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Tennessee Valley Authority
Form 10-K
November 20, 2015
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(MARK ONE)

ANNUAL REPORT PURSUANT TO
SECTION 13, 15(d), OR 37 OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended September 30, 2015

OR
 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
(State or other jurisdiction of incorporation or organization)

62-0474417

(IRS Employer Identification No.)

400 W. Summit Hill Drive

Knoxville, Tennessee

(Address of principal executive offices)

(865) 632-2101

(Registrant's telephone number, including area code)

37902

(Zip 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 No

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 Act. Yes No

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 No

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 No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) 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.

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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.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(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 Act). Yes No

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GLOSSARY OF COMMON ACRONYMS

Following are definitions of some of the acronyms frequently used in this Annual Report on Form 10-K for the fiscal year ended September 30, 2015 (the “Annual Report”):

Term or Acronym	Definition
AFUDC	Allowance for funds used during construction
AOCI	Accumulated other comprehensive income (loss)
ARO	Asset retirement obligation
ART	Asset Retirement Trust
ASLB	Atomic Safety and Licensing Board
BEST	Bellefonte Efficiency and Sustainability Team
BLEU	Blended low-enriched uranium
BREDL	Blue Ridge Environmental Defense League
BSER	Best system of emission reduction
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CCP	Coal combustion products
CCR	Coal combustion residuals
CCW	Coal combustion waste
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CME	Chicago Mercantile Exchange
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
COL	Combined construction and operating license application
COLA	Cost-of-living adjustment
CSAPR	Cross State Air Pollution Rule
CTs	Combustion turbine unit(s)
CVA	Credit valuation adjustment
CY	Calendar year
DCP	Deferred Compensation Plan
DER	Distributed energy resources
DEU	Discounted energy units
DOE	Department of Energy
EPA	Environmental Protection Agency
ERS	EnergyRight® Solutions programs
ESPA	Early Site Permit Application
FASB	Financial Accounting Standards Board
FCM	Futures Commission Merchant
FERC	Federal Energy Regulatory Commission
FPA	Federal Power Act
FTP	Financial Trading Program
GAAP	Accounting principles generally accepted in the United States of America
GAO	U.S. Government Accountability Office
GHG	Greenhouse gas
GPP	Green Power Providers
GWh	Gigawatt hour(s)
IRP	Integrated Resource Plan
IRUs	Indefeasible rights of use
JSCCG	John Sevier Combined Cycle Generation LLC

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kWh	Kilowatt hour(s)
LIBOR	London Interbank Offered Rate
LPC	Local power company customer of TVA
LTDCP	Long-Term Deferred Compensation Plan

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MATS	Mercury and Air Toxics Standards
MD&A	Management’s Discussion and Analysis of Financial Condition and Results of Operations
MLGW	Memphis Light, Gas and Water Division
MLPs	Master Limited Partnerships
mmBtu	Million British thermal unit(s)
MSO	Mixed oxide
MtM	Mark-to-market
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NAV	Net asset value
NDT	Nuclear Decommissioning Trust
NEIL	Nuclear Electric Insurance Limited
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
NSPS	New Source Performance Standards
NSR	New Source Review
NYSE	New York Stock Exchange
OCI	Other comprehensive income (loss)
OMB	Office of Management and Budget
PARRS	Putable Automatic Rate Reset Securities
PM	Particulate matter
PSD	Prevention of Significant Deterioration
QER	Quadrennial Energy Review
QTE	Qualified technological equipment and software
REIT	Real Estate Investment Trust
RSO	Renewable Standard Offer
SACE	Southern Alliance for Clean Energy
SCCG	Southaven Combined Cycle Generation LLC
SCRs	Selective catalytic reduction systems
SEC	Securities and Exchange Commission
SERP	Supplemental Executive Retirement Plan
Seven States	Seven States Power Corporation
SHLLC	Southaven Holdco LLC
SMR	Small modular reactor(s)
SO ₂	Sulfur dioxide
SOA	Society of Actuaries
SSSL	Seven States Southaven, LLC
TCWN	Tennessee Clean Water Network
TDEC	Tennessee Department of Environment & Conservation
TIPS	Treasury Inflation-Protected Securities
TOU	Time-of-use
TVARS	Tennessee Valley Authority Retirement System
TN Board	Tennessee Board of Water Quality, Oil and Gas
TWQCB	Tennessee Water Quality Control Board

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USEC
U.S. Treasury
VIE
XBRL
WCD

United States Enrichment Corporation
United States Department of the Treasury
Variable interest entity
eXtensible Business Reporting Language
Waste Confidence Decision

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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," "probably," "likely," "potential," "speculate," the negative of such words, 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, amended, or existing, laws, regulations, or administrative orders, including those related to environmental matters, and the costs of complying with these laws, regulations, and administrative orders;
- The cost of complying with known, anticipated, and new emissions reduction requirements, some of which could render continued operation of many of TVA's aging coal-fired generation units not cost-effective and result in their removal from service, perhaps permanently;
- Actions taken, or inaction, by the U.S. government relating to the national debt ceiling or automatic spending cuts in government programs;
- Costs and liabilities that are not anticipated in TVA's financial statements for third-party claims, natural resource damages, or fines or penalties associated with unexpected failures of a facility or infrastructure as well as for environmental clean-up activities;
- Addition or loss of customers by TVA or the local power company customers of TVA ("LPCs");
- Significant changes in demand for electricity which may result from, among other things, economic downturns, increased energy efficiency and conservation, and improvements in distributed generation and other alternative generation technologies;
- Significant delays, cost increases, or cost overruns associated with the construction of generation or transmission assets;
- Changes in the timing or amount of pension and health care costs;
- Increases in TVA's financial liabilities for decommissioning its nuclear facilities or retiring other assets;
- Physical or cyber attacks on TVA's assets;
- The outcome of legal or administrative proceedings;
- The failure of TVA's generation, transmission, flood control, and related assets, including coal combustion residual ("CCR") facilities, to operate as anticipated, resulting in lost revenues, damages, and other costs that are not reflected in TVA's financial statements or projections;
 - Differences between estimates of revenues and expenses and actual revenues earned and expenses incurred;
- Weather conditions;
 - Catastrophic events such as fires, earthquakes, explosions, solar events, electromagnetic pulses, droughts, 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;
 - Events at a TVA 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 or changes 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 and those that increase flows across TVA's transmission grid;
 - 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 which affect the supply of water for TVA's generation facilities;

• Changes in TVA's determinations of the appropriate mix of generation assets;

• TVA's organizational transformation efforts or cost reduction efforts not being fully successful;

• Inability to obtain, or loss of, regulatory approval for the construction or operation of assets;

• 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") or Asset Retirement Trust ("ART");

• Limitations on TVA's ability to borrow money which may result from, among other things, TVA's approaching or substantially reaching the limit on bonds, notes, and other evidences of indebtedness specified in the Tennessee Valley Authority Act of 1933, as amended;

• 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, or, potentially, an increased reliance by TVA on alternative financing should TVA approach its debt limit;

• Changes in the economy and volatility in financial markets;

• Changes in technology;

• 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;

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- Changes in the market price of equity securities, debt securities, and other investments;
- Changes in interest rates, currency exchange rates, and inflation rates;
- Ineffectiveness of TVA's disclosure controls and procedures or its internal control over financial reporting;
- Inability to eliminate identified deficiencies in TVA's systems, standards, controls, or corporate culture;
- Inability to attract or retain a skilled workforce;
 - 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, ownership, 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 feasibility of preserving Bellefonte Nuclear Plant ("Bellefonte") Unit 1 for possible completion, and cause TVA to forego future construction at these or other facilities;
- Loss of quorum of the TVA Board of Directors; and
- Other 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 management to predict all such factors or to assess the extent to which any factor or combination of factors may impact TVA's business or cause results to differ materially from those contained in any forward-looking statement. TVA undertakes no obligation to update any forward-looking statement to reflect developments that occur after the statement is made.

GENERAL INFORMATION

Fiscal Year

References to years (2015, 2014, 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 Consolidated 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 purpose of the Tennessee Valley Authority Act of 1933, as amended, 16 U.S.C. §§ 831-831ee (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 files annual, quarterly, and current reports with the Securities and Exchange Commission ("SEC") under Section 37 of the Securities Exchange Act of 1934. TVA's SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. TVA also hosts or posts the filings for the most recent five-year period on its website at

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.

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PART I

ITEM 1. BUSINESS

The Corporation

The Tennessee Valley Authority ("TVA") is a corporate agency and instrumentality of the United States ("U.S.") that was created in 1933 by legislation enacted by the U.S. Congress in response to a request by President Franklin D. Roosevelt. 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 2015, the revenues generated from TVA's electricity sales were \$10.8 billion and accounted for virtually all of TVA's revenues.

TVA 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. In addition, the TVA Board of Directors (the "TVA Board") established two councils — the Regional Resource Stewardship Council and the Regional Energy Resource Council — under the Federal Advisory Committee Act to advise TVA on its stewardship activities in the Tennessee Valley and its energy resource activities.

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. TVA's power system financings consist primarily of the sale of debt securities and secondarily of alternative forms of financing such as lease arrangements. 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 local power company customers of TVA ("LPCs") which distribute TVA power, a source of power supply outside the area for which TVA or its LPCs 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, 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-cherry-picking" provision, prevents the Federal Energy Regulatory Commission ("FERC") from ordering TVA to provide access to its transmission lines to others to deliver power to customers within TVA's defined service area. As a result, the anti-cherry-picking 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)

	2015	2014	2013
Alabama	\$1,582	\$1,611	\$1,551
Georgia	267	268	260
Kentucky	660	680	1,019
Mississippi	1,023	1,056	1,029
North Carolina	58	58	52
Tennessee	7,189	7,246	6,818
Virginia	50	51	53
Subtotal	10,829	10,970	10,782
Sale for resale and other	18	29	47
Subtotal	10,847	10,999	10,829
Other revenues	156	138	127
Operating revenues	\$11,003	\$11,137	\$10,956

Note

See Power Supply and Cleaner Energy Initiatives — Coal-Fired for a discussion of idled coal-fired units.

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Customers

TVA is primarily a wholesaler of power. It sells power to LPCs which then resell power to their customers at retail rates. TVA's LPCs consist of (1) municipalities and other local government entities ("municipalities") and (2) customer-owned entities ("cooperatives"). These municipalities and cooperatives operate public power electric systems whose primary purpose is not to make a profit but to supply electricity to the general public or its members. TVA also sells power to directly served customers, primarily customers with very large loads and federal agencies with loads larger than 5,000 kW. Whether TVA or a LPC serves a particular new load is determined by TVA-LPC contract provisions that take into account load projections, facilities investments, and the number of residential customers served by the LPC. In addition, power in excess of 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. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations — Financial Results — Operating Revenues.

Operating Revenues by Customer Type

For the years ended September 30

(in millions)

	2015	2014	2013
Revenue from sales of electricity			
Local power companies	\$9,998	\$10,062	\$9,463
Industries directly served	701	780	1,199
Federal agencies and other	148	157	167
Total sales of electricity	10,847	10,999	10,829
Other revenues	156	138	127
Operating revenues	\$11,003	\$11,137	\$10,956

Local Power Companies

Revenues from LPCs accounted for approximately 91 percent of TVA's total operating revenues in 2015. At September 30, 2015, TVA had wholesale power contracts with 155 LPCs. Each of these contracts requires the LPC to purchase from TVA all of its electric power and energy consumed within the TVA service area. All LPCs purchase power under contracts that require five, ten, twelve, or fifteen years notice to terminate.

The number of LPCs with the contract arrangements described above, the revenues derived from such arrangements in 2015, and the percentage of TVA's 2015 total operating revenues represented by these revenues are summarized in the table below.

TVA Local Power Company Customer Contracts

At September 30, 2015

Contract Arrangements ⁽¹⁾	Number of LPCs	Sales to LPCs in 2015 (in millions)	Percentage of Total Operating Revenues in 2015	
15-year termination notice	7	\$196	1.8	%
12-year termination notice	1	25	0.2	%
10-year termination notice	49	3,399	30.9	%
5-year termination notice	98	6,378	58.0	%
Total	155	\$9,998	90.9	%

Note

(1) Ordinarily, the LPCs and TVA have the same termination notice period; however, in contracts with five of the LPCs 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). Two of the LPCs have five-year termination notices or a shorter period if any act of Congress, court decision, or regulatory change requires or permits that election. Also, under TVA's contract with Bristol Virginia Utilities, a five-year termination notice may not be given by the LPC until January 2018.

TVA's two largest LPCs — 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 2015, sales to MLGW and NES accounted for nine percent and eight percent, respectively.

The power contracts between TVA and LPCs provide for purchase of power by LPCs at the wholesale rates established by the TVA Board. Under Section 10 of the TVA Act, the TVA Board is authorized to regulate LPCs to carry out the purposes of the TVA Act through contract terms and conditions as well as through rules and regulations. TVA regulates LPCs primarily through the provisions of TVA's wholesale power contracts. All of the power contracts between TVA and the LPCs require that power purchased from TVA be sold and distributed to the ultimate consumer without discrimination among consumers of the

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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 the electric system revenues of the LPCs are used only for electric system purposes. Furthermore, almost all of these contracts specify the specific resale rates and charges at which the LPC must resell TVA power to its 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.

Through service practice standards that were adopted in 1979, TVA also regulates LPC policies for customer deposits, termination, information to consumers, and billing. On November 6, 2014, the TVA Board approved a revised service practice policy framework. The new framework provides for enhanced, consistent regulatory policy for ratepayers across the Tennessee Valley, while both upholding the intent of the original standards and recognizing local considerations.

Other Customers

Revenues from directly served industrial customers accounted for approximately seven percent of TVA's total operating revenues in 2015. 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.

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, the level of competition, and other relevant factors, 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

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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 9.

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 each month by the operation of the fuel cost adjustment formula. 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;
- Tax equivalents (other than the amount attributable to fuel cost-related revenues);
- Other costs in accordance with the TVA Act;
- and

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Debt service coverage.

This methodology reflects the cause-and-effect relationship between TVA's costs and the corresponding rates it 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 to be sufficient to produce revenues approximately equal to projected costs (exclusive of the costs collected through the fuel rate).

TVA's wholesale and retail rate structures include time-of-use ("TOU") and seasonal demand and energy ("SDE") rate structures to more closely align TVA's revenues with its costs. Recent rate structure changes provide customers with pricing that is more reflective of their cost, allowing them to make better informed choices regarding electricity use during higher cost periods.

TVA has worked with its customers to enhance rate structures and pricing signals with the goal of reducing the overall cost of providing electric service within the Tennessee Valley. The two-year collaborative effort culminated with the TVA Board approving rate structure revisions and a rate adjustment on August 21, 2015. Below is a summary of these revisions, which, with the exception of the rate adjustment, were designed to recover the same overall revenue for TVA. Rate structure changes, however, will impact every customer differently with certain customers paying slightly more and others paying slightly less based on past and future usage.

As of October 1, 2015, all 155 LPCs were taking service under a TOU structure. The new wholesale rate structure for LPCs includes capacity-related demand charges that are billed during on-peak periods and energy rates that differ by on-peak and off-peak periods each month. Such energy rates are designed to recover marginal costs and include pricing differentials that reflect the wholesale market.

Large customers, including those directly served by TVA and those served by LPCs, are metered separately. TVA developed a rate structure similar to the rate structure of the LPCs, which provides incentives for high load factor and off-peak usage. While some customers are still making their elections, the majority have chosen the TOU rate structure. Other qualifying customers will transition to the TOU structure by 2017.

TVA and its customers collaborated on a revised cost-of-service methodology. The resulting cost-of-service study reflects multiple different points of view and was used as a guide for the rate structure changes. Small changes in revenue allocation improve alignment with cost-of-service, while also ensuring industrial rates are competitive and residential rates are affordable.

As part of the comprehensive rate restructuring, TVA's existing environmental adjustment ("EA") was modified to conform with the new wholesale and large-customer rate designs. While revised slightly, the EA will collect approximately the same revenue as before the rate structure changes. The EA recovered approximately \$439 million in 2015.

TVA's rates include a fuel cost adjustment mechanism that automatically adjusts rates each month to recover the cost TVA pays for fuel. Such costs include natural gas, fuel oil, purchased power, coal, emission allowances, nuclear fuel, and other fuel-related commodities; they also incorporate realized gains and losses on derivatives purchased to hedge the costs of such commodities, and tax equivalents associated with fuel cost adjustments.

On August 21, 2015, the TVA Board approved modifications from the current fuel cost adjustment methodology, which is based on an average fuel rate, to a methodology that is based on a class specific rate. Fuel costs for LPCs and large customers are now allocated based on the contribution of each customer class to total fuel costs as determined by

their hourly load profiles and TVA's hourly incremental dispatch costs.

The final rate-related action on August 21, 2015, was the TVA Board's approval of an increase in fiscal year 2016 revenues of approximately \$200 million. This increase equates to an approximate 2.49 percent wholesale rate adjustment.

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Power Supply and Cleaner Energy Initiatives

General

Power generating facilities operated by TVA at September 30, 2015, included 29 conventional hydroelectric sites, one pumped-storage hydroelectric site, nine coal-fired sites, three nuclear sites, 15 natural gas and/or oil-fired sites, one diesel generator site, 14 solar energy sites, digester gas cofiring capacity at one coal-fired site, biomass cofiring potential (located at coal-fired sites), and one wind energy site, although certain of these facilities were out of service as of September 30, 2015. See Item 2, Properties — Generating Properties — Net Capability for a discussion of these facilities. TVA also acquires power under power purchase agreements of varying durations including short-term contracts of less than 24-hours in duration. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations — Financial Results — Operating Expenses.

TVA intends to balance production capabilities with power supply requirements by promoting the conservation and efficient use of electricity and, when necessary, buying, building, or leasing assets or entering into power purchase 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) resources.

The following charts show TVA's generation and purchased power by generating source as a percentage of all electric power generated and purchased (based on kWh) for the periods indicated:

Note

Renewable resources (non-hydro) is less than one percent for all periods shown, and therefore is not represented on the charts above.

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 temporarily unavailable due to equipment failures, inspections, or repairs. As of September 30, 2015, TVA had nine coal-fired plants consisting of 39 active units, accounting for 10,995 MW of summer net capability, and 20 inactive units. 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. As of September 30, 2015, TVA had 13 retired units: John Sevier Fossil Plant ("John Sevier") Units 1-4, Shawnee Fossil Plant ("Shawnee") Unit 10, and Widows Creek Fossil Plant ("Widows Creek") Units 1-8. Mothballed units are unavailable for service but can be brought back into service after some maintenance with an appropriate amount of notification, typically weeks or months. As of September 30, 2015, TVA had seven mothballed units: Johnsonville Fossil Plant ("Johnsonville") Units 5-10 and Colbert Fossil Plant ("Colbert") Unit 5. Inactive reserve units are unavailable for service but can be brought back into service after some repairs in a relatively short duration of time, typically measured in days. As of September 30, 2015, TVA had no units 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. Increasing regulatory costs require consideration of whether or not to make the required capital investments to continue operating these facilities. In April 2011, TVA entered into two agreements (collectively, the "Environmental Agreements") to address a dispute under the CAA. 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.

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TVA is taking the actions necessary to comply with the Environmental Agreements. TVA is confident that it has adequate capacity to meet the needs of its customers after these units are retired. See Natural Gas-Fired Generation and/or Oil-fired below and Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Resources — Coal-Fired Units.

The following table summarizes the actions TVA is required to take under the Environmental Agreements, and other coal-fired generation actions taken or to be taken by TVA.

Fossil Plant	Units Impacted	Existing Scrubbers and SCRs ⁽¹⁾	Requirements Under Environmental Agreements	Actions Taken by TVA	Actions Planned to be Taken by TVA
Allen	3	SCRs on all three units	- Install scrubbers or retire no later than December 31, 2018	- The Board approved the construction of a gas-fired plant at the current location of the Allen coal-fired site	- Retire Units 1-3 after completion of the gas-fired plant, before December 31, 2018
Bull Run	1	Scrubber and SCRs on unit	- Continuously operate current emission control equipment - Remove from service, control ⁽²⁾ , convert ⁽³⁾ , or retire Units 1-4 no later than June 30, 2016	- Continuously operate existing emission control equipment	- Continuously operate existing emission control equipment
Colbert	5	SCR on Unit 5	- Remove from service, control ⁽²⁾ , or retire Unit 5 no later than December 31, 2015 - Control or retire removed from service units within three years	- Idled Unit 5 in October 1, 2013	- Retire Units 1-4 before April 16, 2016 - Retire Unit 5 no later than December 31, 2015
Cumberland	2	Scrubbers and SCRs on both units	- Continuously operate existing emission control equipment - Control ⁽²⁾ , convert ⁽³⁾ , or retire all four units no later than December 31, 2017	- Continuously operate existing emission control equipment	- Continuously operate existing emission control equipment
Gallatin	4	None	- Retire two units no later than December 31, 2012 - Remove from service two units no later than December 31, 2012 and control ⁽²⁾ , convert ⁽³⁾ , or retire those units no later than December 31, 2015	- The Board approved adding scrubbers and SCRs on all four units	- 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 and control ⁽²⁾ , convert ⁽³⁾ , or retire those units no later than December 31, 2015	- Retired Units 1 and 2 on December 31, 2012 - Retired Units 3 and 4 on June 25, 2014	
Johnsonville	10	None	- Retire six units no later than December 31, 2015 - Retire four units no later	- Idled Units 7 and 8 effective March 1, 2012 - Idled Units 5 and 6 and	- Retire Units 5-10 by December 31, 2015

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			than December 31, 2017	Units 9 and 10 on October 1, 2013	- Retire Units 1-4 by December 31, 2017
Kingston	9	Scrubbers and SCRs on all nine units	- Continuously operate existing emission control equipment - Upgrade scrubbers on Units 1 and 2 no later than December 31, 2012	- Continuously operate existing emission control equipment - The Board approved the construction of a gas-fired plant at the current location of the Paradise coal-fired plant	- Continuously operate existing emission control equipment
Paradise	3	Scrubbers and SCRs on all three units	- Continuously operate emission control equipment on Units 1-3 - Control ⁽²⁾ , convert ⁽³⁾ , or retire Units 1 and 4 no later than December 31, 2017	- Retired Unit 10 on June 30, 2014	- Retire Units 1 and 2 after completion of the gas-fired plant
Shawnee	10	None	- Retire two of Units 1-6 no later than July 31, 2013 - Retire two of Units 1-6 no later than July 31, 2014	- Retired Units 3 and 5 on July 31, 2013	- Add scrubbers and SCRs on Units 1 and 4 by December 31, 2017
Widows Creek	8	Scrubbers and SCRs on Units 7 and 8	- Retire two of Units 1-6 no later than July 31, 2015 - Continuously operate existing emissions control equipment on Units 7 and 8	- Retired Units 1, 2, 4, and 6 on July 31, 2014 - Retired Units 7 and 8 on September 30, 2015	

Notes

(1) Selective catalytic reduction systems ("SCRs")

(2) If TVA decides to add emission controls to these units, TVA must continuously operate the emission controls once they are installed.

