highly enriched uranium to be blended with other uranium down to a level that allows the blended uranium to be fabricated into fuel that can be used in nuclear power plants. This blended nuclear fuel was first loaded in a Browns Ferry Nuclear Plant ("Browns Ferry") reactor in 2005, which initiated the amortization of the costs of the BLEU fuel assemblies to nuclear fuel expense. TVA expects to continue to use the blended nuclear fuel to reload the Browns Ferry reactors through at least 2016. BLEU fuel was loaded into Sequoyah ("Sequoyah") Unit 2 in 2008, 2009, and 2011.

Under the terms of an interagency agreement between TVA and the DOE, in exchange for supplying highly enriched uranium materials to the appropriate third party fuel processors for processing into usable BLEU fuel for TVA, the DOE participates to a degree in the savings generated by TVA’s use of this blended nuclear fuel. Over the life of the program, TVA projects that the DOE’s share of savings generated by TVA’s use of this blended nuclear fuel could result in future payments to the DOE of as much as $225 million. TVA accrues an obligation with each BLEU reload batch related to the portion of the ultimate future payments estimated to be attributable to the BLEU fuel currently in use. At September 30, 2011, this obligation was $37 million. During 2009, the DOE and TVA agreed that this obligation will be offset by amounts that the DOE expects to owe TVA in the future for certain decommissioning costs that TVA will pay on the DOE’s behalf. Accordingly, TVA will remit the

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BLEU fuel savings amounts to the DOE, only after those future decommissioning costs have been offset against TVA's obligation to the DOE.

The third party fuel processors own the conversion and processing facilities and will retain title to all land, property, plant, and equipment used in the BLEU fuel program. However, the fuel fabrication contract qualifies as a capital lease, and TVA recognized a capital lease asset and corresponding lease obligation related to amounts paid or payable to the processor.

Investment Funds

Investment funds consist primarily of trust funds designated to fund nuclear decommissioning requirements (see Note 20 — Contingencies — Decommissioning Costs), AROs (see Note 7 — Non-Nuclear Decommissioning Costs), and the Supplemental Executive Retirement Plan ("SERP") (see Note 18 — Overview of Plans and Benefits — Supplemental Executive Retirement Plan). Nuclear decommissioning funds, asset retirement funds, and SERP funds, which are classified as trading, are invested in portfolios of securities generally designed to earn returns in line with overall equity market performance.

Energy Prepayment Obligations and Discounts on Sales

During 2002, TVA introduced an energy prepayment program, the discounted energy units ("DEU") program. Under this program, TVA customers could purchase DEUs generally in $1 million increments, and each DEU entitles the purchaser to a $0.025/kilowatt-hour discount on a specified quantity of firm power over a period of years (five, 10, 15, or 20) for each kilowatt-hour in the prepaid block. The remainder of the price of the kilowatt-hours delivered to the customer is due upon billing. TVA's DEU program allowed customers to use cash on hand to prepay TVA for some of their power needs, providing funding to TVA and a savings to customers in the form of a discount on future purchases. The distributor customer receives a discount on a specified volume of firm energy purchased. The supplement to the power contract specifies the discount rate (2.5 cents per kilowatt-hour), the monthly block of kilowatt-hours to which the discount applies, the number of years (term), and contingencies upon contract termination.

TVA has not offered the DEU program since the end of 2004. Total sales for the program since inception have been approximately $55 million. TVA is accounting for the prepayment proceeds as unearned revenue and is reporting the obligations to deliver power as Energy prepayment obligations and Current portion of energy prepayment obligations on the September 30, 2011, and 2010, Balance Sheets.

TVA recognizes revenue as electricity is delivered to customers, based on the ratio of units of kilowatt-hours delivered to total units of kilowatt-hours under contract. At September 30, 2011, approximately $48 million has been applied against power billings on a cumulative basis during the life of the program, of which approximately $5 million was recognized as noncash revenue during 2011. Approximately $5 million was applied against power billings during each of 2010 and 2009.

In 2004, TVA and its largest customer, Memphis Light, Gas and Water Division ("MLGW"), entered into an energy prepayment agreement under which MLGW prepaid TVA $1.5 billion for the future costs of electricity to be delivered by TVA to MLGW over a period of 180 months. TVA accounted for the prepayment as unearned revenue and is reporting the obligation to deliver power under this arrangement as Energy prepayment obligations and Current portion of energy prepayment obligations on the September 30, 2011 and 2010 Balance Sheets. TVA expects to recognize approximately $100 million of noncash revenue in each year of the arrangement as electricity is delivered to MLGW based on the ratio of units of kilowatt-hours delivered to total units of kilowatt-hours under contract. At September 30, 2011, $790 million had been recognized as noncash revenue on a cumulative basis during the life of the agreement, $100 million of which was recognized as noncash revenue during each of 2011, 2010, and 2009.

Discounts for both programs amounted to $47 million for each of the years ended September 30, 2011, 2010, and 2009.

Insurance

Although TVA