(3) Convert to renewable biomass

After TVA completes the actions described in the above table, TVA anticipates that it will have 7,884 MW of summer net capability of coal-fired generation, a reduction of 6,689 MW from TVA's coal-fired capacity as of September 30, 2010. TVA is

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moving towards a more balanced generation plan with greater reliance on lower-cost and cleaner energy generation technologies. TVA's long-range plans will continue to consider the costs and benefits of significant environmental investments at its remaining coal-fired plants.

Nuclear

TVA has three nuclear sites consisting of six units in operation and one unit under construction. The units at Browns Ferry Nuclear Plant ("Browns Ferry") are boiling water reactor units, and the units at 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, 2015

Nuclear Unit	Status	Nameplate Capacity (MW)	Net Capacity Factor for 2015 (%)	Date of Expiration of Operating License
Sequoyah Unit 1	Operating	1,221	78.9	2040
Sequoyah Unit 2	Operating	1,221	95.7	2041
Browns Ferry Unit 1	Operating	1,264	88.9	2033
Browns Ferry Unit 2	Operating	1,190	88.5	2034
Browns Ferry Unit 3	Operating	1,190	97.2	2036
Watts Bar Unit 1	Operating	1,270	91.4	2035
Watts Bar Unit 2	Under construction	1,220	—	2055

Watts Bar Unit 2. Construction of Watts Bar Unit 2 is continuing in accordance with the schedule and budget expectations approved by the TVA Board in April 2012. The total estimated cost of completion is approximately \$4.5 billion. TVA plans to bring Watts Bar Unit 2 into commercial operation by June 2016. On October 22, 2015, the NRC approved the operating license for Watts Bar Unit 2. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Generation Resources — Watts Bar Unit 2 and Note 22 — Legal Proceedings — Administrative Proceedings Regarding Watts Bar Unit 2, which discussions are incorporated herein by reference.

Extended Power Uprate. TVA is undertaking an Extended Power Uprate ("EPU") project at Browns Ferry that is expected to increase the amount of electrical generation capacity of its reactors. The license for each reactor must be modified to allow reactor operation at the higher power level.

Because the license amendment requests ("LARs") submitted by TVA at the beginning of this project have been under review for an extended time due to uprate-related technical issues, the original amendment request was withdrawn and resubmitted in September 2015. When approved, the license amendment will allow all three units at Browns Ferry to increase capacity by 20 percent over original power levels, inclusive of projects previously completed on Units 1, 2, and 3 which resulted in a five percent increase in capacity.

TVA expects to begin implementing the EPU project starting in the spring of 2018 for Unit 3, the fall of 2018 for Unit 1, and the spring of 2019 for Unit 2, and TVA expects to complete the project in 2020. The project not only involves engineering analyses, but modification and replacement of certain existing plant components to enable the units to produce the additional power requested by the license amendments. These improvements will be ongoing in parallel with the NRC's license amendment review process. The project is estimated to cost approximately \$380 million.

Sequoyah License Renewal. On September 28, 2015, the NRC approved renewed licenses for Sequoyah Units 1 and 2, which allow both units to operate for an additional 20 years. The renewed licenses will expire in 2040 for Unit 1

and 2041 for Unit 2.

Bellefonte Unit 1. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Generation Resources — Bellefonte Unit 1.

Other Nuclear Initiatives. TVA is preparing an early site permit license application to the NRC to license small modular reactors ("SMR") at TVA's Clinch River Site in Oak Ridge, Tennessee. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Generation Resources — Small Modular Reactors.

Other Nuclear Matters. See Fuel Supply — Nuclear Fuel below for a discussion of spent nuclear fuel and low-level radioactive waste, Note 22 — Contingencies for a discussion of TVA's nuclear decommissioning liabilities and the related trust and nuclear insurance, and Note 22 — Legal Proceedings for a discussion of legal and administrative proceedings related to TVA's nuclear program, which discussions are incorporated herein by reference.

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Hydroelectric and Other Renewable Energy Resources

Conventional Hydroelectric Dams. TVA maintains 29 conventional hydroelectric dams with 109 generating units throughout the Tennessee River system for the production of electricity. At September 30, 2015, these units accounted for 3,796 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 and runoff, initial water levels, and the need for water for competing water management objectives. The amount of electricity generated from these facilities also depends on the availability of TVA's hydroelectric generation plants. When these factors are unfavorable, TVA must increase its reliance on higher cost generation plants and purchased power. In addition, a portion of energy generated by eight U.S. Army Corps of Engineers dams on the Cumberland River contribute to the TVA power system. See Weather and Seasonality below and Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Dam Safety Assurance Initiatives.

Raccoon Mountain Pumped-Storage Plant. The four units at Raccoon Mountain Pumped-Storage Plant ("Raccoon Mountain") were placed in service during 1978 and 1979. The units, with a total net summer capability of 1,616 MW, are utilized to balance the transmission system as well as generate power. TVA uses electricity generated by its coal-fired and nuclear plants at night to operate pumps that fill the reservoir at Raccoon Mountain. Then, during the day, when power prices are higher, the water is released and the pumps reverse to work as power generating turbines. The cost of generation at Raccoon Mountain, therefore, is linked to the cost of generating plants which are used to power the pumps.

Hydro Modernization Program. In 1992, TVA began a Hydro Modernization Program to address reliability issues related to its hydroelectric units. At September 30, 2015, modernization had been completed on 56 conventional hydroelectric units and Raccoon Mountain. The modernization projects resulted in 427 MW of increased capacity from the conventional hydroelectric units, with an average efficiency gain of approximately five percent.

Hydroelectric generation will continue to be an important part of TVA's energy mix. TVA continues to assess its remaining conventional hydroelectric units for opportunities to improve reliability through major maintenance projects. Small capacity gains may be realized on a limited number of these projects, but long-term reliability is the primary focus.

Other Renewable Energy Resources. TVA's renewable energy portfolio includes both TVA-owned assets and renewable energy purchases. TVA owns 14 solar sites, capability for digester gas and biomass cofiring, and three wind turbines. At September 30, 2015, the wind turbines were not operational and were not available to provide any summer net capability. The Electric Power Research Institute ("EPRI") is currently undertaking a research project to assess the condition of the three TVA-owned turbines and to evaluate options for their future. Results of the project were expected to be completed in the first quarter of 2015, but work has been delayed. The digester gas cofiring capability is accounted for as coal-fired generation summer net capability. The TVA-owned solar sites provide less than one MW of summer net capability.

Natural Gas and/or Oil-Fired

Part of TVA's strategy of portfolio diversification and air emissions reductions involves the addition of natural gas-fired plants to its generation fleet. During 2014, TVA's Board approved the construction of two natural gas-fired generation facilities. One facility, with an expected generation capacity of approximately 1,000 MW, will be constructed at the Allen site and a second facility, with an expected generation capacity of approximately 1,000 MW, will be constructed at TVA's Paradise site. Upon completion of each facility, existing coal-fired units at each site will be retired with the exception of Paradise Unit 3, which would continue to be operated. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Generation

Resources — Natural Gas-Fired Units and Note 22 — Legal Proceedings — National Environmental Policy Act Challenge at Paradise Fossil Plant.

TVA purchased a 700 MW combined-cycle gas plant near Ackerman, Mississippi during the third quarter of 2015. TVA had purchased the electricity generated by the plant since 2008. See Note 6. With the addition of this plant, TVA's natural gas- and oil-fired fleet consisted of 99 combustion turbine power blocks (87 simple-cycle units and 12 combined-cycle power blocks) at September 30, 2015. The 87 simple-cycle units provide a maximum of 5,388 MW of summer net capability. The 12 combined-cycle power blocks provide a maximum of 4,559 MW of summer net capability. Eighty of the simple-cycle units and one combined-cycle power block are fueled by either natural gas or fuel oil. The remaining seven simple-cycle units and the remaining 11 combined-cycle power blocks are fueled by natural gas only. Sixty of the simple-cycle units are currently capable of quick-start response allowing full generation capability in approximately 10 minutes. The economic dispatch of gas-powered plants depends on both the day-to-day price of gas and the price of other available intermediate resources like coal-fired plants. TVA uses simple-cycle units as peaking or backup units.

See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Generation Resources — Natural Gas-Fired Units and Item 2, Properties — Generating Properties for a discussion of lease arrangements into which TVA has entered in connection with certain of the combustion turbine units. Because of TVA's strategy of portfolio diversification and reducing air emissions, TVA may decide to make further strategic investments in natural gas-fired facilities in the future by purchase, construction, or lease.

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Diesel Generators

At September 30, 2015, TVA had one diesel generator plant consisting of five units, and these facilities accounted for 9 MW of summer net capability.

Energy Efficiency, Demand Response, and Renewable Energy Programs

During 2015, the TVA Board approved the 2015 Integrated Resource Plan ("IRP") as a guide in making decisions about the energy resources TVA may use to meet future demand for electricity in the Tennessee Valley. The purpose of integrated resource planning is to meet future power demand by identifying the need for generating capacity and determining the best mix of resources to meet the need on a least-cost, system-wide basis. TVA updated its 2011 IRP earlier than planned because several of the assumptions used in its development changed. These include greater availability and lower cost of natural gas and reduced demand for electricity. The 2015 IRP affirms the merits of a diverse portfolio with more natural gas and renewable energy considerations and energy efficiency.

The integrated plan approach considers a broad range of feasible supply-side and demand-side options and assesses them with respect to financial, economic, and environmental impacts. TVA is leading an initiative with the goal of determining the value of distributed resources on the system. Initial efforts are focused on small-scale distributed (rooftop) solar, but the method is general enough to allow for value determination for other distributed options. Work is ongoing, led by a team that includes technical support from EPRI, to develop a methodology to identify site preferences on the distribution systems of the LPCs. This work, along with locational analysis already completed by TVA, will help in placement of utility-scale and distributed solar in support of the IRP recommendations.

Implementing energy efficiency programs will require close cooperation between TVA, local stakeholders, LPCs, and electric customers particularly around deployment of additional energy efficiency resources. The success of energy efficiency depends on end-use customer participation. TVA is primarily a wholesale power provider and the LPCs have the relationship with most end-use customers. TVA will need to work with LPCs and others in the region to design additional delivery mechanisms to achieve the levels of penetration envisioned in the IRP. TVA has a history of successful collaboration around the design and delivery of energy efficiency programs and plans to build on that experience. There are a number of initiatives already underway both internal to TVA and in cooperation with LPCs seeking more effective and innovative program designs, improved performance tracking and budgeting, and enhanced delivery mechanisms.

TVA, in cooperation with its customers, continues to implement a broad portfolio of energy efficiency, demand response, and system load enhancement programs and projects designed to help reduce long-term energy supply costs in the TVA service area through EnergyRight® Solutions ("ERS") programs. TVA realized 412 gigawatt hours ("GWh") and 553 GWh of energy efficiency savings in 2015 and 2014, respectively, through these programs. ERS programs will remain a focus of TVA and are playing an important role in the implementation of the 2015 IRP.

ERS programs continue to be modified and expanded with the completion of the In-Home Energy Evaluation program in 2014. This program included over 85,000 home energy audits and the implementation of the new eScore program which includes a wireless data collection system to more effectively document and process residential evaluation data. TVA launched the eScore design throughout the Tennessee Valley in December 2014 with greater focus on establishing a long-term efficiency improvement relationship with participating homeowners. The ERS programs also include demand reduction efforts such as dispatchable voltage regulation which contribute to TVA's management of peak loads.

TVA's Green Power Switch® ("GPS") program is a voluntary program that supports the production of renewable energy by allowing consumers to purchase it through either the LPCs or from TVA for direct-serve customers. Supply

for the retail portion of the program is sourced from within the TVA service area and sold in 150 kWh blocks. In addition to the standard retail program, TVA continues to test a lower-priced bulk option under GPS that allows for larger commercial and industrial customers located within certain portions of TVA's service area to purchase renewable energy credits ("RECs"), an environmental commodity that represents the environmental attributes of one MWh of renewable energy. Supply for the bulk option is sourced from TVA-contracted renewable energy within the greater Southeastern region. TVA also tested a 100-percent solar option for retail customers, which ended in July 2015. In total, the GPS program provided approximately 206,524 MWh of renewable energy in CY 2014.

In 2013, TVA replaced its Generation Partners ("GP") program with the GPP program for the purpose of encouraging the development of small-scale solar, wind, biomass, and hydroelectric generation systems across the Tennessee Valley that are 50 kilowatts ("kW") or less. The GPP program was not fully subscribed for CY 2015. As of September 30, 2015, the combined participation for the GP and GPP programs comprised more than 93.07 MW of operating generation with 5.18 MW of additional approved capacity in the GPP program that has yet to become operational.

The Renewable Standard Offer ("RSO") program is a voluntary program that began in 2011 to increase the amount of renewable energy generated in TVA's service territory. This program offers pre-set prices, terms, and conditions for power generated by selected, commercially available renewable energy technologies. Solar, wind, and specific biomass projects are included in the program. Projects must be greater than 50 kW, but no greater than 20 MW, in nameplate capacity. TVA

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demonstrated its continued commitment to renewable energy by offering to purchase an additional 100 MW under the RSO program in CY 2015. As of September 30, 2015, TVA had over 74.71 MW of operating generation and an additional 234.65 MW under application or contract not yet operating. RSO projects approved in CY 2015 have a contract term of 20 years and a new price structure that was updated to be compatible with the existing portfolio.

The Solar Solution Initiative ("SSI") is a targeted incentive program that aims to support the existing local solar industry, while also serving as a recruitment tool for new industry in the Tennessee Valley region, by retaining and adding investment and jobs. The program provides incentive payments for mid-sized (greater than 50 kW up to 1 MW) solar projects in TVA's RSO program if the projects use local certified installers in the Tennessee Valley region. During CY 2015, the SSI program was expanded to 20 MW. The program currently has over approximately 9 MW of operating generation. Applications will continue to be accepted and placed on the waiting list until 20 MW is contracted or until the end of the CY 2015 application period in November 2015, whichever occurs first.

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 2015, TVA acquired approximately six percent of the power that it purchased on the power spot market, approximately one percent through short-term power purchase agreements (agreements with a duration of one year or less but longer than the term of spot-market purchases), and approximately 93 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 2023 and 2036, and the most significant of these contracts are described below.

Power Purchase Contracts (Excluding Wind Contracts)

At September 30, 2015

Type of Facility	Location	Summer Net Capability (MW)	Contract Termination Date
Lignite	Mississippi	440	2032
Natural gas	Alabama	720	2023
Solar	Alabama	80	2036

Under federal law, TVA is required to purchase energy from qualifying cogenerators and small power producers at TVA's avoided cost of self-generating or purchasing this energy from another source. As of September 30, 2015, there were 24 suppliers, with a combined capacity of 882 MW, whose power TVA purchases under this law.

As of September 30, 2015, TVA was a party to contracts with eight wind farms for the purchase of energy. Energy is currently provided to TVA under all contracts. The first began providing 300 MW (nameplate capacity) from a wind farm in Illinois in May 2010. TVA currently does not purchase the renewable attributes for this energy but has the opportunity to obtain them in the future. The other seven contracts provide TVA with an additional 1,215 MW (nameplate capacity) that include renewable attributes. These wind farms are located in Illinois, Kansas, and Iowa. TVA may work with counterparties to renegotiate or 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.

Wind Contracts

As of September 30, 2015

Location of Wind Farm	Contracted Nameplate Capacity (in MW)	Date Delivery Began	Contract Termination Date
Illinois	300*	2010	2016
Iowa	198	2010	2031

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Iowa	101	2012	2030
Kansas	201	2012	2032
Kansas	165	2013	2032
Illinois	150	2012	2032
Illinois	200	2012	2032
Illinois	200	2013	2033

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.

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In addition, TVA has contracted for 27 MW of nameplate renewable energy capacity from 15 wind turbine generators located on Buffalo Mountain near Oak Ridge, Tennessee, 4.8 MW of nameplate capacity from a landfill gas facility near Knoxville, Tennessee, and 4.5 MW of nameplate capacity from a solar farm in Haywood County, Tennessee.

Technology advancements may be needed to address some of the operational issues associated with intermittent renewable energy sources, such as wind and solar, in the future. Regional differences and geographic 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, the most viable renewable resources are hydroelectric, biomass (solid and methane recovery), solar, and wind.

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

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

Fuel Expense Per kWh⁽¹⁾⁽²⁾

For the years ended September 30

(cents/kWh)

	2015	2014	2013
Coal	2.84	3.05	3.07
Natural gas and fuel oil	3.25	4.30	3.89
Nuclear	0.50	0.57	0.61
Average fuel cost per kWh net thermal generation from all sources	1.91	2.14	2.15

Note

(1) Excludes effects of the fuel cost adjustment deferrals and amortization on fuel expense.

(2) In 2012, TVA began allocating a portion of its Financial Trading Program ("FTP") gains and losses to fuel expense. In 2013, the allocation was 70 percent of FTP gains and losses being allocated to fuel expense and 30 percent of FTP gains and losses being allocated to purchased power expense. In 2014 and 2015, the allocation was 80 percent of FTP gains and losses being allocated to fuel expense and 20 percent of FTP gains and losses being allocated to purchased power expense.

Coal

Coal consumption at TVA's coal-fired generating facilities during 2015 and 2014 was approximately 28 million tons and 31 million tons, respectively. At September 30, 2015, and September 30, 2014, TVA had 32 days and 29 days of system-wide coal supply at full burn rate, respectively, with net book values of \$316 million and \$361 million, respectively.

TVA utilizes both short-term and long-term (longer than one year) coal contracts. During 2015, long-term contracts made up 90 percent of coal purchases and short-term contracts accounted for the remaining 10 percent. TVA plans to continue using contracts of various lengths, terms, and coal quality to meet its expected consumption and inventory requirements. During 2015, TVA purchased coal by basin as follows:

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50 percent from the Illinois Basin in Illinois, Indiana and Kentucky;
43 percent from the Powder River Basin in Wyoming;
two percent from the Uinta Basin of Utah and Colorado; and
five percent from the Appalachian Basin of Kentucky, Pennsylvania, Tennessee, Virginia, and West Virginia.

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The following table indicates the delivery methods TVA utilizes for its coal supply:

Percentage of Coal Supply Delivery Methods

For the years ended September 30

	2015	2014	
Rail	22	% 23	%
Barge	18	% 16	%
Barge and rail combination	50	% 54	%
Truck	10	% 7	%

Generally, total system coal inventories were at or above target levels for most of 2015 due to lower than planned coal-fired generation requirements. However, due to persistent performance issues with certain rail companies, inventories at some facilities fell below targeted levels during 2015.

Natural Gas and Fuel Oil

During 2015, TVA purchased a significant amount of its natural gas requirements from a variety of suppliers under contracts with terms of up to three years and purchased substantially all of its fuel oil requirements on the spot market. See Note 16 — Derivatives Not Receiving Hedge Accounting Treatment — Derivatives Under FTP. The net book value of TVA's natural gas inventory was \$8 million and \$9 million at September 30, 2015, and 2014, respectively. The net book value of TVA's fuel oil inventory was \$90 million and \$100 million at September 30, 2015, and 2014, respectively. At September 30, 2015, 83 of the combustion turbines that TVA operates were dual-fuel capable, and TVA has fuel oil stored on each of these sites for its dual-fuel combustion turbines as a backup to natural gas.

Nuclear Fuel

Current Fuel Supply. 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 four-year (2016-2019) 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 2017. BLEU fuel was loaded into Sequoyah Unit 2 three times but is not expected to be used in the Sequoyah reactors in the future.

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 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, 2015, and 2014, the net book value of this nuclear fuel was \$1.4 billion and \$1.3 billion, respectively.

Mixed Oxide Nuclear Fuel. Under the DOE Surplus Plutonium Disposition ("SPD") Program, mixed oxide ("MOX") fuel would be fabricated with surplus plutonium and depleted uranium as a replacement for commercial uranium fuel. In February 2010, the DOE and TVA entered into an interagency agreement to evaluate the potential use of MOX fuel in reactors at Browns Ferry and Sequoyah. As part of the evaluation of MOX fuel, TVA participated as a cooperating agency in the DOE's development of the April 2015 final supplemental Environmental Assessment ("EIS") that addresses the potential use of MOX fuel in the TVA reactors. A decision to use MOX fuel is not required or expected for several years. At the earliest, based on the expected production rate of MOX fuel, TVA could start using a small number of MOX fuel assemblies in TVA reactors after 2020. TVA's three criteria for implementing MOX fuel are that it must be environmentally and operationally safe; it must be economical compared to other nuclear fuel used by TVA; and it must be licensed by the NRC for use. If TVA decides to use MOX fuel and the NRC approves its use, some changes in the operation of the reactors are expected and additional equipment may be required. As TVA continues to evaluate fuel options, current fuel supply plans do not include MOX fuel.

Low-Level Radioactive Waste. Low-level radioactive waste ("radwaste") results from certain materials and supplies used in the normal operation of nuclear electrical generation units. TVA sends shipments of radwaste to burial facilities in Clive,

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Utah and Andrews, Texas. TVA is capable of storing some radwaste at its own facilities for an extended period of time, if necessary.

Spent Nuclear Fuel. The Sequoyah dry cask storage facilities have been in use since 2004 and are expected to provide storage capacity through 2026. The Browns Ferry dry cask storage facilities have been in use since 2005. Planned expansion to Browns Ferry independent spent fuel storage installation facilities, including implementation of larger storage casks, is expected to extend storage capacity from 2016 to 2030. TVA began loading used fuel into the new larger casks at Browns Ferry in July 2015. Watts Bar has sufficient storage capacity in its spent fuel pool through 2016. TVA is currently constructing an independent spent fuel installation pad for spent fuel storage at Watts Bar, and cask loading is scheduled in the summer of 2016. 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. As a result of this lawsuit and related agreements, TVA has collected approximately \$153 million through 2015.

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 one operating 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 safely operate the reactors to produce electricity.

TVA has provided irradiation services using only Watts Bar Unit 1 since 2003. Although the interagency agreement provides for irradiation services to be performed at Watts Bar and Sequoyah, TVA expects the Watts Bar site to provide sufficient capacity to fulfill this agreement.

Transmission

The TVA transmission system is one of the largest in North America. TVA's transmission system has 70 interconnections with 12 neighboring electric systems, and delivered nearly 161 billion kWh of electricity to TVA customers in 2015. In carrying out its responsibility for transmission grid reliability in the TVA service area, TVA has operated with 99.999 percent reliability over the last 16 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, TVA offers transmission services to others to transmit wholesale power in a manner that is comparable to TVA's own use of the transmission system. TVA has also adopted and operates in accordance with its published transmission Standards of Conduct 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 FERC. These standards are designed to maintain the reliability of the bulk electric system, including TVA's generation and transmission system, and 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 continue to become more complex and stringent for transmission systems. At present there are approximately 100 mandatory standards subject to enforcement containing approximately 1,200 requirements and sub-requirements that must be met. See Item 7, Management's Discussion and

Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Regulatory Compliance — Transmission Issues.

Transmission upgrades may be required to maintain reliability when some coal-fired units become inactive. TVA invested \$283 million in such upgrades between 2011 and 2015, and estimates future expenditures for transmission upgrades required as a result of inactive coal-fired units to be approximately \$150 million for 2016 to 2020. Upgrades may include enhancements to existing lines and substations or new installations as necessary to provide adequate power transmission capacity, maintain voltage support, and ensure generating plant and transmission system stability.

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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 2015, TVA experienced 144 fewer heating degree days, or 3.9 percent less, than in 2014. Conversely, TVA experienced 134 additional cooling degree days, or 7.1 percent more, than in 2014. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Sales of Electricity.

	2015	Percent Change	2014	Percent Change	2013
Combined degree days (normal 5,223)	5,587	(0.2)%	5,597	9.9%	5,095

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 33,352 MW on January 24, 2014, at 7.3 degrees Fahrenheit.

Rainfall in the Upper Basin of the Tennessee Valley was 106 percent of normal for 2015 and 97 percent of normal in 2014. Also, runoff was 93 percent of normal in 2015 and 90 percent of normal in 2014. 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 increased six percent in 2015 as compared to 2014, and decreased 25 percent in 2014 as compared to 2013. Conventional hydroelectric generation was approximately 101 percent of normal in 2015 and 96 percent of normal in 2014.

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-cherry-picking provision. The fence limits the region in which TVA or LPCs which distribute TVA power may provide power. The anti-cherry-picking provision limits the ability of others to use the TVA transmission system for the purpose of serving customers within TVA's service area. However, other utilities may use their own transmission lines to serve customers within TVA's service area. There have also been some efforts in the past to erode the protection of the anti-cherry-picking provision, and the protection of the anti-cherry-picking provision could be limited and perhaps eliminated by Congressional legislation at some time in the future.

TVA also faces competition in the form of emerging technologies. Improvements in energy efficiency technologies, growing smart technologies, and other storage technologies may reduce the demand for centrally provided power. The growing interest by customers to generate their own power through distributed generation (including solar power) has the potential to lead to load reduction as well as cause TVA to re-evaluate how it operates the overall grid system to continue to provide highly reliable power at affordable rates. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Generation Resources — Distributed Generation.

Research and Development

TVA makes annual investments in science and technological innovation to help the agency meet future business and operational challenges. Each year TVA's annual research portfolio is updated based on a broad range of operational and industry drivers that help assess key technology gaps, performance issues, or other significant issues that should be addressed through research and development. Core research activities directly support optimization of TVA's

generation and delivery assets, air and water quality, energy utilization, and distributed/clean energy integration.

In the area of energy utilization, TVA evaluates emerging energy efficiency and load management technologies for market and program readiness. TVA's efforts are directed towards demonstrating and validating the performance, reliability, and consumer acceptance of new efficiency technology as well as the value of energy efficiency and load management technologies for the consumer, the LPCs, and TVA. TVA also coordinates activities with EPRI and industry stakeholders related to transportation electrification to support operational fleet requirements and the needs of LPCs to provide guidance on matters of plug-in electric vehicle grid integration and readiness for transportation electrification technologies.

TVA's distributed/clean energy research effort seeks to understand the scope and impact of integrating distributed energy resources ("DER") on operations and business economics and to develop strategies for adapting to the evolving electricity landscape in the Tennessee Valley. Of particular interest is modeling existing and expected solar power deployments in the Tennessee Valley to evaluate the full extent of system impacts of those renewable resources. Initial economic analyses have been conducted to identify the value of DER (particularly solar PV) to both TVA and the LPC system. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Generation Resources — Distributed Generation.

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Investments in TVA's research portfolio are supported through partnership and collaboration with LPCs, EPRI and other research consortiums, the DOE and other federal agencies, national labs, peer utilities, universities, and industry vendors and participation in professional societies.

Flood Control Activities

The Tennessee River watershed has one of the highest annual rainfall totals of any watershed in the United States, averaging 51 inches per year. During 2015, approximately 56 inches of rain fell in the Tennessee Valley. TVA manages the Tennessee River system in an integrated manner, balancing hydroelectric generation with navigation, flood damage reduction, water quality and supply, and recreation. TVA spills or releases excess water through the tributary and main stem dams in order to reduce flood damage to the Tennessee Valley. TVA typically spills only when all available hydroelectric generating turbines are operating at full capacity and additional water still needs to be moved downstream.

Environmental Stewardship Activities

TVA's mission includes managing the Tennessee River, its tributaries, and federal 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. Each dam may also have ancillary structures used to support or assist the main dam's function. The reservoir system provides approximately 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 TVA's coal-fired and nuclear power plants. TVA's Environmental Policy, which was adopted by the TVA Board in 2008, 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, sustainable land use, and natural resource management. TVA also manages approximately 11,000 miles of shoreline, 650,000 surface acres of reservoir water, and 293,000 acres of reservoir lands for cultural and natural resource protection, recreation, and other purposes.

Strategic guidance for carrying out many of TVA's essential stewardship responsibilities is provided in TVA's Natural Resource Plan ("NRP"). The NRP, issued in August 2011, serves as a 20-year guide for TVA's essential stewardship efforts in managing biological resources (plants, animals, and aquatic species); cultural resources (archaeological sites, historical sites, and artifacts); recreation; water resources; reservoir lands planning; and public engagement. The plan will also guide TVA in achieving the objectives of its Environmental Policy for a more systematic and integrated approach to fulfilling its essential stewardship responsibilities. The NRP was developed with public input including participation from federal and state resource management agencies and the RRSC. Members of the RRSC, established in March 2000, represent public and private stakeholders who benefit from TVA's management of the river system. They provide recommendations on stewardship activities, including reservoir operations, public-land planning and management, water supply, recreation, cultural and natural resource management, infrastructure operation and maintenance, and emergency preparedness. TVA intends to review and update the NRP approximately every five years.

Economic Development Activities

Since its creation in 1933, TVA has promoted the development of the Tennessee Valley. Economic development, along with energy production and environmental stewardship, is one of the purposes of TVA. TVA works with its LPCs, regional, state, and local agencies, and communities to showcase the advantages available to businesses locating or expanding in TVA's service area. TVA's primary economic development goals are to recruit companies to locate in the Tennessee Valley, encourage expansion of existing business and industry that provide quality jobs, and assist communities in the Tennessee Valley with economic growth opportunities. TVA seeks to meet these goals through a combination of initiatives and partnerships designed to provide financial assistance, technical services, industry expertise, and site-selection assistance to new and existing businesses.

Economic development programs developed by TVA include those which focus on supporting all communities including rural and economically distressed communities across the Tennessee Valley by working in close partnership with other federal and state organizations. TVA also jointly offers incentive programs with participating LPCs. These programs offer competitive incentives to existing and potential power customers in certain business sectors that make multi-year commitments to invest in the Tennessee Valley. In addition to financial support for these programs, TVA offers resources to communities and economic developers in the areas of recruitment, leadership development, industrial product preparedness (sites and buildings), planning, and project assistance.

TVA's economic development efforts helped recruit or expand over 224 companies into the TVA service area during 2015. These companies announced capital investments of over \$7.8 billion and the expected creation and/or retention of over 76,200 jobs.

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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 all or parts of 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 that are applicable to other agencies 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.

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 NERC.

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 of the FPA 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 wholesale power 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-cherry-picking 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) 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 and (2) using manipulative or deceptive devices or contrivances in connection with the purchase or sale of power or transmission services subject to FERC's jurisdiction .

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 price gouging situations if such sales are through an independent system operator or regional transmission organization 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.

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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 federal 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 solid and hazardous wastes. See Environmental Matters below.

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 where Congress has clearly made TVA subject to state regulation. See Environmental Matters below.

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 ("OMB"). 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 activities, particularly its power generation activities, are subject to comprehensive regulation under environmental laws and regulations relating to air pollution, water pollution, and management and disposal of solid and hazardous wastes, among other issues.

Clean Air Act

The CAA establishes a comprehensive program to protect and improve the nation's air quality and control sources of air pollution. 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 National Ambient Air Quality Standards ("NAAQS") for certain air pollutants. The EPA has done this for ozone, particulate matter ("PM"), sulfur dioxide ("SO₂"), nitrogen dioxide ("NO₂"), carbon monoxide, and lead. Over the years, the EPA has made the NAAQS more stringent. Each state must develop a plan to be approved by the EPA for achieving and maintaining a NAAQS within its borders. These plans impose limits on emissions from pollution sources, including TVA fossil fuel-fired plants. Areas meeting a NAAQS are designated attainment areas. Areas not meeting a NAAQS are designated nonattainment areas, and more stringent requirements apply in those areas. This includes stricter controls on industrial facilities and more complicated permitting processes. TVA fossil-fired plants

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can be impacted by these requirements. As NAAQS become more stringent, utilities are expected to come under increasing pressure to further reduce emissions from their existing fossil fuel generating plants.

On October 1, 2015, the EPA signed a final rule to revise the ozone NAAQS to 70 parts per billion ("ppb") from the current 2008 standard of 75 ppb. The EPA is expected to make final designations in 2017 based on the most recent three years of data. Currently, all areas of the Tennessee Valley meet the 2008 ozone NAAQS. However, impacts of the 2015 ozone NAAQS to TVA and states in TVA's service territory are not possible to determine until EPA makes designations in 2017.

Effective November 4, 2015, the EPA designated the Tennessee portion of the Chattanooga Tennessee-Alabama-Georgia non-attainment area as attainment with respect to the fine particulate matter NAAQS. The Alabama and Georgia portions of this area were designated attainment in December 2014. Knoxville is the only remaining area in the Tennessee Valley region that is designated non-attainment for fine particulate matter. TVA expects that the EPA will designate the Knoxville area attainment in the near future.

New Source Review. The NSR provisions of the CAA require that a permit be obtained prior to constructing new major air emission sources or making major modifications to existing air pollution sources. Major modifications are non-routine physical or operational changes that increase the emissions from an air emission source above specified thresholds. The EPA and environmental groups have been actively pursuing NSR enforcement actions against electric utilities since 1999, alleging that typical plant maintenance activities require NSR permits. If violations are found to have occurred, the EPA or state enforcement authorities could require the installation of new pollution control equipment and could impose fines and penalties. The Environmental Agreements resolved most past NSR claims that TVA faced. The Environmental Agreements did not resolve possible claims based on increases in greenhouse gas ("GHG") and sulfuric acid mist, and these claims could still be pursued in the future.

Cross State Air Pollution Rule. The EPA issued the Cross-State Air Pollution Rule ("CSAPR") in July 2011, requiring several states in the eastern United States to improve air quality by reducing power plant emissions that cross state lines and contribute to pollution in other states relative to the 1997 ozone NAAQS and the 1997 and 2006 fine particle NAAQS. The U.S. Court of Appeals for the District of Columbia Circuit ("D.C. Circuit") vacated the rule before implementation began, but the D.C. Circuit's vacatur was reversed by the U.S. Supreme Court in April 2014. Upon further proceedings on remand, the D.C. Circuit granted the EPA's motion to restore CSAPR but shift the compliance deadlines by three years. Under the revised compliance deadlines, Phase I emission reductions in SO₂ and NO_x became effective on January 1, 2015, and will be followed by Phase II reductions that become effective on January 1, 2017. TVA's significant reductions in SO₂ and NO_x emissions and planned future reductions will aid in compliance with CSAPR.

On November 16, 2015, the EPA proposed an update to CSAPR to address cross-state pollution relative to the 2008 ozone NAAQS, and also to respond to a July 2015 remand of the CSAPR emission budgets for certain states by the D.C. Circuit. In this update, the EPA proposes to make more stringent the Phase II reductions for NO_x that become effective on January 1, 2017. The comment period for this proposal will remain open until 45 days after publication of the rule in the Federal Register. TVA is studying this proposal to update CSAPR for potential impacts beyond those identified above for the original CSAPR.

Hazardous Air Pollutants from Industrial, Commercial, and Institutional Boilers. In March 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, effective in the second quarter of 2014, has had minor impacts on some of TVA's startup and auxiliary boilers at its plants. While all plant startup and auxiliary boilers are expected to be exempt from the emission limits due to their limited use, most boilers will be subject to scheduled tuneups to ensure optimized combustion, and TVA will be required to follow work practice standards in order for the boilers to be exempt from

emission standards.

Mercury and Air Toxic Standards for Electric Utility Units. In April 2012, the EPA promulgated a final rule establishing standards for hazardous air pollutants emitted from steam electric utilities. The rule requires additional controls for hazardous air pollutants, including mercury, non-mercury metals, and acid gases, for some of TVA's coal-fired units by 2015-2016. TVA has chosen to idle or retire some units in lieu of investing in additional controls and may in some cases construct replacement generation. The rule was challenged in court and was upheld on April 15, 2014, by the D.C. Circuit. However, in June 2015, the United States Supreme Court held that the EPA was required to consider cost before deciding whether the regulation of hazardous air pollutants emitted from steam electric utilities was appropriate and necessary. The case has been remanded to the D.C. Circuit. The MATS rule remains in effect until the D.C. Circuit takes further action, and TVA's MATS compliance strategy is thus currently not affected by the Supreme Court's decision.

In October 2015, TVA submitted a request to the EPA for an administrative order under the Clean Air Act that would allow operation of Paradise Units 1 and 2 for a year beyond the MATS compliance date of April 16, 2016. The additional year is necessary to allow these units to continue to operate while the new combined cycle facility is being built. Without the additional year, TVA would be forced to shut down Paradise Units 1 and 2 as of the MATS compliance date, without replacement capacity being available, which would cause adverse consequences to transmission system reliability. TVA expects to retire Paradise Units 1 and 2 once this replacement capacity is available.

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The Environmental Agreements. See Note 22 — Legal Proceedings — Environmental Agreements for a discussion of the Environmental Agreements, which discussion is incorporated herein by reference.

Acid Rain Program. Congress established the Acid Rain Program to achieve reductions in emissions of SO₂ and NO_x, the primary causes of acid rain. The program includes a cap-and-trade emission reduction program for SO₂ emissions from power plants. TVA continues to reduce SO₂ and NO_x emissions from its coal-fired plants, and the SO₂ allowances allocated to TVA under the Acid Rain Program are sufficient to cover the operation of its coal-fired plants. In the TVA service area, the limitations imposed on NO_x emissions by either the CAIR or CSAPR program are expected to be more stringent than the Acid Rain Program. Therefore, TVA forecasts that the Acid Rain Program will have no impact on TVA other than administrative reporting.

Regional Haze Program. In June 2005, the EPA issued the Clean Air Visibility Rule, amending its CY 1999 regional haze rule, which had established timelines for states to improve visibility in national parks and wilderness areas throughout the United States. Under the amended rule, certain types of older existing sources are 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, SO₂, and NO_x emissions or agree to lower emission limits at plants equipped with such controls. TVA anticipates that this program will impact only Colbert Unit 5, which was idled in October 2013 and will be retired on or before December 31, 2015.

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 SO₂ 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 opacity requirements is coming under increased scrutiny, especially compliance during periods of startup, shutdown, and malfunction. State implementation plans ("SIPs") developed under the CAA typically exclude periods of startup, shutdowns, and malfunctions, but on June 12, 2015, the EPA finalized a rule to eliminate such exclusions. The EPA rule requires states to modify their implementation plans by 2017. These new requirements could reduce flexibility and increase operational costs for TVA's coal-fired plants.

Petition to Expand the Ozone Transport Region. On December 9, 2013, eight of the twelve states that make up the Ozone Transport Region ("OTR") submitted a petition to the EPA requesting that nine states, including Kentucky and Tennessee, be added to the OTR. TVA is unable to predict the outcome of the petition at this time. Should the petition be granted, additional controls may be required on existing electric generating units and other sources in the additional states. New and modified sources would have to have state of the art controls and meet other requirements as well.

Climate Change

Legislation. Although climate change legislation has failed to progress in the U.S. Congress in past years, there is continuing interest in legislation that could regulate GHG emissions or impose other energy-related restrictions and requirements. If legislation intended to limit GHG emissions or impose other energy policies were to become law, such limitations would likely affect TVA's coal-fired plants and could affect other fossil fuel-fired plants. The costs and impacts of such regulation could be significant for TVA. TVA is unable to predict the likelihood or form of such legislation at this time.

Regulation. On August 3, 2015, the EPA issued the Clean Power Plan, a rule under section 111(d) of the Clean Air Act, to reduce carbon emissions from existing power plants burning fossil fuels. The Clean Power Plan, which is part of President Obama's Climate Action Plan strategy, establishes state-specific emission goals to lower CO₂ emissions from power plants, targeting a 32 percent nationwide reduction in CO₂ emissions from 2005 levels by 2030. The EPA established an "interim goal" that states must meet on average over the eight-year period from 2022-2029 and a "final

goal” that states must meet in 2030 and thereafter based on a two-year average. States must submit to EPA final plans, or “initial plans” with a request for an extension, by September 6, 2016. States that receive an extension must submit final plans by September 6, 2018. The impact of these rules on TVA and the states in TVA’s service territory cannot be determined until the state plans are developed and approved by the EPA, but the impact on TVA could be significant.

On August 3, 2015, the EPA also finalized New Source Performance Standards for carbon emissions from new, modified, and reconstructed power plants. These standards apply to two types of fossil-fuel fired sources: (1) stationary combustion turbines, generally firing natural gas, and (2) electric utility steam generating units, generally firing coal. These standards reflect the degree of emission limitation achievable through the application of the best system of emission reduction ("BSER") that EPA has determined to be adequately demonstrated for each type of source. These standards will apply to the new combined-cycle plants that TVA is constructing at its Allen and Paradise facilities, and TVA believes that its current plans for those plants will enable it to comply with the new standards.

Executive Action. To strengthen the Administration's efforts to increase government-wide energy efficiency and sustainability and implement goals in the President’s June 2013 Climate Action Plan, President Obama issued a memorandum on December 5, 2013, requiring that at least 20 percent of the total amount of energy consumed by each federal agency in any fiscal year, starting in 2020, shall be renewable energy. In addition, on March 25, 2015, President Obama issued Executive

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Order 13693, which directed each federal agency to ensure that, starting in 2025 and continuing each year thereafter, no less than 30 percent of the total amount of building electric energy shall be renewable electric energy. TVA is on track to achieve the aforementioned 2020 goal of the Presidential Memorandum and the 2025 goal of Executive Order 13693.

On December 18, 2014, the White House Council on Environmental Quality released draft guidance that provides federal agencies with direction on the consideration of the effects of greenhouse gas emissions and climate change when evaluating certain energy and other types of infrastructure projects. The new guidance provides more clarity and consistency for producing and presenting information and provides a plan for agencies to follow during NEPA reviews. This draft guidance updates the previous 2010 release and includes land and resource management actions. TVA does not anticipate significant changes to its NEPA procedures as a result of the draft guidance.

On April 21, 2015, the Administration released the initial installment of its Quadrennial Energy Review ("QER"). In the QER, the Administration announced that the DOE is creating a partnership with 17 energy companies, including TVA, to improve infrastructure resilience against extreme weather and climate change.

International Accords. International agreements and protocols relating to climate change have not been adopted by the United States; accordingly, they would not become binding upon TVA unless and until they are enacted into law.

Litigation. In addition to legislative activity, climate change issues have been the subject of a number of lawsuits, including lawsuits against TVA.

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 Item 1, Business — Power Supply and Cleaner Energy Initiatives.

Physical Impacts of Climate Change. TVA manages the potential effects of climate change on its mission, programs, and operations within its environmental management processes. In June 2014, TVA issued an updated Statement on Climate Change Adaptation and prepared an updated Climate Change Adaptation Action Plan.

Actions Taken by TVA to Reduce GHG Emissions. TVA has reduced GHG emissions from both its generation stations and its operations. As discussed earlier in this Item I, Business, recent TVA Board actions have focused on TVA's plan to balance its coal-fired generation by increasing its nuclear capacity, modernizing its hydroelectric generation system, increasing natural gas-fired units in its generation fleet, installing emission control equipment on certain of its coal-fired units, increasing its purchases of renewable energy, and investing in energy efficiency initiatives to reduce energy use in the Tennessee Valley. Additionally, TVA has invested to reduce energy use in its operations. The combination of more stringent environmental rules, lower natural gas prices, and lower demand for energy across the Tennessee Valley has reduced the utilization of coal-fired generation. These factors have resulted in lower CO₂ emissions.

Renewable/Clean Energy Standards

Twenty-nine states and the District of Columbia have established enforceable or mandatory requirements for electric utilities to generate a certain amount of electricity from renewable sources. One state within the TVA service area, North Carolina, has a mandatory renewable standard that, while it does not apply directly to TVA, does apply to TVA's LPCs serving retail customers 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 LPCs that sell TVA power in North Carolina. Likewise,

the Mississippi Public Service Commission adopted an energy efficiency rule applying to electric and natural gas providers in the state, and TVA is supplying information on participation in ERS efforts to support the covered Mississippi LPCs.

Legislation has been proposed in Congress in the past to establish a national renewable energy standard that could require energy providers, including TVA, to rely more on renewable energy resources. Such legislation has not passed but could be passed in the future.

Water Quality Control Developments

Cooling Water Intake Structures. On May 19, 2014, the EPA released a final rule under Section 316(b) of the Clean Water Act, relating to cooling water intake structures ("CWIS") for existing power generating facilities. The rule requires changes in cooling water intake structures used to cool the vast majority of coal, gas, and nuclear steam-electric generating plants and a wide range of manufacturing and industrial facilities in the U.S. The final rule requires cooling water intake structures to reflect the best technology available for minimizing adverse environmental impacts, primarily by reducing the amount of fish and shellfish that are impinged or entrained at a cooling water intake structure. These new requirements will potentially affect a number of TVA's fossil- and nuclear-fueled facilities and will likely require capital upgrades to ensure compliance. Most TVA facilities are projected to require retrofit of CWIS with "fish-friendly" screens and fish return systems to achieve compliance with the new rule. The rule will be implemented through permits issued under the National Pollutant Discharge Elimination System ("NPDES") in Section 402 of the Clean Water Act. State agencies administer the NPDES permit program in most states

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including those in which TVA's facilities are located. In addition, the responsible state agencies must provide all permit applications to the U.S. Fish & Wildlife Service for a 60-day review prior to public notice and an opportunity to comment during the public notice. As a result, the permit may include requirements for additional studies of threatened and endangered species arising from U.S. Fish & Wildlife Service comments and may require additional measures be taken to protect threatened and endangered species and critical habitats directly or indirectly related to the plant cooling water intake. TVA's review of the final rule indicates that the rule offers adequate flexibility for cost-effective compliance. The required compliance timeframe is linked to plant specific NPDES permit renewal cycles (i.e., technology retrofits), and compliance is expected to be in the 2020-2022 timeframe.

Hydrothermal Discharges. The EPA and many states are beginning to focus regulatory attention on potential effects of hydrothermal discharges. Many TVA plants have variances from thermal standards under Section 316(a) of the Clean Water Act that may have to be re-justified through new studies. Specific data requirements in the future will be determined based on negotiations between TVA and regulators. If plant thermal limits are made more stringent, TVA may have to install cooling towers at some of its plants and operate installed cooling towers more often. This could result in a substantial cost to TVA.

Steam-Electric Effluent Guidelines. On September 30, 2015, the EPA finalized the revision of the Clean Water Act steam electric effluent limitation guidelines. The rule sets strict technology-based effluent limitations that will force technological and operational changes particularly at existing coal-fired facilities. It has the potential to impact long-term investment decisions being made relative to the long-term compliance and operability of TVA coal-fired units. The rule is complex and establishes multiple new effluent limits applicable to existing facilities. The details of the rule are under review to identify key requirements and resultant implications for TVA's operations and to update budgeted estimates for associated projects. Each plant must comply between 2018 and 2023 depending on when a new Clean Water Act permit is needed.

Groundwater Contamination. Environmental groups and state regulatory agencies are increasing their attention on groundwater contamination associated with coal combustion residuals ("CCRs") management activities such as ash ponds. Seven of TVA's 10 coal-fired plants are in some level of state regulatory groundwater assessment. Three of those plants (Colbert, Gallatin Fossil Plant ("Gallatin"), and Shawnee) have investigations beyond monitoring and reporting. Five of the seven TVA coal-fired plants (Gallatin, Shawnee, Paradise, Johnsonville, and Widows Creek) have either underground storage tank groundwater monitoring, or groundwater remediation monitoring with state regulatory involvement. As a result of these assessments and increased attention, TVA may have to change how it manages CCRs at some of its plants with associated increases in cost. These costs are not expected to be significant. In addition, TVA's Environmental Research Center facility at Muscle Shoals, Alabama has an active groundwater monitoring program as part of a Resource Conservation and Recovery Act ("RCRA") Corrective Action Permit. See Item 7, Management's Discussion and Analysis of Financial Condition — Key Initiatives and Challenges — Generation Resources — Coal Combustion Residual Facilities.

Other Clean Water Act 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, new wastewater analytical methods, and regulation of herbicide discharges. In addition, other new environmental regulations related to mountain top mining of coal in the Appalachian region under the Clean Water Act may increase the cost of coal that TVA purchases for its plants.

Cleanup of Solid and Hazardous Wastes

Liability for releases and cleanup of hazardous substances is imposed under the federal Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), and other federal and parallel state statutes.

In a manner similar to many other industries and power systems, TVA has generated or used hazardous substances over the years.

TVA Sites. TVA operations at some of its facilities have resulted in contamination, including coal ash, that TVA is addressing. At September 30, 2015, 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 \$23 million and is included in Accounts payable and accrued liabilities and Other long-term liabilities on the Balance Sheet.

Non-TVA Sites. TVA is aware of alleged hazardous-substance releases at certain non-TVA areas for which it may have some liability. See Note 22 — Contingencies — Environmental Matters.

Coal Combustion Residuals. The EPA published its final rule governing CCRs on April 17, 2015, and the rule became effective October 19, 2015. The rule regulates CCRs as nonhazardous waste under Subtitle D of the Resource Conservation and Recovery Act. While states may adopt the rule's requirements into their regulatory programs, the rule does not require states to adopt the requirements. Although the rule became effective October 19, 2015, certain provisions have later effective dates. TVA's review of the final rule indicates that the rule offers adequate flexibility for compliance. The ongoing TVA wet-to-dry conversion program includes budgeted projects that are expected to address many of the requirements of the CCR rule. TVA is continuing to evaluate the rules and their impact on its operations, including the cost and timing estimates of related projects.

TVA is preparing an environmental impact statement ("EIS") that will address the closure of CCR impoundments at TVA's coal-fired plants. TVA plans to complete the EIS by the third quarter of 2016. See Item 7, Management's Discussion and

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Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Generation Resources — Coal Combustion Residual Facilities.

Tennessee Department of Environment and Conservation. In August 2015, the Tennessee Department of Environment and Conservation ("TDEC") issued an order that 1) allowed TDEC to oversee TVA's implementation of the EPA's CCR rule and 2) required TVA to assess CCR contamination risks at seven of TVA's eight coal-fired plants in Tennessee and to remediate any unacceptable risks. The TDEC order does not allege that TVA is violating any CCR regulatory requirements nor does it assess TVA penalties. The TDEC order sets out an iterative process through which TVA and TDEC will identify and evaluate any CCR contamination risks and, if necessary, respond to such risks.

Environmental Investments

From the 1970's to 2015, TVA spent approximately \$6.2 billion on controls to reduce emissions from its coal-fired power plants. In addition, TVA has reduced emissions by idling or retiring coal-fired units and relying more on cleaner energy resources including natural gas and nuclear generation.

SO₂ Emissions and NO_x Emissions. To reduce SO₂ emissions, TVA has installed scrubbers on 17 of its coal-fired units with scrubbers currently under construction on six additional units, and switched to lower-sulfur coal at 24 coal-fired units. To reduce NO_x emissions, TVA has installed SCRs on 20 coal-fired units with SCRs currently under construction on six additional units, operates selective non-catalytic reduction systems on four units, installed low-NO_x burners or low-NO_x combustion systems on 25 units, optimized combustion on five units, and operates NO_x control equipment year round when units are operating (except during start-up, shutdown, and maintenance periods). TVA has also retired or announced plans to retire 33 of 59 coal-fired units, and the remaining coal-fired units will either have scrubbers and SCRs, be repowered to renewable biomass, or be retired. See Power Supply and Cleaner Energy Initiatives — Coal-Fired above.

Particulate Emissions. To reduce particulate emissions of air pollutants, TVA has equipped all of its coal-fired units with scrubbers, mechanical collectors, electrostatic precipitators, and/or bag houses.

Primarily due to the actions described above, emissions of NO_x have been reduced by 90 percent below peak 1995 levels and emissions of SO₂ have been reduced by 94 percent below 1977 levels through CY 2014. For CY 2014, TVA's emission of CO₂ from its sources was approximately 77.5 million tons, a 27 percent reduction from 2005 levels. To remain consistent and provide clear information and to align with the EPA's reporting requirements, TVA will continue to report CO₂ emissions on a CY basis.

There could be additional material costs if reductions of GHGs, including CO₂, are mandated by legislative, regulatory, or judicial actions and if more stringent emission reduction requirements for conventional pollutants are established. These costs cannot reasonably be predicted at this time because of the uncertainty of these actions. A number of emerging EPA regulations establishing more stringent air, water, and waste requirements could result in significant changes in the structure of the U.S. power industry, especially in the eastern half of the country.

TVA currently anticipates spending significant amounts on environmental projects through 2025 including investments in new clean energy generation including natural gas, nuclear, and renewables to reduce TVA's overall environmental footprint. Based on options for certain coal-fired units under the Environmental Agreements and the anticipated results of updates to its IRP in 2015, the amount and timing of expenditures could change. See Power Supply and Cleaner Energy Initiatives — Coal-Fired above and Estimated Required Environmental Expenditures below.

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Estimated Required Environmental Expenditures

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

Air, Water, and Waste Quality Estimated Potential Environmental Expenditures⁽¹⁾

At September 30, 2015

(in millions)

	Estimated Timetable	Total Estimated Expenditures
Site environmental remediation costs ⁽²⁾	2016+	\$23
Coal combustion residual conversion program ⁽³⁾	2016-2022	1,250
Proposed clean air control projects ⁽⁴⁾	2016-2025	750
Clean Water Act requirements ⁽⁵⁾	2016-2022	300

Notes

(1) These estimates are subject to change as additional information becomes available and as laws or regulations change.

(2) Estimated liability for cleanup and similar environmental work for those sites for which sufficient information is available to develop a cost estimate.

(3) Includes costs associated with pond closures, conversion of wet to dry handling, and landfill activities. In April 2015, the EPA finalized rules related to CCRs. TVA is continuing to evaluate the rules and their impact on its operations, including the cost and timing estimates of related projects. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Key Initiatives and Challenges — Coal Combustion Residual Facilities.

(4) 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 or transmission upgrades.

(5) Includes projects that TVA is currently planning to comply with revised rules under the Clean Water Act (i.e., Section 316(b)) and effluent limitation guidelines for steam electric power plants).

Employees

On September 30, 2015, TVA had 10,918 employees, of whom 3,984 were trades and labor employees. Neither the federal labor relations laws covering most private sector employers nor those covering most federal agencies apply to TVA. However, the TVA Board has a long-standing policy of acknowledging and dealing with recognized representatives of its employees, 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 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.

For ease of reference, the risk factors are presented in four categories: (1) regulatory, legislative, and legal risks, (2) operational risks, (3) financial, economic, and market risks, and (4) general business risks.

REGULATORY, LEGISLATIVE, AND LEGAL RISKS

New laws, regulations, or administrative orders, or Congressional action or inaction, 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. Additionally, Congress could act, or fail to take action, on various issues that may result in impacts to TVA, including but not limited to action or inaction related to the national debt ceiling or automatic spending cuts in government programs. Although it is difficult to predict exactly how new laws, regulations, or administrative orders or Congressional action or inaction may impact TVA, some of the possible effects are described below.

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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 laws or regulations may be revised or reinterpreted in a way that adversely affects TVA. Possible areas of future laws or regulations include, but are not limited to, the following:

Greenhouse gases. In August 2015, the EPA issued stronger regulations concerning CO₂ emissions from existing power plants burning fossil fuels, and states are required to issue plans to implement these laws or regulations no later than September 6, 2018. Costs to comply with these regulations, as well as future regulations regarding CO₂ 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. In April 2015, the EPA issued stronger regulations concerning CCRs, and state governments may impose additional regulations. These laws or regulations may require TVA to make additional capital expenditures, increase operating and maintenance costs, or even cause it to shut down certain facilities. TVA had spent approximately \$760 million as of September 30, 2015 as part of its CCR program. The CCR program consists of TVA's commitment to convert all operational coal plants to dry CCR storage, to close all wet storage facilities, and to meet all applicable state and federal regulations.

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.

TVA's ability to control or allocate funds could be restricted.

Other federal entities may attempt to restrict TVA's ability to access or control its funds that are on deposit in the TVA account in the U.S. Treasury. For example, should the U.S. Treasury approach its debt ceiling, the U.S. Treasury might, as part of an effort to control federal spending, attempt to require TVA to receive approval before disbursement of funds from TVA's U.S. Treasury account. Additionally, the Office of Management and Budget ("OMB") might, in the event that automatic spending cuts go into effect, attempt to require TVA to reduce its budget by a specified percentage (although the legal applicability of such a situation to TVA would depend upon the wording of the legislation making the automatic spending cuts). Such attempts to restrict TVA's ability to control or allocate funds in those specific types of situations could adversely affect its cash flows, results of operations, and financial condition, its relationships with creditors, vendors, and counterparties, the way it conducts its business, and its reputation.

TVA may lose its protected service territory.

TVA's service area is defined by the fence and protected by the anti-cherry-picking provision. From time to time there have been efforts to erode the protection of the anti-cherry-picking provision, and the protection of the anti-cherry-picking provision could be limited and perhaps eliminated by Congressional legislation at some time in the future. If Congress were to eliminate or reduce the coverage of the anti-cherry-picking 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 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 effectively operate 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.

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

TVA's management of real property containing power generation and transmission structures as well as certain reservoir shorelines is important for navigation, flood control, and the effective operation of the power system. 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.

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, nuclear, and transmission reliability areas. To settle the EPA and other claims involving alleged NSR violations, TVA agreed to retire 18 coal-fired units and pay a civil penalty. The cost to install the necessary equipment to comply with existing environmental laws, regulations, settlement agreements, and orders at some other facilities has caused TVA to retire additional units and may render some other 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 assets, may be unable to operate certain assets, or may have to pay fines or penalties if it continues to operate the assets.

Additional NRC requirements may negatively affect TVA's cash flows, results of operations, and financial condition or impact TVA's ability to operate its nuclear facilities.

In response to concerns raised by the Fukushima events, the NRC has required all utilities that own operating nuclear reactors, including TVA, to make substantial modifications at their nuclear facilities. Additionally, the NRC is requiring TVA to evaluate certain of its hydro and nuclear facilities to prevent damage to the nuclear facilities in the event of a catastrophic flood event. Complying with these requirements will require significant capital expenditures and may negatively affect TVA's cash flows, results of operations, financial condition, and reputation. Should TVA be unable to comply with the requirements, TVA may not be able to operate its nuclear facilities as currently contemplated by TVA's generation plans.

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 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.

TVA is largely restricted to a defined service area.

If demand for power in TVA's service area decreases, TVA's ability to expand its customer base would be constrained by its inability to pursue new customers outside its service area. Accordingly, the reduction in demand would have to be offset by such actions as reducing TVA's internal costs or increasing rates. Any failure of such measures to fully offset the reduced demand for power may negatively affect TVA's cash flows, results of operations, and financial condition.

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OPERATIONAL RISKS

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, constructing two natural gas-fired plants, preserving Bellefonte Unit 1 for possible future completion, 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 overruns in the cost of labor and materials as well as risks of schedule delays, which may result from, among other things, changes in laws or regulations, lack of productivity, human error, and the failure to schedule activities properly. In addition, if TVA does not obtain the necessary regulatory approvals or licenses, 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. Further, if construction projects are not completed according to specifications, TVA may suffer, among other things, delays in receiving licenses, reduced plant efficiency, reduced transmission system integrity and reliability, and higher operating costs.

TVA may not be able to operate one or more of its nuclear power units.

Should issues develop with TVA's nuclear power units that TVA is unable to correct, TVA might voluntarily shut down one or more units or be ordered to do so by the NRC. Returning the unit(s) into operation could be a lengthy and expensive process, or might not be possible depending on circumstances. In either case, TVA's cash flows, results of operations, financial condition, and reputation may be negatively affected.

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 and anticipates adding a seventh operating unit in CY 2016 when Watts Bar Unit 2 becomes operational. Risks associated with these units include the following:

Nuclear Risks. A nuclear incident at one of TVA's facilities 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. 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 \$114 million per year and a total of \$764 million per nuclear incident under the Price-Anderson Act. These potential liabilities will increase to \$133 million per year and a total of \$891 million per nuclear incident once Watts Bar Unit 2 becomes operational. Any such nuclear incident could also 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. Further, the availability or price of insurance may be impacted by TVA's acts or omissions, such as a failure to properly maintain a facility, or events outside of TVA's control, such as an equipment manufacturer's inability to meet a guideline, specification, or requirement.

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 NDT if,

among other things:

• The value of the investments in the NDT 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;

• TVA is required to decommission a nuclear plant sooner than it anticipates; or

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The NRC guidelines for calculating the minimum amount of funds necessary for decommissioning activities are significantly changed.

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, operating, 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.

TVA's facilities and information infrastructure may not operate as planned due to physical and cyber threats to TVA's security.

TVA has an extensive generation and transmission system and supporting infrastructure that includes both physical and cyber assets. Potential targets include, among other things, TVA's generation facilities, transmission infrastructure such as substations and towers, information technology systems, and network infrastructure. Because of TVA's status as a governmental corporation and TVA's role as predominately the sole power provider for its service territory, TVA may be targeted by individuals, groups, or nation states for physical or cyber attacks.

Physical Attacks. TVA's operations are located over wide areas and are protected by automated monitoring systems, local law enforcement, TVA employees, or a combination thereof. However, it may not be possible to effectively deter or prevent attacks, including vandalism and more significant acts, at all TVA facilities. Such attacks could pose health and safety risks, significantly disable or destroy TVA assets, interfere with TVA's operations, result in additional regulatory or security requirements, and negatively affect TVA's cash flows, results of operations, and financial condition.

Cyber Attacks. TVA's operations are extensively computerized. A failure or breach of its information technology assets, whether caused by a cyber attack or otherwise, could:

Significantly disrupt operations, including the generation and transmission of electricity;

Negatively affect TVA's cash flows, results of operations, and financial condition;

Pose health and safety risks; and

Result in the compromise of sensitive data.

The theft, damage, or improper disclosure of sensitive data may also subject TVA to penalties and claims from third parties.

TVA's generation and transmission assets or their supporting infrastructure may not operate as planned.

Many of TVA's generation and transmission assets and their supporting infrastructure have been operated more often, or for more prolonged periods, than originally intended. Many of TVA's coal-fired units, for example, have been operating since the 1950s and have been in nearly constant service since they were completed. Additionally, certain of

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TVA's newer assets have experienced operating issues and manufacturing defects in essential equipment. If TVA's generation and transmission assets or their supporting infrastructure fail to operate as planned, if necessary repairs or upgrades are delayed or cannot be completed as quickly as anticipated, or if necessary spare parts are unavailable, TVA, among other things:

- ♣May have to invest a significant amount of resources to repair or replace the assets or the supporting infrastructure;
- ♣May have to remediate collateral damage caused by a failure of the assets or the supporting infrastructure;
- ♣May not be able to maintain the integrity or reliability of the transmission system at normal levels;
- ♣May have to operate less economical sources of power;
- ♣May have to purchase replacement power on the open market at prices greater than its generation costs;
- ♣May be required to invest substantially to meet more stringent reliability standards;

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• May be unable to maintain insurance on affected facilities, or be required to pay higher premiums for coverage, unless necessary repairs or upgrades are made;

- May be unable to operate the assets for a significant period of time;
and

• May not be able to meet its contractual obligations to deliver power.

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

TVA's safety program may not prevent accidents that could, among other things, impact TVA's operations or financial condition.

TVA's safety program, no matter how well designed and operated, may not completely prevent accidents. In addition to the potential human cost of accidents, which could include injury to employees or members of the public, significant accidents could impact TVA's ability to carry out operations, cause it to shut down facilities, subject it to additional regulatory scrutiny, damage its reputation, interfere with its ability to attract or retain a skilled workforce, and harm its financial condition.

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. Also, 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. Additionally, periods of either high or low levels of rainfall may reduce river levels and impede river traffic, impacting barge deliveries of critical items such as coal and equipment for power facilities. 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.

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, explosions, solar events, electromagnetic pulses, droughts, floods, tornadoes, wars, national emergencies, terrorist activities, pandemics, and other similar destructive or disruptive events. 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; limit or disrupt TVA's ability to provide flood control and river management; 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 if public opposition to nuclear power makes operating such plants less feasible 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 catastrophic events, such as droughts and floods, to occur more frequently in the Tennessee Valley region, which could adversely impact TVA.

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. Certain of TVA's generation and transmission assets are critical to maintaining reliability of the transmission system. Additionally, TVA uses certain assets that belong to third parties to transmit power and maintain reliability. Accordingly, problems at other utilities as well as at TVA's facilities may cause interruptions in TVA's service to TVA's customers, increase congestion on the transmission grid, or reduce service reliability. 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, increased congestion, or reduced service reliability, TVA's cash flows, results of operations, financial condition, and reputation may be negatively affected.

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TVA's supplies of fuel, purchased power, or other critical items may be disrupted.

TVA purchases coal, uranium, natural gas, fuel oil, and electricity from a number of suppliers. Additionally, TVA purchases other items, such as anhydrous ammonia, liquid oxygen, or replacement parts that are critical to the operation of certain generation assets. Disruption in the acquisition or delivery of fuel, purchased power, or other critical supplies may result from a variety of physical and commercial events, political developments, legal actions, or environmental regulations affecting TVA's suppliers as well as from transportation or transmission constraints. If one of TVA's suppliers fails to perform under the terms of its contract with TVA, TVA might have to purchase replacement fuel, power, or other critical supplies, perhaps at a significantly higher price than TVA is 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 supplies could require TVA to operate higher cost generation assets, thereby adversely affecting TVA's cash flows, results of operations, and financial condition. Moreover, if TVA is unable to acquire enough replacement fuel, power, or supplies, or does not have sufficient reserves to offset the loss, TVA may not be able to operate certain assets or provide enough power to meet demand, resulting in power curtailments, brownouts, or even blackouts.

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's 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 a large portion of its tributary system 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 of TVA's facilities rely. Events at these 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 determination of the appropriate mix of generation assets may change.

TVA has determined that its power generation assets should consist of a mixture of nuclear, coal-fired, natural gas-fired, and renewable power sources, including hydroelectric. In making this determination, TVA took various factors into consideration, including the anticipated availability of its nuclear units, the availability of non-nuclear facilities, the forecasted cost of natural gas and coal, the forecasted demand for electricity, and environmental compliance including the expense of adding air pollution controls to its coal-fired units. If any of these assumptions materially change or are overtaken by subsequent events, then TVA's generation mix may not adequately address its operational needs. Resolving such a situation may require capital expenditures or additional power purchases, and TVA's cash flows, results of operations, financial condition, and reputation may be negatively affected. Additionally, TVA is taking measures to maintain flexibility by keeping certain facilities and sites available as generation options. There are costs associated with maintaining these options that could impact TVA's cash flows, results of operation, financial condition, and reputation.

FINANCIAL, ECONOMIC, AND MARKET RISKS

TVA's cost reduction efforts may not be successful.

TVA has been working to reduce operating expenses to offset reductions in power demand. The failure to achieve or maintain cost reductions could adversely affect TVA's rates, reputation, cash flows, results of operations, and financial condition.

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

At September 30, 2015, TVA's qualified pension plan had assets of \$6.8 billion compared to liabilities of \$12.8 billion. The qualified plan is mature with approximately 23,700 retirees and beneficiaries receiving benefits of approximately \$690 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 experience and assumptions related to terminations, retirements, and mortality; rates of increase in compensation levels; rates of return on plan assets; discount rates used in determining future benefit obligations and required funding levels; optional forms of benefit payments selected; 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. Unfavorable financial market

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conditions 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, 2015, TVA had \$23.9 billion of Bonds outstanding (not including noncash items of foreign currency exchange gain of \$21 million and net discount on sale of Bonds of \$108 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 power purchase 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 rating actions by credit rating agencies.

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 and other financing arrangements 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, as a governmental instrumentality, TVA cannot 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-cherry-picking provision, and (3) TVA's status as a corporate agency and instrumentality of the United States. 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, may be impacted if the sovereign credit ratings of the United States are downgraded. Such a downgrade of the United States's sovereign credit ratings could, among other things, result in a downgrade of TVA's credit rating. Additionally, the economy could be negatively impacted resulting in reduced demand for electricity, an increase in borrowing costs, and an increase in the cost of fuels, supplies, and other materials required for TVA's operations.

TVA, together with owners of TVA securities, may be impacted by downgrades of TVA's credit ratings.

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 securities 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 may result in TVA's having to post collateral under certain physical and financial contracts that contain ratings triggers.

A downgrade below a contractual threshold may prevent TVA from borrowing under three credit facilities totaling \$2.5 billion or posting letters of credit as collateral under these facilities. At September 30, 2015, there were \$1.1 billion of letters of credit outstanding under these facilities. If TVA were no longer able to post letters of credit as collateral, TVA's liquidity would be negatively affected, for TVA would likely have to post cash as collateral instead of letters of credit.

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A downgrade may 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 securities.

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 energy and commodity prices, cost estimates, construction schedules, power demand forecasts, the 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 cash flows, results of operations, and financial condition, as well as TVA's ability to meet electricity demand and the way TVA conducts its business.

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, but are not limited to, 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. TVA could lose customers if those customers' operations leave TVA's service territory, choose another utility where available, or pursue self-generation to meet some or all of their power needs. The loss of customers could have a material adverse effect on TVA's cash flows, results of operations, or financial condition, and could result in higher rates, especially because of the difficulty in replacing customers on account of the fence.

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.

Increased Energy Efficiency and Conservation. Increasingly efficient use of energy as well as conservation efforts may reduce the demand for power. Such a reduction could have a significant impact on TVA, especially if it occurs during an economic downturn or a period of slow economic growth, could negatively affect TVA's cash flows, results of operations, and financial condition, and could result in higher rates and changes to how TVA operates.

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. If prices of commodities critical to operations, including coal, uranium, natural gas, fuel oil, crude oil, construction materials, or emission allowances, increase, TVA's rates may increase.

Investment Price Risk. TVA is exposed to investment price risk in the NDT, its Asset Retirement Trust ("ART"), its Supplemental Executive Retirement Plan ("SERP"), its Long-Term Deferred Compensation Plan ("LTDCP"), and its pension plan. If the value of the investments held in the NDT or the pension fund either decreases or fails to increase in accordance with assumed rates of return, TVA may be required to make substantial contributions to these funds. In addition, although TVA is not required to make contributions to the ART, it may choose to do so, particularly if TVA's estimates of its non-nuclear asset retirement obligation liabilities increase. TVA may also choose to make contributions to the SERP and LTDCP from time to time.

Interest Rate Risk. Changes in interest rates may increase the amount of interest that TVA pays on new Bonds that it issues, decrease the return that TVA receives on short-term investments, decrease the value of the investments in the NDT, the ART, and TVA's pension fund, increase the amount of collateral that TVA is required to post in connection with certain of its derivative transactions, 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

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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.

Under the Dodd-Frank Wall Street Reform and Consumer Protection Act and its implementing regulations, TVA is subject to recordkeeping, reporting, and reconciliation requirements related to its derivative transactions. In addition, depending on how regulatory agencies interpret and implement the provisions of this act, TVA's hedging costs may increase, and TVA may have to post additional collateral and margin in connection with its derivative transactions. These occurrences may, among other things, negatively affect TVA's cash flows and cause TVA to reduce or modify its hedging activities, which could increase the risks to which TVA is exposed.

The market for TVA securities might be limited.

Although many TVA 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.

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.

GENERAL BUSINESS RISKS

TVA's organizational transformation efforts may not be successful.

TVA has been working to improve its corporate culture. The failure to achieve or maintain improvements in TVA's corporate culture may contribute to the likelihood of incidents such as significant environmental events, delays in

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construction projects, or other operational or financial challenges that could adversely affect TVA's cash flows, results of operations, and financial condition as well as TVA's ability to attract or retain a skilled workforce.

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, significant delays in construction projects, acts or omissions of TVA management, the perception of such acts or omissions, measures taken to offset reductions in demand, or a significant dispute with one of TVA's customers. Any deterioration in TVA's reputation may harm TVA's relationships with its customers and stakeholders, may increase TVA's cost of doing business, may interfere with its ability to attract and retain a skilled workforce, and may potentially lead to the imposition of additional laws and regulations that negatively affect the way TVA conducts its business.

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 successfully implement its organizational transformation efforts.

Loss of a quorum of the TVA Board could limit TVA's ability to adapt to meet changing business conditions.

Under the TVA Act, a quorum of the TVA Board is five members. Becoming a member of the TVA Board requires confirmation by the U.S. Senate following appointment by the President. Further, TVA Board members may not continue in office indefinitely until a successor is appointed. The TVA Board is responsible for, among other things, establishing the rates TVA charges for power as well as TVA's long-term objectives, policies, and plans. Accordingly, loss of a quorum for an extended period of time would impair TVA's ability to change rates and to modify these objectives, policies, and plans. Such an impairment would likely have a negative impact on TVA's ability to respond to significant changes in technology, the regulatory environment, or the industry overall and, in turn, negatively affect TVA's cash flows, results of operations, and financial condition.

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.

Generating Properties

At September 30, 2015, TVA-operated generating assets consisted of 39 active coal-fired units and 20 inactive coal-fired units, 6 nuclear units, 109 conventional hydroelectric units, 4 pumped-storage units, 12 combined-cycle power blocks, 87 simple-cycle units, 5 diesel generator units, one wind energy site (out of service), and 14 solar sites. In addition, TVA has biomass co-firing potential at its coal-fired sites. As of September 30, 2015, 24 of the simple-cycle combustion turbine units were leased to private entities and leased back to TVA under long-term leases. In addition, TVA is leasing the three Caledonia combined-cycle power blocks under a long-term lease. TVA is in the

process of constructing additional generating assets. For a discussion of these assets, see Item 1, Business — Power Supply and Cleaner Energy Initiatives.

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Net Capability

The following table summarizes TVA's summer net capability in megawatts ("MW") at September 30, 2015:

SUMMER NET CAPABILITY⁽¹⁾

At September 30, 2015

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	741	1959	1959
Bull Run	Tennessee	1	863	1967	1967
Colbert ⁽²⁾	Alabama	4	712	1955	1965
Cumberland	Tennessee	2	2,470	1973	1973
Gallatin	Tennessee	4	976	1956	1959
Johnsonville	Tennessee	4	428	1951	1959
Kingston	Tennessee	9	1,398	1954	1955
Paradise	Kentucky	3	2,201	1963	1970
Shawnee	Kentucky	9	1,206	1953	1955
Total Coal-Fired		39	10,995		
Nuclear					
Browns Ferry	Alabama	3	3,309	1974	1977
Sequoyah	Tennessee	2	2,292	1981	1982
Watts Bar	Tennessee	1	1,135	1996	1996
Total Nuclear		6	6,736		
Hydroelectric					
Conventional Plants					
	Alabama	36	1,176	1925	1962
	Georgia	2	33	1931	1956
	Kentucky	5	223	1944	1948
	North Carolina	6	492	1940	1956
	Tennessee	60	1,872	1912	1972
Pumped-Storage	Tennessee	4	1,616	1978	1979
Total Hydroelectric		113	5,412		
Natural Gas and/or Oil-Fired ^{(3),(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 ⁽⁵⁾	Tennessee	3	465	2000	2000
Johnsonville	Tennessee	20	1,133	1975	2000
Kemper	Mississippi	4	312	2002	2002
Lagoon Creek	Tennessee	12	941	2001	2002
Marshall County	Kentucky	8	621	2002	2002
Subtotal Simple-Cycle Combustion Turbine		87	5,388		
Combined-Cycle Combustion Turbine					
Ackerman ⁽⁶⁾	Mississippi	1	705	2007	2007

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Caledonia ⁽⁷⁾	Mississippi	3	765	2003	2003
John Sevier ⁽⁸⁾	Tennessee	1	870	2012	2012
Lagoon Creek ⁽⁹⁾	Tennessee	1	525	2010	2010
Magnolia	Mississippi	3	920	2003	2003
Southaven	Mississippi	3	774	2003	2003
Subtotal Combined-Cycle Combustion Turbine		12	4,559		
Total Natural Gas and/or Oil-Fired Diesel Generator		99	9,947		
Meridian	Mississippi	5	9	1998	1998
Total Diesel Generators		5	9		
TVA Renewable Resources (non-hydro) ⁽¹⁰⁾			< 1		
Total TVA-Operated Generating Facilities			33,099		

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Contract Renewable Resources ⁽¹¹⁾⁽¹²⁾	176
Power Purchase and Other Agreements ⁽¹³⁾	3,189
Total Summer Net Capability	36,464

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 and does not include operational limitations such as derates.
- (2) Eight MW of cofired methane at Allen and seven MW of cofired biomass at Colbert are accounted for as coal generation as opposed to TVA Renewable Resources.
- (3) See Generating Properties above for a discussion of TVA-operated natural gas and/or oil-fired facilities subject to leaseback and long-term lease arrangements.
- (4) Peak firing of simple-cycle combustion turbine units accounts for an additional 257 MW of short-term capability.
- (5) Two units at the Gleason Simple-Cycle Facility were derated as of September 30, 2015, pending completion of maintenance.
- (6) Ackerman Combined Cycle Facility is a single steam cycle unit driven by two gas turbines (2x1 configuration).
- (7) Caledonia is currently a leased facility operated by TVA.
- (8) John Sevier Combined Cycle Facility is a single steam cycle unit driven by three gas turbines (3x1 configuration).
- (9) Lagoon Creek Combined Cycle Facility is a single steam cycle unit driven by two gas turbines (2x1 configuration).
- (10) TVA's three wind turbines (2 MW nameplate capacity) at its Buffalo Mountain Site in Tennessee were not operational as of September 30, 2015, and do not appear to be economical for returning to operation. TVA owns 0.4 MW of solar installations at 14 sites.
- (11) Contract Renewable Resources include Generation Partners, Renewable Standard Offer, and 15 wind turbine generators located on Buffalo Mountain.
- (12) Solar and wind resources are listed at nameplate capacity.
- (13) Power Purchase and Other Agreements includes renewable resources. See Item 1, Business — Power Supply and Cleaner Energy Initiatives — Purchased Power and Other Agreements for information on renewable energy power purchase contracts.

Transmission Properties

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

- Approximately 2,500 circuit miles of 500 kilovolt, 11,500 circuit miles of 161 kilovolt, and 2,200 circuit miles of other voltage transmission lines;
- 512 transmission substations, power switchyards, and switching stations; and
- 1,293 customer connection points (customer, generation, and interconnection).

At September 30, 2015, 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:

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- Approximately 11,000 miles of reservoir shoreline;
- Approximately 293,000 acres of reservoir land;
- Approximately 650,000 surface acres of reservoir water; and
- Approximately 80 public recreation areas throughout the Tennessee Valley, including campgrounds, day-use areas, and boat launching ramps.

Additionally, TVA manages over 170 agreements for commercial recreation (such as campgrounds and marinas).

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.

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 also has a significant number of buildings in Muscle Shoals, Alabama, and is implementing strategies to further reduce its Muscle Shoals real property holdings.

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.

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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.

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

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 22 — Legal Proceedings, which discussion is incorporated by reference into this Item 3.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

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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.

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ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data for the years 2011 through 2015 should be read in conjunction with the audited financial statements and notes thereto (collectively, the "Consolidated Financial Statements") presented in Item 8, Financial Statements and Supplementary Data. Certain reclassifications have been made to the 2011, 2012, and 2013 financial statement presentations to conform to the 2014 and 2015 presentations.

Selected Financial Data⁽¹⁾⁽²⁾

For the years ended, or at, September 30

(dollars in millions)

	2015	2014	2013	2012	2011
Sales (millions of kWh)	158,163	158,057	161,925	165,255	167,730
Peak load (MW)	32,751	33,352	28,726	31,098	31,434
Operating revenues	\$11,003	\$11,137	\$10,956	\$11,220	\$11,841
Fuel expense	\$2,444	\$2,730	\$2,820	\$2,680	\$2,926
Purchased power expense	\$950	\$1,094	\$1,027	\$1,189	\$1,427
Operating and maintenance expense	\$2,838	\$3,341	\$3,428	\$3,510	\$3,617
Net interest expense	\$1,133	\$1,169	\$1,226	\$1,273	\$1,305
Net income	\$1,111	\$469	\$271	\$60	\$162
Construction expenditures	\$2,850	\$2,384	\$2,051	\$2,119	\$2,417
Total assets	\$48,825	\$45,596	\$46,106	\$47,334	\$46,393
Financial obligations					
Long-term debt, net ⁽³⁾					
Long-term power bonds, net	\$22,684	\$21,948	\$22,315	\$20,269	\$22,412
Long-term debt of variable interest entities	\$1,246	\$1,279	\$1,311	\$981	\$—
Total long-term debt, net	\$23,930	\$23,227	\$23,626	\$21,250	\$22,412
Current debt, net ⁽³⁾					
Short-term debt, net	\$1,034	\$596	\$2,432	\$1,507	\$482
Current maturities of power bonds	\$32	\$1,032	\$32	\$2,308	\$1,537
Current maturities of long-term debt of variable interest entities	\$33	\$32	\$30	\$13	\$—
Total current debt, net	\$1,099	\$1,660	\$2,494	\$3,828	\$2,019
Total debt ⁽³⁾	\$25,029	\$24,887	\$26,120	\$25,078	\$24,431
Capital leases ⁽⁴⁾	\$105	\$109	\$43	\$35	\$5
	\$37	\$39	\$40	\$—	\$—

Membership interests of variable interest entity subject to mandatory redemption⁽³⁾⁽⁴⁾

Leaseback obligations	\$616	\$691	\$761	\$1,203	\$1,282
Energy prepayment obligations	\$310	\$410	\$510	\$612	\$717

Notes

(1) See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations for a description of certain items in 2015, 2014, and 2013 affecting results in those years.

(2) See Item 1A, Risk Factors and Note 22 for a discussion of risks and contingencies that could affect TVA's future financial results.

(3) See Note 10 and Note 14 — Debt Outstanding.

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to help the reader understand the Tennessee Valley Authority ("TVA"), its operations, and its present business environment. The MD&A is provided as a supplement to — and should be read in conjunction with — TVA's consolidated financial statements and the accompanying notes thereto contained in Item 8, Financial Statements and Supplementary Data of this Annual Report on Form 10-K for the fiscal year ended September 30, 2015 (the "Annual Report"). The MD&A includes the following sections:

• **Business and Mission** - a general description of TVA's business, objectives, strategic priorities, and core capabilities;

• **Executive Overview** - a general overview of TVA's activities and results of operations for 2015;

• **Results of Operations** - an analysis of TVA's consolidated results of operations for the three years presented in its consolidated financial statements;

• **Liquidity and Capital Resources** - an analysis of cash flows, a description of aggregate contractual obligations, and an overview of financial position;

• **Key Initiatives and Challenges** - an overview of current and future initiatives and challenges facing TVA;

• **Critical Accounting Policies and Estimates** - a summary of accounting policies that require critical judgments and estimates;

• **Fair Value Measurements** - a description of TVA's investments and derivative instruments and valuation considerations;

• **Legislative and Regulatory Matters** - a summary of laws and regulations that may impact TVA; and

• **Risk Management Activities** - a description of TVA's risk governance and exposure to various market risks.

Business and Mission

Business

TVA operates the nation's largest public power system. At September 30, 2015, TVA provided electricity to approximately 52 large industrial customers, eight federal agency customers, and 155 local power company customers of TVA ("LPCs") 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 2015 revenues from the sale of electricity totaled \$10.8 billion. As a wholly-owned agency and instrumentality of the United States, however, TVA differs from other electric utilities in a number of ways:

• TVA is a government corporation.

• The area in which TVA sells power is limited by the Tennessee Valley Authority Act of 1933, as amended (the "TVA Act"), under a provision known as the "fence"; however, another provision of federal law known as the "anti-cherry-picking" 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.

The rates TVA charges for power are set solely by the TVA Board of Directors (the "TVA Board") and are not set or reviewed by another entity, such as a public utility commission. 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.

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, or 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.

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TVA's Mission of Service

TVA was built for the people, created by Congress, and charged with a unique mission - to improve the quality of life in a seven-state region through the integrated management of the region's resources.

TVA's mission focuses on three key areas:

Energy - Provide reliable, affordable electric power throughout the Tennessee Valley;

Environment - Act as steward of the region's natural resources; and

Economic Development - Serve as a catalyst for sustainable economic development.

While TVA's mission has not changed since it was established in 1933, the climate in which TVA operates continues to evolve. The business and economic environment has become more challenging due to economic conditions, tougher environmental standards, the need to modernize its generating fleet, and changing customer needs. To adapt to these challenges, TVA has developed the following strategic imperatives to position itself to carry out its mission of serving the people of the Tennessee Valley:

Rates - Maintain low rates;

Stewardship - Be responsible stewards;

Debt - Live within its means; and

Asset Portfolio - Meet reliability expectations and provide a balanced portfolio.

TVA's mission sets the stage for its strategic planning process that includes strategic objectives, initiatives, and scorecards for performance designed to provide clear direction for improving TVA's core business.

Linking the Mission to Performance

TVA has formulated key performance measures to support its strategic imperatives. The intent of these measures is to align employees to TVA's mission by focusing its collective efforts on operational excellence, fiscal responsibility, and economic development and environmental stewardship. The measures are designed to promote teamwork, encourage high performance behaviors, and motivate TVA employees to achieve goals aligned with TVA's mission and values.

The 2015 corporate results compared with targets for these key indicators are reflected in the chart below. In addition to these Corporate Measures, TVA organizations also develop and track performance measures. See Item 11, Executive Compensation — Compensation Discussion and Analysis for additional information regarding the TVA 2015 Organization Scorecards.

Corporate Measure	Weight	Actual	Threshold	Target	Stretch
Corporate total spending (\$ millions)	40%	\$792	\$856	\$837	\$817
Nuclear unit capability factor (%)	20%	91.1%	89.8%	90.8%	92.0%
Coal seasonal equivalent forced outage rate (%)	15%	4.8%	6.4%	5.9%	5.0%
Load not served (system minutes)	10%	3.8	5.8	4.4	3.7
Reportable environmental events	10%	22	17	12	9

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Combined cycle seasonal equivalent forced outage rate (%)	5%	0.6%	3.3%	2.1%	1.1%
Executive Overview					

TVA's net income for the years ended September 30, 2015 and 2014, was \$1.1 billion and \$469 million, respectively. Sales of electricity were relatively flat for the year ended September 30, 2015, as compared to the prior year. Revenue from the sales of electricity had a slight decrease of \$152 million for the year ended September 30, 2015, as compared to the year ended September 30, 2014, primarily due to a decrease in fuel cost recovery driven by lower fuel rates offset by the increase in the 2015 non-fuel base rate and warmer weather in 2015. Operating and maintenance costs decreased \$503 million for the year ended September 30, 2015, as compared to the prior year primarily due to cost savings initiatives undertaken by management,

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the timing of projects, fewer nuclear outages, and the timing of pension costs. These decreases in expenses were partially offset by an increase in depreciation expense related to the timing of idling or retiring certain coal-fired units. Overall, TVA exceeded its cost reduction initiative goal of reducing operating costs by \$500 million from its 2013 budget by over \$100 million.

TVA also focused on managing debt to help ensure long-term financial health. TVA continues to benefit from lower interest rates, and set a new record in September 2015 when it issued \$1.0 billion of 50-year global power bonds carrying an interest rate of 4.25 percent, priced at a yield of 4.383 percent. Favorable operating cash flow during 2015 enabled TVA to fund some of its \$2.9 billion of capital investments with operating funds instead of borrowing additional debt.

By partnering with its customers, TVA strengthened customer loyalty and relationships while its economic development efforts attracted investments in the Tennessee Valley of over \$7.8 billion and 76,200 jobs created or retained. In addition, TVA worked with its LPC customers to restructure its pricing plan to put TVA in a more competitive position to attract and retain customers. It is expected that changes to this plan will better link the actual cost of generating power with the amount its customers pay by improving TVA's rate structure and pricing products and programs, and will help customers make more informed decisions on energy usage.

TVA continues to focus on balancing its asset portfolio to be able to provide clean, reliable, and affordable energy under a variety of future conditions. During 2015, TVA retired Units 7 and 8 at Widows Creek Fossil Plant ("Widows Creek") removing 938 MW of summer net capability from its coal-fired generation fleet. This was the last operating unit at the Stevenson, Alabama facility, which stopped generating electricity in September 2015 after a 63-year history of producing power. Work is proceeding on Watts Bar Nuclear Plant ("Watts Bar") Unit 2. On October 22, 2015, the NRC issued a forty-year operating license for Watts Bar Unit 2, and it is expected that the unit will begin commercial operations in the third quarter of 2016. TVA also acquired a 700 MW combined-cycle gas plant located in Ackerman, Mississippi in April 2015.

Operational improvements in TVA's nuclear program continue over that of the past few years. In September 2015, Units 1 and 2 of the Sequoyah Nuclear Plant ("Sequoyah") received license extensions to 2040 and 2041, respectively.

Work is also continuing on the remediation of the seepage discovered in October 2014 at Boone Dam. Remediation is expected to take five to seven years to complete.

Longer-term, TVA anticipates low growth rates and plans to focus on the future of its energy supply utilizing more natural gas, renewables, and nuclear power as well as energy efficiency and demand response initiatives and projects related to compliance with environmental and reliability requirements and standards. This focus was validated in the summer of 2015 when TVA completed an update of its 2011 Integrated Resource Plan ("IRP") in response to changes in the utility industry and changes within its seven-state service territory. This update involved significant stakeholder engagement and employed industry-leading modeling improvements that identified a robust, least-cost, and risk-informed target power supply mix for the next 20 years. The IRP also concludes there is no immediate need for new baseload capacity beyond Watts Bar Unit 2 and upgrades at the Browns Ferry Nuclear Plant ("Browns Ferry"). The TVA Board approved the recommendations in the 2015 IRP which provide strategic guidance for a diverse, resource portfolio and reinforce the importance that TVA's power be reliable, affordable, diverse and sustainable into the future. The TVA Board also directed that future developments such as changes in energy efficiency pricing and performance, renewable resources pricing and performance, load forecasting, and commodity prices be monitored so that management may appropriately consider possible adjustments to its planning direction. Updates to the 2015 IRP are to be initiated no later than 2020.

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Results of Operations

Sales of Electricity

Sales of electricity accounted for virtually all of TVA's operating revenues in 2015, 2014, and 2013. TVA sells power at wholesale rates to LPCs 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 nonstandard loads. In addition, power that exceeds the needs of the TVA system is sold under exchange power arrangements with certain other power systems.

The following chart compares TVA's energy sales statistics for the years ended September 30, 2015, 2014, and 2013:

Weather affects both the demand for TVA power and the price for that power. 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.

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Notes

* Normal heating degree days for the years ended September 30, 2015, 2014 and 2013 was 3,360. This calculation is updated every five years in order to incorporate the then most recent 30 years. It was last updated in 2011.

** Normal cooling degree days for the years ended September 30, 2015, 2014, and 2013 was 1,863. This calculation is updated every five years in order to incorporate the then most recent 30 years. It was last updated in 2011.

2015 Compared to 2014

Sales of electricity increased 106 million kilowatt hours ("kWh") for the year ended September 30, 2015, as compared to the year ended September 30, 2014, primarily due to increased sales volume for LPCs resulting from a seven percent increase in cooling degree days. This increase was partially offset by both a decrease in sales to industries directly served as a result of economic conditions affecting certain customers, and a decrease in sales to federal agencies and other, primarily from a reduction in off-system sales as TVA had less excess generation available for sale.

2014 Compared to 2013

Sales of electricity decreased 3.9 billion kWh for the year ended September 30, 2014, compared to the year ended September 30, 2013, primarily due to a decrease in demand from industries directly served. The reduced demand was largely the result of a decrease in demand by United States Enrichment Corporation ("USEC"), which began ceasing operations during the third quarter of 2013. Partially offsetting the decrease from industries directly served was an increase in sales to federal agencies and other due to an increase in off-system sales as TVA had excess generation available for resale.

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Financial Results

The following table compares operating results for 2015, 2014, and 2013:

Summary Consolidated Statements of Operations

	2015	2014	2013
Operating revenues	\$11,003	\$11,137	\$10,956
Operating expenses	8,788	9,548	9,503
Operating income	2,215	1,589	1,453
Other income, net	29	49	44
Net interest expense	1,133	1,169	1,226
Net income	\$1,111	\$469	\$271

Operating Revenues. Operating revenue components as a percentage of total operating revenues for 2015, 2014, and 2013 consisted of the following:

The rate structure in effect for the years ended September 30, 2015, 2014, and 2013 provides price signals intended to encourage LPCs and end-use customers to shift energy usage from high-cost generation periods to less expensive generation periods. Under this structure, weather can positively or negatively impact both volume and effective rates, while only volume was impacted under the former wholesale structure. This is because the wholesale structure includes two components: a demand charge and an energy charge. The demand charge is based on the customer's peak monthly usage and increases as the peak increases. The energy charge is based on the kWhs used by the customer. The rate structure also includes 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.

The changes in revenue components are summarized below:

	Variance 2015 vs. 2014	Variance 2014 vs. 2013
Fuel cost recovery	\$(371	) \$(19)
Base revenue	230	208
Off-system sales	(11) (19)
Other revenue	18	11
Total	\$(134) \$181

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2015 Compared to 2014

Operating revenues decreased \$134 million for the year ended September 30, 2015, as compared to the year ended September 30, 2014, primarily due to a \$371 million decrease in fuel cost recovery, which was partially offset by a \$230 million increase in base revenue. The \$371 million decrease in fuel cost recovery was primarily attributable to lower fuel rates. The \$230 million increase in base revenue was predominantly driven by an increase of \$206 million resulting from the non-fuel base rate increase that became effective October 1, 2014, and an increase of \$24 million from higher volume. The \$230 million increase in base revenue is split between an increase in energy revenue of \$138 million and an increase in demand revenue of \$105 million.

2014 Compared to 2013

Operating revenues increased \$181 million for the year ended September 30, 2014, compared to the year ended September 30, 2013, primarily due to a \$208 million increase in base revenue. The increase in base revenue was attributable to higher sales volume to LPCs and the non-fuel base rate increase that became effective October 1, 2013. This was partially offset by a \$19 million decrease in fuel cost recovery which resulted from the decrease in sales to industries directly served due to the reduction in demand by USEC. In addition, off-system sales decreased by \$19 million primarily due to a reduction in excess generating capacity.

See Sales of Electricity above for further discussion of the change in the volume of sales of electricity and Operating Expenses below for further discussion of the change in fuel expense.

Operating Expenses. Operating expense components as a percentage of total operating expenses for 2015, 2014, and 2013 consisted of the following:

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The following table summarizes TVA's expenses for various fuels for the years indicated:

Fuel Expense for TVA-Owned Facilities*

For the years ended September 30

(in millions)

	2015	2014	2013
Coal	\$1,564	\$1,873	\$1,890
Natural gas	575	531	504
Fuel oil	36	48	36
Nuclear fuel	273	307	317
Total fuel	\$2,448	\$2,759	\$2,747

Note

* Excludes effects of the fuel cost adjustment deferrals and amortization on fuel expense in the amounts of \$4 million, \$(29) million, and \$73 million for the years ended September 30, 2015, 2014, and 2013, respectively.

The following chart summarizes TVA's net generation and purchased power in millions of kWh by generating source for the periods indicated:

Note

Renewable resources (non-hydro) is less than 1% for all periods shown, and therefore is not represented on the chart above.

2015 Compared to 2014

Fuel expense decreased \$286 million for the year ended September 30, 2015, as compared to the prior year. This decrease was primarily driven by overall favorable fuel rates and a change in the mix of generation resources, which contributed approximately \$314 million to the decrease in fuel expense. Partially offsetting this decrease in fuel expense was an increase in fuel expense driven by more timely collections of fluctuations in fuel costs during the year ended September 30, 2015, which accounted for a \$25 million increase.

Purchased power expense decreased \$144 million for the year ended September 30, 2015, as compared to the prior year, primarily due to lower market prices for natural gas, as TVA's primary source of purchased power is natural gas-fired generation. The average Henry Hub natural gas spot price for the year ended September 30, 2015, was approximately 30 percent lower than the prior year. The lower prices contributed to a \$156 million decrease in purchased power expense. Partially offsetting this decrease in purchased power expense was a \$6 million increase in purchased power expense driven by more timely collections of fluctuations in fuel costs in the year ended September 30, 2015. Additionally offsetting the decrease in

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purchased power expense was an increase of one percent in the volume of power purchased contributing to an increase in purchased power expense of \$6 million.

Operating and maintenance expense decreased \$503 million for the year ended September 30, 2015, as compared to the prior year. This decrease was due to several factors including a \$241 million decrease in pension and post-retirement costs due mainly to regulatory accounting actions taken by the TVA Board. Beginning October 1, 2014, TVA began deferring pension costs as regulatory assets to the extent that the amount calculated under accounting principles generally accepted in the United States of America ("GAAP") as pension expense differs from the amount TVA contributes to the pension plan. The ongoing cost savings initiatives undertaken by management (see Key Initiatives and Challenges — Continuous Improvement Initiatives below) contributed approximately \$164 million to the decrease in operating and maintenance expense, with approximately \$114 million attributable to labor savings. Additionally, there was a \$60 million decrease in projects expense due primarily to the timing of nuclear and information technology projects and a \$34 million decrease in planned outage expense, resulting from approximately 50 less nuclear outage days in the year ended September 30, 2015, as compared to the prior year.

Depreciation and amortization expense increased \$188 million for the year ended September 30, 2015, as compared to the prior year, primarily due to an increase of \$177 million in the amount of accelerated depreciation expense recognized on certain coal-fired units. The increase in accelerated depreciation was driven primarily by the decision to accelerate the retirement of Widows Creek Unit 7. See Note 1 — Property, Plant, and Equipment, and Depreciation.

Tax equivalents expense decreased \$15 million for the year ended September 30, 2015, as compared to the same period of the prior year. This change primarily reflects a decrease in the accrued tax equivalent expense related to the fuel cost adjustment mechanism. The accrued tax equivalent expense is equal to five percent of fuel cost adjustment mechanism revenues and decreased for the year ended September 30, 2015, as compared to the same period of the prior year.

2014 Compared to 2013

Fuel expense decreased \$90 million for the year ended September 30, 2014, as compared to the prior year, primarily due to the timing of collections of fluctuations in fuel costs and a reduction in sales volume. For the year ended September 30, 2014, more timely collections of fluctuations in fuel costs decreased fuel expense by \$102 million as compared to the prior year, primarily due to the weather patterns in 2013. Additionally, a reduction in sales volume of two percent contributed to a \$70 million decrease in fuel expense. Offsetting these decreases was an increase of \$82 million in fuel expense primarily due to a change in the generation mix and higher natural gas prices. Higher prices for natural gas increased fuel expense by approximately \$50 million. Decreased rainfall and runoff in 2014 contributed to a decrease of 27 percent in hydroelectric generation as compared to the prior year. Hydroelectric generation is TVA's least expensive type of generation.

Purchased power expense increased \$67 million for the year ended September 30, 2014, as compared to the prior year, primarily due to an increase of 10 percent in the average price of purchased power. The increase in the average price resulted in a \$104 million increase to purchased power expense and was largely a result of higher market prices for natural gas, as TVA's primary source of purchased power is natural gas-fired generation. As an indication of general market conditions, the average Henry Hub natural gas spot price for the year ended September 30, 2014 was \$4.348 per mmBtu, which was 20 percent higher than the average price for the prior year. Offsetting the increase in purchased power expense was a \$31 million decrease due to the timing of the fuel cost recovery mechanism, primarily due to the weather patterns in 2013.

Operating and maintenance expense decreased \$87 million in 2014 as compared with 2013. This decrease was primarily driven by a \$122 million decrease in expenses related to cost savings initiatives undertaken by management

(see Key Initiatives and Challenges — Continuous Improvement Initiatives below), a \$52 million decrease in pension and post-retirement costs due to an increase in the discount rate, and a \$25 million decrease in nuclear outage expense primarily due to a reduction in major outage projects. Offsetting these decreases were an increase of \$65 million in employee-related expenses related to restructuring activities and a \$42 million increase in other post-employment benefit expense.

Depreciation and amortization expense increased \$163 million in 2014, compared to 2013, primarily due to an increase in the amount of accelerated depreciation recognized for certain coal-fired units to be idled. Incremental depreciation associated with the idling of coal-fired units was \$206 million for the year ended September 30, 2014, compared with \$49 million for the year ended September 30, 2013. See Note 1 — Property, Plant, and Equipment, and Depreciation.

Tax equivalents expense decreased \$8 million for the year ended September 30, 2014, as compared to the prior year. This change primarily reflects a decrease in gross revenue from power sales (excluding sales and deliveries to federal agencies and off-system sales with other utilities) during 2013, compared to 2012, as tax equivalent payments are calculated based on the previous year's results.

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Interest Expense. Interest expense and interest rates for 2015, 2014, and 2013 were as follows:

Interest Expense and Rates

For the years ended September 30

	2015	Percent Change	2014	Percent Change	2013	
Interest expense ⁽¹⁾						
Interest expense	\$1,347	0.2	% \$1,344	(3.6	)% \$1,394	
Allowance for funds used during construction	(214	) 22.3	% (175	) 4.2	% (168)
Net interest expense	\$1,133	(3.1	)% \$1,169	(4.6	)% \$1,226	
	2015	Percent Change	2014	Percent Change	2013	
Interest rates (average)						
Long-term outstanding power bonds ⁽²⁾	5.495	% (1.4	)% 5.575	% (2.6	)% 5.725	%
Long-term debt of VIE	4.609	% 0.2	% 4.601	% (4.6	)% 4.824	%
Membership interests of variable interest entity subject to mandatory redemption	7.000	% (0.2	)% 7.017	% 1.9	% 6.887	%
Discount notes	0.051	% —	% 0.051	% (34.6	)% 0.078	%
Blended	5.162	% 0.3	% 5.146	% (2.4	)% 5.273	%

Notes

(1) Interest expense includes amortization of debt discounts, issuance, and reacquisition costs, net.

(2) The average interest rates on long-term debt obligations are calculated using an average of long-term debt balances at the end of each month in the periods depicted and interest expense for those periods.

2015 Compared to 2014

Net interest expense decreased \$36 million for the year ended September 30, 2015, as compared to the prior year. This decrease was primarily attributable to an increase of \$39 million in allowance for funds used during construction ("AFUDC") as a result of ongoing construction activities at Watts Bar Unit 2, which was partially offset by a \$3 million increase in interest expense mainly due to a higher average balance of long-term debt.

2014 Compared to 2013

Net interest expense decreased \$57 million for the year ended September 30, 2014. This was primarily attributable to a decrease in long-term interest expense of \$58 million, related to a decrease in both the average balance and the average interest rate of TVA's outstanding debt. See Note 14.

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 to pay 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.

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 proceeds from other financings. See Note 14 — Credit Facility Agreements. Other financing arrangements include call monetization transactions, sales of assets, and sales of receivables and loans.

The TVA Act authorizes TVA to issue Bonds in an amount not to exceed \$30.0 billion outstanding at any time. At September 30, 2015, TVA had \$23.9 billion of Bonds outstanding (not including noncash items of foreign currency exchange gain of \$21 million and net discount on sale of Bonds of \$108 million). The balance of Bonds outstanding directly affects TVA's capacity to meet operational liquidity needs and to strategically use Bonds to fund certain capital investments as management and the TVA Board may deem desirable. Other options for financing not subject to the limit on Bonds, including lease financings (see Lease Financings below and Note 10), could provide supplementary funding if needed. Also, the impact of energy efficiency and demand response initiatives may reduce generation requirements and thereby reduce capital investment needs. Currently, TVA believes that it has adequate capability to fund its ongoing operational liquidity needs and make planned capital

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investments over the next decade through a combination of Bonds, additional power revenues through power rate increases, cost reductions, or other ways.

Debt Securities. TVA's Bonds are not obligations of the United States, and the United States does not guarantee the payments of principal or interest on Bonds. TVA's Bonds consist of power bonds and discount notes. Power bonds have maturities of between one and 50 years. At September 30, 2015, the average maturity of long-term power bonds was 17.8 years, and the average interest rate was 4.78 percent. 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.

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 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 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 18 — Appropriation Investment.

The rate test for the one-year period ended September 30, 2015, was calculated after the end of 2015, and TVA met the test's requirements.

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, 2015, was calculated after the end of 2015, and TVA met the test's requirements. TVA must next meet the bondholder protection test for the five-year period ending September 30, 2020.

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.

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The following table provides additional information regarding TVA's short-term borrowings.

Short-Term Borrowing Table

	At September 30 2015	For the year ended September 30 2015	At September 30 2014	For the year ended September 30 2014	At September 30 2013	For the year ended September 30 2013
Amount Outstanding (at End of Period) or Average Amount						
Outstanding (During Period)						
Discount notes	\$1,034	\$1,357	\$596	\$1,737	\$2,432	\$1,887
Weighted Average Interest Rate						
Discount notes	0.055	% 0.051	% 0.002	% 0.051	% 0.042	% 0.078
Maximum Month-End Amount						
Outstanding (During Period)						
Discount notes	N/A	\$2,590	N/A	\$2,442	N/A	\$3,261

TVA ended with a higher balance of short-term debt at September 30, 2015, than at September 30, 2014, due to timing of cash flows and debt portfolio management decisions. The average balance of short-term debt was lower in 2015 than 2014 due to timing of financing activities in both years. TVA held a lower balance of short-term debt at September 30, 2014, than at September 30, 2013, due to debt portfolio management decisions. The average balance of short-term debt was lower in 2014 than 2013 due to lower overall financing needs in 2014. 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 construction projects.

During both 2015 and 2014, TVA issued \$1.0 billion of power bonds, and TVA redeemed \$1.2 billion and \$365 million of power bonds during 2015 and 2014, respectively. Power bonds outstanding, excluding unamortized discounts and premiums and net exchange losses from foreign currency transactions, at September 30, 2015 were \$23.9 billion (including current maturities) and at September 30, 2014 were \$23.6 billion (including current maturities). For additional information about TVA debt issuance activity and debt instruments issued and outstanding at September 30, 2015, and 2014, including rates, maturities, outstanding principal amounts, and redemption features, see Note 14 — Debt Securities Activity and Debt Outstanding.

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, the 2009 Series A and B power bonds, 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." Other NYSE-listed bonds are assigned various symbols by the exchange, which are noted on the NYSE's web site. 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.

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. According to statements made by nationally recognized credit rating agencies, the credit ratings of the United States

government remain under negative pressure despite recent legislative developments, and additional fiscal measures may be needed to improve the outlook on the government's bond ratings. Additionally, TVA may be impacted by how the U.S. government addresses the situation of approaching its debt limit. In June 2013, one credit rating agency changed the outlook for the ratings of the United States from negative to stable, citing receding fiscal risks, and subsequently changed the outlook on TVA from negative to stable. In October 2013, one credit rating agency placed the ratings on the United States sovereign debt on rating watch negative, and subsequently placed TVA's rating on rating watch negative. Rating watch is typically event driven, while the negative status indicates a heightened probability of a downgrade. The outlook on TVA's ratings has subsequently been returned to stable, and is currently stable with all three agencies.

Lease Financings. TVA has entered into certain leasing transactions with special purpose entities to obtain third-party financing for its facilities. These special purpose entities are sometimes identified as variable interest entities ("VIEs") of which TVA is determined to be the primary beneficiary. TVA is required to account for these VIEs on a consolidated basis. TVA may seek to enter into similar arrangements in the future, but has no immediate plans to do so. See Note 10.

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Summary Cash Flows

A major source of TVA's liquidity is operating cash flows resulting from the generation and sales of electricity. Net change in cash and cash equivalents was \$(200) million, \$(1.1) billion, and \$734 million for the years ended September 30, 2015, 2014, and 2013, respectively. A summary of cash flow components for the years ended September 30 follows:

Cash provided by (used in):
Operating Activities

2015 Compared to 2014

Net cash flows provided by operating activities increased by \$335 million in 2015 compared to 2014. This increase was due primarily to continued cost reduction initiatives, as well as decreases in nuclear and information technology projects, fewer outages in 2015 compared to 2014, decreases in the Kingston Fossil Plant ("Kingston") ash spill costs, and timing of revenue collections. These changes were partially offset by a decrease in Kingston insurance recovery proceeds, and increases in cash used for pension contributions, increases in TVA's margin requirements due to lower natural gas prices, increases in asset retirement project expenditures, and increases in cash used due to timing of payments.

2014 Compared to 2013

Net cash flows provided by operating activities increased by \$383 million in 2014 compared to 2013. This increase was a result of the October 1, 2013 base rate increase, increases in heating and cooling degree days, cost reduction initiatives, increases in Kingston insurance recovery proceeds, and changes in working capital components driven primarily by an increase in payables due to timing of purchases. These increases were partially offset by an increase in receivables, increase in pension contributions, and increase in costs deferred as a result of actions of TVA's regulator, primarily related to the deferred nuclear generating unit at Bellefonte. See Note 9 — Deferred Nuclear Generating Units.

Investing Activities

The majority of TVA's investing cash flows are due to investments in property, plant, and equipment for new generating assets and work on existing facilities, environmental projects, and transmission upgrades necessary to maintain reliability.

2015 Compared to 2014

Net cash flows used in investing activities increased by \$829 million in 2015 compared to 2014. This increase was driven by capacity expansion spending for the natural gas-fired generation facilities at Paradise Fossil Plant ("Paradise") and Allen Fossil Plant ("Allen"), the Ackerman Combined Cycle Plant acquisition, and the nuclear seismic upgrade projects for Browns Ferry and Sequoyah.

2014 Compared to 2013

Net cash flows used in investing activities increased \$371 million in 2014 compared to 2013. The increase primarily reflects the \$333 million increase in construction expenditures and \$39 million increase in nuclear fuel expenditures. The construction expenditures increase is primarily related to the ongoing work on Watts Bar Unit 2, capacity expansion related to the natural gas-fired generation facilities at Paradise and Allen, and environmental and clean air

projects. The increase in nuclear fuel expenditures was due to TVA's purchasing nuclear fuel in advance of the five outages scheduled for 2015.

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Financing Activities

2015 Compared to 2014

The \$1.4 billion change in net cash provided by financing activities was primarily due to net issuances of debt of \$198 million in 2015 attributable to more power bonds maturing, as compared to net redemptions of debt of \$1.2 billion in 2014. The net redemptions in 2014 were primarily due to the strategic decision to use \$1.1 billion of cash on hand to meet some near-term capital funding needs. The net increase in cash provided by financing activities in 2015 was partially offset by the strategic decision to use \$200 million of cash on hand in 2015 to meet some capital funding needs.

2014 Compared to 2013

Net cash flows used in financing activities was \$1.3 billion in 2014 compared to \$522 million of net cash flows provided by financing activities in 2013. The increase in cash flows used in financing activities was primarily due to net redemptions of debt of \$1.2 billion during 2014, as compared to net issuances of debt of \$1.0 billion during 2013. This \$2.2 billion change in net debt issuances and redemptions was primarily due to less power bonds maturing in 2014 compared to 2013 and a strategic decision to use cash on hand during 2014 to meet some of its near-term capital funding needs.

Cash Requirements and Contractual Obligations

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

Capital Expenditures⁽¹⁾

As of September 30

	Actual	Estimated Capital Expenditures		
	2015	2016	2017	2018
Watts Bar Unit 2	\$654	\$73	\$—	\$—
Other capacity expansion expenditures	998	931	819	581
Environmental expenditures	248	316	165	16
Coal combustion residual	84	103	155	161
Transmission expenditures	340	389	408	366
Other capital expenditures ⁽²⁾	793	887	957	911
Total capital expenditures	\$3,117	⁽³⁾ \$2,699	\$2,504	\$2,035

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) Other capital expenditures are primarily associated with short lead time construction projects aimed at the continued safe and reliable operation of generating assets.

(3) The numbers above exclude AFUDC, capitalized during the year, related to construction expenditures, of \$214 million and include construction in progress expenditures accrued in Accounts payable and accrued liabilities of \$144 million. Additionally, the numbers above exclude \$5 million of Inventories, net and Other long-term assets related to the Combustion turbine asset acquisition.

TVA continually reviews 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, that are not expected to contribute positively to cash flows 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, 2015. See Note 10, Note 11, Note 12, Note 14, Note 18, and Note 22 for a further description of these obligations and commitments.

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Commitments and Contingencies

Payments due in the year ending September 30

	2016	2017	2018	2019	2020	Thereafter	Total
Debt ⁽¹⁾	\$1,066	\$1,555	\$1,682	\$1,032	\$30	\$18,514	\$23,879
Interest payments relating to debt	1,209	1,196	1,107	1,032	1,022	17,981	23,547
Debt of VIEs	33	35	36	38	40	1,097	1,279
Interest payments relating to debt of VIEs	58	58	56	54	52	642	920
Lease obligations							
Capital	13	13	13	12	12	156	219
Non-cancelable operating	44	42	32	25	25	38	206
Purchase obligations							
Power	217	226	229	235	241	3,124	4,272
Fuel	1,282	711	635	508	335	1,448	4,919
Other	262	198	193	189	173	1,830	2,845
Environmental Agreements	47	36	6	3	2	8	102
Membership interests of variable interest entity subject to mandatory redemption	2	2	2	2	3	26	37
Interest payments related to membership interests of variable interest entity subject to mandatory redemption	3	2	2	2	2	13	24
Flood response commitment to NRC	11	1	—	—	—	—	12
Litigation settlements	13	—	—	—	—	—	13
Unfunded loan commitments	5	—	—	—	—	—	5
Environmental cleanup costs-Kingston ash spill	6	—	—	—	—	—	6
Long-term monitoring costs -- Kingston ash spill	1	1	1	1	1	10	15
Payments on other financings	104	104	104	96	73	232	713
Payments to U.S. Treasury - Return on Power Program Appropriation	5	6	7	7	8	77	110
Investment							
Retirement Plan ⁽²⁾	209	—	—	—	—	—	209
Total	\$4,590	\$4,186	\$4,105	\$3,236	\$2,019	\$45,196	\$63,332

Note

(1) Does not include noncash items of foreign currency exchange gain of \$21 million and net discount on sale of Bonds of \$108 million.

(2) The Tennessee Valley Authority Retirement System calculates TVA's minimum required annual contribution to the pension plan prior to the beginning of each fiscal year based on pension plan rules. The amount listed for 2016 is the minimum required contribution, and the calculation has not yet been completed for any years beyond 2016. See Note 21.

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In addition to the obligations above, TVA has energy prepayment obligations in the form of revenue discounts. See Note 1 — Energy Prepayment Obligations.

Energy Prepayment Obligations

Obligations due in the year ending September 30

	2016	2017	2018	2019	2020	Thereafter	Total
Energy Prepayment Obligations	\$ 100	\$ 100	\$ 100	\$ 10	\$—	\$—	\$ 310

EnergyRight® Solutions Program. TVA purchases certain loans receivable from its LPCs in association with the EnergyRight® Solutions program. Depending on the nature of the energy-efficiency project, loans may have a maximum term of five years or ten years. The loans receivable are then transferred to a third-party bank with which TVA has agreed to repay in full any loan receivable that has been in default for 180 days or more or that TVA has determined is uncollectible. As of September 30, 2015, the total carrying amount of the loans receivable, net of discount, was approximately \$156 million. Such amounts are not reflected in the Commitments and Contingencies table above. The total carrying amount of the financing obligation was approximately \$185 million at September 30, 2015. See Note 8 and Note 12 for additional information.

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Off-Balance Sheet Arrangements

At September 30, 2015, TVA had no off-balance sheet arrangements.

Key Initiatives and Challenges

Generation Resources

Nuclear Response Capability. Since the events that occurred in 2011 at the Fukushima Daiichi Nuclear Power Plant ("Fukushima events"), the Nuclear Regulatory Commission ("NRC") has issued and adopted additional detailed guidance on the expected response capability to be developed by each nuclear plant site. TVA submitted integrated strategies to the NRC on February 28, 2013. TVA is currently implementing strategies and physical plant modifications to address the actions outlined in this guidance for all of its nuclear plants. As of September 30, 2015, TVA had spent \$236 million on modifications at all its nuclear plants, including Watts Bar Unit 2, and expects to spend an additional \$46 million to complete these modifications to address this guidance.

Extreme Flooding Preparedness. Updates to the TVA analytical hydrology model completed in 2009 indicated that under "probable maximum flood" conditions, some of TVA's dams might not have been capable of regulating the higher flood waters. A "probable maximum flood" is an extremely unlikely event; however, TVA is obligated to provide protection for its nuclear plants against such events. As a result, TVA installed a series of temporary barriers to raise the height of four TVA dams to manage the issue on an interim basis. Subsequent modifications have replaced the temporary barriers at three of the four dams, and work on the fourth dam is substantially complete.

Since 2009, TVA has performed further hydrology modeling of portions of the TVA watershed using updated modeling tools. TVA also completed a series of permanent modifications to the four dams initially addressed in 2009 as well as to several other dams identified through the more recent analytical work. The modifications addressed and rectified the potential for certain dams to be overtopped during a "probable maximum flood" event as well as the potential for certain other dams to become unstable under "probable maximum flood" conditions. These modifications were completed in the spring of 2015 with the exception of certain repairs at Fort Loudoun Dam that are expected to be completed in 2017. As of September 30, 2015, TVA had spent \$142 million on these modifications, and expects to spend an additional \$11 million to complete the modifications.

The revised hydrology models have been reviewed and approved by the NRC with regard to Watts Bar Unit 1. The NRC has indicated that the approval for Watts Bar Unit 1 will provide a basis for the subsequent application of that approval to Watts Bar Unit 2. TVA plans to seek NRC approval for similar modeling as applied to Sequoyah Units 1 and 2 and will subsequently address Browns Ferry conditions as needed.

The hydrology analyses discussed above relate to the current operation and current requirements of TVA's existing nuclear fleet as well as to Watts Bar Unit 2. In addition, the NRC has required all utilities to reexamine flood hazards at nuclear plants in light of the lessons learned from the nuclear accident at Fukushima Daiichi. In March 2015, TVA sent its flood hazard analyses to the NRC for all three nuclear sites considering the NRC's Fukushima-related requirements. Minor modifications to some of TVA's nuclear plants may result from these analyses, and further modifications to TVA's dams based on this analysis are expected. Temporary protection measures are in place in the interim while the NRC review is underway.

NRC Seismic Assessments. On May 9, 2014, the NRC notified licensees of nuclear power reactors in the central and eastern United States of the results of seismic hazard screening and prioritization evaluations performed by unit owners and reviewed by the NRC staff. Because the seismic hazards for Bellefonte Nuclear Plant ("Bellefonte"), Browns Ferry, Sequoyah, and Watts Bar had increases in seismic parameters beyond the technical information available when the plants were designed and licensed, TVA must conduct seismic risk evaluations for these plants. TVA must complete the evaluation for Watts Bar by June 30, 2017, and the evaluations for Browns Ferry and

Sequoyah by December 31, 2019. The evaluation dates for Bellefonte have not yet been determined because of Bellefonte's deferred construction status. These evaluations could result in TVA having to make modifications to one or more of its nuclear plants. Cost estimates for any required modifications cannot be developed until after the evaluations are complete, but costs for modifications could be substantial.

In addition to the reevaluations, TVA has mitigated seismic risk to beyond the original design by performing seismic upgrades for Browns Ferry and Sequoyah. Specific seismic upgrades performed at Watts Bar as part of the Unit 2 licensing efforts go beyond the seismic upgrades at Browns Ferry and Sequoyah to mitigate the risk of extensive modifications that may be dictated by the seismic hazard reevaluations.

Watts Bar Unit 2. TVA's Watts Bar Unit 2 construction project continues on track with an estimate to complete of approximately \$4.5 billion and commercial operations by June 2016, which is consistent with the expectations approved by the Board in April 2012.

On October 22, 2015, the NRC approved the operating license for Watts Bar Unit 2. The license will expire in 2055. Based on construction and testing progress to date, fuel load is currently forecasted for the first quarter of 2016. Challenges that

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could potentially affect the forecast include completing complex work and required documentation, addressing emergent work identified during testing, and successfully transitioning the site into dual unit operation. See Note 22 — Legal Proceedings — Administrative Proceedings Regarding Watts Bar Unit 2.

Bellefonte Unit 1. TVA's 2015 IRP, adopted by the TVA Board in August 2015, does not envision any immediate needs for significant baseload plants such as Bellefonte. Work on the Bellefonte Unit 1 site was slowed in 2014, and TVA has been focused on preserving Bellefonte for potential future development.

Spent Fuel. Under the Nuclear Waste Policy Act of 1982, generators of nuclear energy were historically required to pay a fee of one-tenth of a cent per kWh into the DOE nuclear waste fund. TVA's annual payments into this fund ranged from \$50 million to \$55 million in recent years. In November 2013, the U.S. Court of Appeals for the District of Columbia Circuit ordered the DOE to stop collecting nuclear waste fees until either (1) the DOE complies with the Nuclear Waste Policy Act of 1982 or (2) the U.S. Congress enacts an alternative waste management plan. In accordance with the court's order, the DOE submitted a proposal to the U.S. Congress in January 2014 to change the nuclear waste fee to zero, and as of May 16, 2014, the DOE ceased collecting this fee. TVA avoided approximately \$20 million of nuclear fuel expense in 2014, and approximately \$52 million of nuclear fuel expense in 2015. Any such savings will be passed on to TVA's customers through the fuel cost adjustment.

Coal-Fired Units. The decision to idle or retire coal-fired units from TVA's generation fleet is being influenced by several factors including the Environmental Agreements, environmental legislation, the cost of adding emission control equipment and other environmental improvements, fuel prices, conditions of its aging plants, and demand for energy. Under the Environmental Agreements, TVA committed, among other things, to retire, on a phased schedule, 18 coal-fired units. As of September 30, 2015, TVA had retired 13 coal-fired units with a summer net capability of 2,432 megawatts ("MW"). The retirements of ten of these units, with a summer net capability of 1,370 MW, were carried out to comply with the Environmental Agreements. In addition, as of September 30, 2015, TVA had removed from service, mothballed, and/or idled an additional seven coal-fired units with a summer net capability of 1,250 MW. Thus, the total number of coal-fired units that are no longer active is 20 with a summer net capability of 3,682 MW. TVA continues to assess its power generating facilities.

Under the terms of the Environmental Agreements, TVA was required to decide whether to install additional air pollution controls on Units 1 and 4 at Shawnee Fossil Plant ("Shawnee"), convert those units to burn biomass, or retire them by December 31, 2017. TVA completed an Environmental Assessment during the first quarter of 2015, and on December 30, 2014, the TVA Board approved installation of air pollution controls (i.e., selective catalytic reduction systems ("SCRs") and dry scrubbers) on Units 1 and 4 at Shawnee with an estimated cost of \$185 million. On December 31, 2014, the decision to install additional air pollution controls was communicated to the Environmental Protection Agency ("EPA") and the other participants in accordance with terms of the Environmental Agreements. These units have a combined summer net capability of 268 MW.

Upon the completion of natural gas-fired generation facilities at the Paradise site, coal-fired Units 1 and 2 at Paradise with a summer net capability of 1,230 MW will be retired, and upon the completion of a natural gas-fired generation facility at the Allen site, coal-fired Units 1-3 at Allen with a summer net capability of 741 MW will be retired. TVA plans to retire the Allen units before December 31, 2018, Colbert Fossil Plant ("Colbert") Unit 5 with a summer net capability of 472 MW no later than December 31, 2015, and Colbert Units 1-4 with a summer net capability of 712 MW before April 16, 2016. During 2015, TVA retired Widows Creek Unit 7 and 8 with a summer net capability of 938 MW on September 30, 2015, and the Board approved the retirement of Johnsonville Units 1-4 with a summer net capability of 428 MW by December 31, 2017. Additionally, TVA plans to retire Johnsonville Units 5-10 with a summer net capability of 778 MW by December 31, 2015. See Natural Gas-Fired Units below.

Coal Combustion Residual Facilities. TVA has committed to a programmatic approach to the elimination of wet storage of coal combustion residual ("CCR") within the TVA service area. The CCR program is ongoing, with approximately \$760 million spent as of September 30, 2015. The EPA published its CCR rule on April 17, 2015, and the TVA CCR program is being adjusted to incorporate the requirements of the published rule.

Under TVA's CCR Conversion Program, TVA has committed to (1) convert all operational coal plants to dry CCR storage, (2) close all wet storage facilities, and (3) meet all applicable state and federal regulations. To carry out its CCR Conversion Program, TVA is undertaking the following actions that are estimated to cost approximately \$1.3 billion to complete.

Dry generation and dewatering projects. Conversion of coal plant CCR wet processes to dry generation or dewatering is underway at Kingston, Gallatin, Cumberland, Shawnee and Paradise. These projects are scheduled to be completed by December 2022.

Landfills. Lined and permitted dry storage facilities have been constructed at Bull Run and Kingston, are under construction at Gallatin, and are in the planning or engineering phases at Cumberland, Paradise, and Shawnee.

Wet CCR impoundment closures. TVA is planning to close wet CCR impoundments in accordance with federal and state requirements when (1) coal plants are converted to dry CCR processes and dry storage landfills become operation or (2) plant operations cease. Closure project schedules and costs are driven by the selected closure technology (e.g., cap and close

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in place or clean closure). As environmental studies are performed and closure methodologies are determined, detailed project schedules and estimates will be prepared.

Groundwater monitoring. TVA's implementation of the EPA's CCR rule includes additional engineering, analysis and installation of a comprehensive groundwater monitoring program.

The overall CCR Conversion Program is scheduled to be completed by 2022 with the exception of a new landfill at Shawnee which will be required to accommodate the addition of air pollution controls at an estimated cost of approximately \$70 million and is scheduled to be completed by 2026. Once the new landfill is in service, the existing bottom ash pond and dry stack will be closed in accordance with federal and state requirements. Due to the size, scope, and selected method of closure, it is estimated that the closure of the ponds at Gallatin will be completed by 2024. Once the CCR Conversion Program is completed, TVA will continue to undertake certain CCR projects after 2022 to support long-term plant generation, including projects for landfill expansions and closing the existing sections once they reach capacity.

Natural Gas-Fired Units. During 2014, the TVA Board approved the construction of two natural gas-fired generation facilities. One facility, with an expected generation capacity of approximately 1,000 MW, will be constructed at the Allen site at a cost not to exceed \$975 million. The second facility, with an expected generation capacity of approximately 1,000 MW, will be constructed at TVA's Paradise site at a cost not to exceed \$1.1 billion. A lawsuit has been filed challenging TVA's Paradise decision. See Note 22 — Legal Proceedings — National Environmental Policy Act Challenge at Paradise Fossil Plant. An injunction or court order that delays TVA's plans at Paradise could increase the project's cost. Upon completion of each facility, existing coal-fired units at each site will be retired with the exception of Paradise Unit 3, which would continue to be operated on the Paradise site. In addition, TVA purchased a 700 MW combined-cycle gas plant near Ackerman, Mississippi during the third quarter of 2015. TVA had purchased the electricity generated by the plant since 2008. See Note 6.

Small Modular Reactors. TVA plans to submit an Early Site Permit Application ("ESPA") for review by the NRC in the second quarter of 2016. This submittal is based on the development of a Plant Parameter Envelope reflecting application for two or more small modular reactors ("SMR") units at TVA's Clinch River site in Oak Ridge, Tennessee. The design and vendor for the SMR technology has not yet been selected. TVA and DOE have entered into an interagency agreement to jointly fund licensing activities for the Clinch River site with DOE reimbursement of up to 50 percent of TVA's eligible costs through 2020.

TVA is developing the Clinch River site on a schedule that supports submittal of a combined construction and operating license ("COL") application in the second half of 2018, in conjunction with supporting NRC's review of the ESPA. This submittal is subject to sufficient progress being made by the SMR vendor(s) with their design certification(s), and a TVA decision to select a specific SMR technology and proceed with development of a COL application in 2017.

Future Capacity Challenges. Although the 2015 IRP recommended the inclusion of more traditional resources, primarily gas-fired, additional capacity will come with its own implementation challenges in the areas of siting and permitting both for the units themselves and for the transmission lines and gas pipelines associated with them. TVA has several teams working on various aspects of the siting and permitting work necessary to ensure that when these resources are needed as part of the generation portfolio, TVA will be better positioned to add them to the resource mix.

Distributed Generation. As technologies for producing energy on solar, small gas, and other types of sites are evolving, they are becoming cost competitive, and consumers have expressed greater interest in utilizing these technologies for their own needs. Previously, the limited impact of electricity from the small numbers of these distributed generation sites was absorbed within the capacity of a system the size of TVA's. However, as the amount of distributed generation grows on the TVA system, the ability of the system to reliably cope with these generation sources becomes more challenging while at the same time reducing the need for TVA's generation resources.

While TVA owns and operates its high-voltage transmission grid, the distribution system is actually a network of grids belonging to LPCs, each with its own unique characteristics and operational challenges. Renewable resources installed on the distribution grid necessitate the involvement of entities in addition to TVA, especially the LPCs. This is especially true for small-scale distributed (rooftop) solar resources. Although TVA did not include small-scale rooftop solar as a resource option in its 2015 IRP, it did include small-scale commercial solar as an option, and it analyzed significant levels of distributed generation penetration in the scenarios to help it begin to understand how the increasing use of distributed generation will affect the TVA power system. As distributed generation continues to expand across the Tennessee Valley, TVA and LPCs will continue to focus significant attention on the safety and reliability impact of these resources as they are interconnected to the grid, as well as how to price such interconnections. Due to numerous assumptions including adoption rates, technology, and location of these distributed resources, TVA cannot currently determine financial implications to its operations.

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Dam Safety Assurance Initiatives

TVA has an established dam safety program, which includes procedures based on the Federal Guidelines for Dam Safety, with the objective of reducing the risk of a dam safety event. The program is comprised of various engineering activities for all of TVA's dams including safety reassessments using modern industry criteria and the new probable maximum flood and site-specific seismic load cases.

One aspect of the guidelines is that dam structures will be periodically reassessed to assure that TVA's dams meet current design criteria. These reassessments include material sampling of the dam and foundational structures and detailed engineering analysis. TVA is currently performing reassessments on its 49 dam projects. Twenty-eight reassessments have been completed through 2015, and ten additional assessments will be completed by the end of 2016. The remaining eleven assessments are expected to be initiated in 2016 and are scheduled to be completed by the end of 2017. To date, TVA has spent \$42 million on the dam safety assurance program, and TVA expects to spend an additional \$23 million in 2016.

Pickwick Landing Dam. As part of the dam safety reassessments, initial data from a seismic stability assessment of Pickwick Landing Dam in western Tennessee showed the factor of safety during a large earthquake for the south embankment dam (an earthen section south of the concrete structure of the dam) was unacceptable based on current TVA and industry standards. Conditions at the dam have not changed; however, in the remote chance that a large seismic event occurs along the New Madrid Fault in Tennessee, it may cause damage to the earthen embankment dam. In order to ensure public safety and to evaluate Pickwick Landing Dam further, TVA has decided to implement risk reduction measures which include a dam failure warning system. A project is underway to further analyze the embankment, perform environmental reviews, and develop design remediation plans. Cost estimates for any required remediation cannot be developed until after the analyses are complete.

Boone Dam. In October 2014, a sink hole was discovered near the base of the earthen embankment at Boone Dam, and a small amount of water and sediment was found seeping from the river bank below the dam. The reservoir was drawn down below winter pool level in early 2015 and will remain at a lowered level as a precautionary measure to ensure the safety of the public while also allowing a more detailed investigation of the seepage.

After extensive investigation, TVA has identified underground pathways contributing to the seepage and has prepared a plan to repair the dam. The plan involves building a structure known as a composite seepage barrier in the dam's earthen embankment. The project is pending environmental review through TVA's National Environmental Policy Act ("NEPA") process. To reduce downstream risk during construction, the reservoir will remain at its lowered level. TVA will continue working with the community to help mitigate local impacts of the extended drawdown. Construction on the composite seepage barrier is expected to begin by early 2016 following completion of the Environmental Assessment. Until then, TVA will continue test grouting and other activities at the site in support of the project design. Benchmarking durations and costs of similar activities at other facilities to complete composite walls have ranged from \$200 million to \$300 million with a range of five to seven years to complete. The cost and duration for the remediation of Boone Dam will be determined upon finalization of design and construction plans which are scheduled to be completed in February 2016.

Major Capital Projects

The table below summarizes major projects of at least \$1.0 billion, as approved by the TVA Board, which support TVA's strategic imperatives related to having a diversified, cleaner portfolio, providing electricity at the lowest feasible rate, responding to changing regulatory requirements including environmental regulations, and meeting operational challenges related to generation reliability. See Liquidity and Capital Resources and Key Initiatives and Challenges.

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Summary Table of Major Projects

Projects	Estimated Project Cost (in billions)	Ending Estimated In-Service Date
Capacity Expansion Projects		
Watts Bar Unit 2	\$4.5	June 2016
Paradise combined cycle plant	1.1	June 2017
Allen combined cycle plant	1.0	June 2018
Environmental		
Gallatin clean air controls	1.1	December 2017

Renewable Energy

The TVA Board approved the establishment of a power purchase agreement for electricity from a planned 80 MW solar farm in Lauderdale County, Alabama at its meeting on February 12, 2015. Commercial operation of the new solar installation is expected in November 2016, subject to successfully meeting conditions that include environmental acceptability and reliable integration into TVA's transmission system.

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Continuous Improvement Initiatives

During 2014 and 2015, TVA undertook cost-reduction initiatives with the goal of reducing operating and maintenance costs by \$500 million by the end of 2015 as compared to its 2013 budget. The objectives of the initiatives are to keep rates low, keep reliability high, and continue to fulfill TVA's broader mission of environmental stewardship and economic development. At the end of 2015, TVA had exceeded its \$500 million target on operating and maintenance cost savings by over \$100 million.

TVA plans to continue to evaluate its operations after having achieved its 2015 cost reduction goal. These evaluations may result in additional cost-saving initiatives in future years and could include additional workforce reductions, unit retirements, and site closures. See Note 3.

Regulatory Compliance

Environmental Mitigation. Of the \$290 million that TVA is required to spend on environmental mitigation projects under the Environmental Agreements, TVA has already spent approximately \$188 million in implementing energy efficiency, electric vehicle, and renewable energy projects. These expenditures on environmental mitigation projects are in addition to the decisions TVA made under the Environmental Agreements to control, convert, or retire additional coal-fired units. These decisions include installation of air pollution controls (i.e., SCRs and dry scrubbers) on the four coal-fired units at the Gallatin Fossil Plant and on Units 1 and 4 at Shawnee.

Transmission Issues. TVA anticipates expenditures to increase as a result of both new and evolving compliance regulations. The North American Electric Reliability Corporation ("NERC") approved revisions to the Transmission Planning ("TPL") Reliability Standards in 2013. TVA has spent \$4 million on existing transmission facilities and anticipates spending an additional \$57 million between 2016 and 2018 to ensure compliance with the 2013 version of the TPL standards. Total costs of compliance with the standard, including those beyond 2018, are estimated to be \$652 million.

Ratemaking

TVA's Board approved changes to its wholesale and large customer base rate structures and associated pricing products at its August 21, 2015 meeting. TVA worked closely with its customers on the development of TVA's long-term pricing direction with the objective of maintaining competitive and affordable rates. The pricing strategy process considered cost of service, rate structures, pricing products, and TVA's competitive position across rate classes. Rate actions taken at that Board meeting included small changes to revenue allocation, changes to the environmental adjustment to conform to the new base rate structures, changes to the manner in which fuel costs are recovered, and a rate adjustment. This rate adjustment took effect on October 1, 2015, and is expected to provide an increase in fiscal year 2016 revenues of approximately \$200 million. See Item 1, Business— Rates — Rate Methodology.

Safeguarding Assets

Physical Security — Non-Nuclear Asset Protection. TVA utilizes a variety of security technologies, security awareness activities, and security personnel to prevent sabotage, vandalism, and thefts. Any of these activities could negatively impact the ability of TVA to generate, transport, and deliver power to its customers. TVA's Police and Emergency Management are active participants with numerous professional and peer physical security organizations in both the electric industry and law enforcement communities.

Recent physical attacks on transmission facilities at other utilities across the country have heightened awareness. TVA is working with the Department of Homeland Security ("DHS"), FERC, NERC, SERC Reliability Corporation, North American Transmission Forum, and other utilities to implement industry approved recommendations and standards.

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.

Cyber Security. TVA operates in a highly regulated environment. TVA's cyber security program aligns or complies with the Federal Information System Management Act, the NERC Critical Infrastructure Protection requirements, and the NRC requirements for cyber security, as well as industry best practices. As part of the U.S. government, TVA coordinates with and works closely with the DHS and the United States Computer Emergency Readiness Team ("US-CERT"). US-CERT functions as a liaison between the DHS and the public and private sectors to coordinate responses to security threats from the internet. TVA is also participating in studies funded through the DOE to identify, design, and test new solutions for protecting critical infrastructure from cyber attacks.

Although TVA has continued to experience increased cyber activity, none of the attacks have impacted TVA's ability to operate as planned or compromised data which could involve TVA in legal proceedings. See Item 1A, Risk Factors —

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Operational Risks — TVA's facilities and information infrastructure may not operate as planned due to physical and cyber threats to TVA's security.

Critical Accounting Policies and Estimates

TVA's consolidated financial statements are prepared in accordance with GAAP, which require management to make estimates, judgments, and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. 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 also would materially impact TVA's financial condition, results of operations, or cash flows. TVA's critical accounting policies are also discussed in Note 1 of the Notes to Consolidated Financial Statements in this Annual Report.

TVA believes that its most critical accounting policies and estimates relate to the following:

- Regulatory Accounting
- Asset Retirement Obligations
- Pension and Other Post-Retirement Benefits

Management has discussed the development, selection, and disclosure of critical accounting policies and estimates with the Audit, Risk, and Regulation Committee of the TVA Board. While TVA's estimates and assumptions are based on its knowledge of current events and actions it may undertake in the future, actual results may ultimately differ from these estimates and assumptions.

Description	Judgments and Uncertainties	Effect if Actual Results Differ From Assumptions
Regulatory Accounting	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.	<p>TVA has not made any material changes in the accounting policy used to record regulatory assets and liabilities during the past three fiscal years.</p> <p>TVA does not believe there is a reasonable likelihood that there will be a material change in the estimates or assumptions used to record regulatory assets and liabilities.</p> <p>If future recovery of regulatory assets ceases to be probable, or any of the other factors described herein cease to be applicable, TVA would be required to write off these costs and recognize them in earnings.</p>
The TVA Board is authorized by the TVA Act to set rates for power sold to 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 of 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. At September 30, 2015, TVA had \$10.9 billion of Regulatory assets and \$166 million of Regulatory liabilities.

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Description	Judgments and Uncertainties	Effect if Actual Results Differ From Assumptions
<p>Asset Retirement Obligations</p> <p>TVA recognizes legal obligations associated with the future retirement of certain tangible long-lived assets. These obligations relate to TVA's generating facilities, including coal-fired, nuclear, hydroelectric, and natural gas and/or oil-fired. They also pertain to coal ash impoundments, transmission facilities, and other property-related assets. Activities involved with the retirement of these assets could include decontamination and demolition of structures, removal and disposal of wastes, and site restoration. 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 9 — Nuclear Decommissioning Costs and Non-Nuclear Decommissioning Costs and Note 13.</p>		

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Description	Judgments and Uncertainties	Effect if Actual Results Differ From Assumptions
<p>Nuclear Decommissioning</p> <p>Utilities that own and operate nuclear plants are required to recognize a liability for legal obligations related to nuclear decommissioning. An equivalent amount is recorded as an increase in the value of the capitalized asset and allocated to expense over the useful life of the asset. The initial obligation is measured at its estimated fair value using various judgments and assumptions. Fair value is developed using an expected present value technique that is based on assumptions of market participants and that considers estimated retirement costs in current period dollars that are inflated to the anticipated decommissioning date and then discounted back to the date the ARO was incurred. Decommissioning cost studies are updated for each of TVA's nuclear units at least every five years. Changes in assumptions and estimates included within the calculations of the fair value of AROs could result in significantly different results than those identified and recorded in the financial statements.</p> <p>TVA periodically reviews its estimated ARO costs. Any change to the ARO asset is recognized and prospectively recognized over the remaining life of the long-lived asset.</p> <p>At September 30, 2015, the present value of the estimated future nuclear decommissioning cost recognized in the financial statements was \$2.2 billion and was included in AROs,</p>	<p>The following key assumptions can have a significant effect on estimates related to the nuclear decommissioning costs reported in TVA's nuclear ARO liability:</p> <p>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.) Second, an assumption must be made on the timing of the decommissioning. Prior to June 30, 2014, TVA based its decommissioning cost estimates on cost elements prescribed by the NRC to dismantle and decommission the radioactive portion of each site with the assumption that decommissioning would occur within the first seven years after plant shut down, which approximates the DECON method of decommissioning. The DECON method requires that radioactive contamination is removed from a site and safely disposed of or decontaminated to a level that permits the site to be released for unrestricted use shortly after it ceases operation. On June 30, 2014, TVA recorded a change in estimate based on the implementation of site-specific decommissioning cost studies. Additionally, TVA determined it appropriate to reflect an increase in the probability that certain of its nuclear operating licenses will be extended and that there is a probability that it will be able to delay ultimate decommissioning activities under a</p>	<p>A 10 percent change in TVA's ARO for nuclear decommissioning cost at September 30, 2015, would have affected the liability by approximately \$220 million.</p>

and the unamortized regulatory asset related to ARO costs of \$1.0 billion was included in Regulatory assets.

SAFSTOR method of decommissioning. The SAFSTOR method allows nuclear facilities to be placed and maintained in a condition that allows the facilities to be safely stored and subsequently decontaminated to levels that permit release for unrestricted use. As such, TVA ascribed probabilities to both the SAFSTOR and DECON methods of decommissioning in order to estimate its decommissioning obligation. Decommissioning cost studies will be updated for each of TVA's nuclear units at least every five years. While the impact of these assumptions cannot be determined with precision, either assuming license extension or extending the timing of decommissioning can significantly change the present value of these obligations. On September 28, 2015, the operating licenses for Sequoyah Units 1 and 2 were granted 20-year renewals, resulting in an increase to TVA's ARO of approximately \$36 million.

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 1.63 percent and 5.52 percent to calculate the present value of the weighted estimated cash flows required to satisfy TVA's decommissioning obligation.

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Description	Judgments and Uncertainties	Effect if Actual Results Differ From Assumptions
<p>Non-Nuclear Decommissioning</p> <p>The present value of the estimated future non-nuclear decommissioning cost was \$1.7 billion at September 30, 2015. 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.</p>	<p>The following key assumptions can have a significant effect on estimates related to the non-nuclear decommissioning costs:</p> <p>Timing – In projecting non-nuclear decommissioning costs, the date of the asset’s retirement must be estimated. In instances where the retirement of a specific asset will precede the retirement of the generating plant, the anticipated retirement date of the specific asset is used. Additionally, TVA expects to incur certain ongoing costs subsequent to the initial asset retirement.</p> <p>Method - TVA develops its cost estimates based on likelihood of decommissioning method where options exist in fulfilling legal obligations, (e.g., cap and close in place or clean closure for coal ash impoundments). Decommissioning method is determined based on several factors including available technologies, environmental studies, cost factors, resource availability, and timing requirements. As these factors are considered and decommissioning methods are determined, the detailed project schedules and estimates are adjusted.</p> <p>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 estimates generally assume current technology and regulations.</p>	<p>TVA has not made any material changes in the accounting policy used to record the non-nuclear ARO liability during the past three fiscal years.</p> <p>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.</p> <p>A 10 percent change in TVA's ARO for non-nuclear decommissioning costs at September 30, 2015, would have affected the liability by approximately \$170 million.</p>

In April 2015, the EPA published its final rule governing coal combustion residuals, which regulates landfill and impoundment location, design, and operations; dictates certain pond-closure conditions; and establishes groundwater monitoring and closure and post-closure standards. As a result of the ruling, TVA made revisions to the assumptions and estimates used to calculate its coal ash ARO's. Increases to estimated project costs, including expansion of work scope and higher costs of materials, resulted in an increase of \$469 million of the ARO liability during the year ended September 30, 2015. TVA continues to evaluate the impact of the rule on its operations, including cost and timing estimates of related projects. As a result, further adjustments to its ARO liabilities may be required as estimates are refined.

Discount Rate – TVA uses its incremental borrowing 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, 2015, the discount rates used in the calculations range from 0.21 percent to 11.00 percent.

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Description	Judgments and Uncertainties	Effect if Actual Results Differ From Assumptions
Pension and Other Post-Retirement Benefits		
<p>TVA sponsors a defined benefit pension plan that is qualified under Internal Revenue Service rules and covers substantially all of its full-time annual employees hired prior to July 1, 2014. The Tennessee Valley Authority Retirement System ("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.</p>	<p>TVA's pension and other post-retirement benefits contain uncertainties because they require management to make certain assumptions related to TVA's cost to provide these benefits. Numerous factors are considered including the provisions of the plans, changing employee demographics, various actuarial calculations, assumptions, and accounting mechanisms. The most significant of these factors are discussed below.</p> <p>Expected Return on Plan Assets. The qualified defined benefit pension plan is the only plan that is funded with qualified plan assets. In determining its expected long-term rate of return on pension plan assets, TVA uses a process that incorporates actual historical asset class returns and an assessment of expected future performance and takes into consideration external actuarial advice and asset class factors. Asset allocations are periodically updated using the pension plan asset/liability studies, and are part of the determination of the estimates of long-term rates of return. The current asset allocation policy approved by the TVARS Board diversifies plan assets across multiple asset classes so as to minimize the risk of large losses. The asset allocation policy is designed to be dynamic in nature and responsive to changes in the funded status of TVARS. Changes in the expected return rates are based on annual</p>	<p>Accounting Mechanisms. In accordance with current accounting guidance, 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.</p> <p>Expected Return on Plan Assets. 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 pension benefit obligation or the market-related value of plan assets in accordance with current accounting methodologies.</p> <p>The actuarial gain (loss) related to the difference between expected and actual return on pension plan assets for 2015 and 2014 was \$(762) million and \$213 million, respectively. Compared</p>

studies performed by third party professional investment consultants. Considering there were no changes to the asset allocation policy and after reviewing the 2015 annual study and the current outlook on capital markets, TVA management decided to maintain the expected return on assets at 7.00 percent, which will be used to measure 2016 net periodic benefit cost. TVA used an expected rate of return of 7.00 percent to measure benefit costs in 2015 and used 7.25 percent to measure benefit costs in 2014 and 2013.

with the assumed returns of 7.00 and 7.25 percent, the 2015 and 2014 actuarial gain (loss) is due to the actual rates of return on the fair value of assets of (4.48) percent and 9.29 percent, respectively. The differences between expected and actual returns that result in an actuarial gain or loss are recognized as a decrease or increase, respectively, in the related regulatory asset and the projected pension benefit obligation. A higher expected rate of return assumption decreases the net periodic pension benefit cost, whereas a lower expected rate of return assumption increases the net periodic pension benefit cost. A 0.25 percent decrease in the expected rate of return on plan assets would increase the 2015 net periodic pension cost by \$16 million.

Changes in the expected rate of return on pension plan assets do not affect TVA's post-retirement benefit plans 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 Supplemental Executive Retirement Plan ("SERP") as any assets set aside for that plan are not considered plan assets under GAAP.

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Description	Judgments and Uncertainties	Effect if Actual Results Differ From Assumptions
	<p>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. The selected bond portfolio is derived from a universe of high quality corporate bonds of Aa quality or higher. After the bond portfolio is selected, a single interest rate is determined that equates the present value of the plan's projected benefit payments discounted at this rate with the market value of the bonds selected. The discount rates used to determine the pension and other post-retirement benefit obligations were 4.50 percent and 4.65 percent, respectively, at September 30, 2015. At September 30, 2014, the discount rates used to determine the pension and other post-retirement benefit obligations were 4.45 percent and 4.50 percent, respectively. The discount rate assumptions used to determine the obligations at year-end are used to determine the net periodic benefit cost for the following year. TVA will use discount rates of 4.50 percent and 4.65 percent to estimate its 2016 pension and other post-retirement net periodic benefit costs, respectively. The discount rate is somewhat volatile because it is determined based upon the prevailing rate as of the measurement date.</p> <p>Mortality. Mortality assumptions are based upon actuarial projections in</p>	<p>Discount Rate. A higher discount rate decreases the plan obligations and correspondingly decreases the net periodic pension and net post-retirement benefit costs for those plans where actuarial losses are being amortized. On the other hand, a lower discount rate increases net periodic pension and net periodic post-retirement benefit costs.</p> <p>Assuming the other components of the calculation are held constant and excluding any impact for unamortized gains or losses, a 0.25 percent decrease would increase the 2015 net periodic pension cost by \$18 million and the 2015 projected pension benefit obligation by \$404 million.</p> <p>As the mortality assumptions improve, (e.g., assume participants are living longer) the benefit obligation increases.</p> <p>The change to the mortality assumption increased the pension and</p>

combination with actuarial studies of the actual mortality experience of TVA's pension and post-retirement plan participants. Based upon a review of the 2013 actuarial experience study, TVA adopted the Society of Actuaries ("SOA") RP-2000 base table projected with a modified improvement scale for purposes of measuring its pension and other post-retirement benefits as of September 30, 2013. In 2014, the SOA released a new base table (RP-2014) and improvement scale (MP-2014). However, based upon analysis of the 2014 actuarial experience study, the results indicated that mortality experience remained in line with the assumptions adopted in 2013. Therefore, TVA retained its 2013 mortality assumptions for purposes of measuring its pension and other post-retirement benefit obligations at September 30, 2014. The actuarial experience study was further updated in 2015. Based on analysis of the 2015 study, the 2014 SOA study of mortality tables, and recent additional studies of mortality improvement that was updated by the SOA in October 2015 (MP-2015), TVA adopted an adjusted version of the SOA's new RP-2014 mortality tables and a modified MP-2014 improvement scale for purposes of measuring its pension and other post-retirement benefit obligations at September 30, 2015.

other post-retirement benefit obligations by \$518 million and \$21 million, respectively, as of September 30, 2015.

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Description	Judgments and Uncertainties	Effect if Actual Results Differ From Assumptions
	<p>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 rates used to determine post-retirement benefit obligations for 2015 and 2014 were 7.00 percent and 7.50 percent, respectively. The 2015 health care cost trend rate of 7.00 percent used to determine post-retirement benefit obligations is assumed to gradually decrease each successive year until it reaches a 5.00 percent annual increase in health care costs in the years beginning October 1, 2019, and beyond. The assumed health care cost trend rates used to determine the net periodic post-retirement cost were 7.50 percent for 2015, 8.00 percent for 2014, and 8.5 percent for 2013. TVA plans to use 7.00 percent in the determination of 2016 net periodic post-retirement cost. The current trend rate assumption reflects the review of TVA medical claims, slight expected increases in premiums for 2016, and more participants moving to the high deductible plan.</p>	<p>Periodic post-retirement benefit cost could fluctuate if there are changes in the health care cost trend rate. Assuming that the other components of the calculation are held constant and excluding any impact for unamortized actuarial gains or losses, a one percent increase in the assumed health care cost trend rate would impact the post-retirement service and interest cost components by \$6 million and the accumulated post-retirement benefit obligation by \$88 million. Likewise, a one percent decrease in the health care cost trend rate would impact the post-retirement service and interest cost components by \$(6) million and the accumulated post-retirement benefit obligation by \$(94) million.</p>
	<p>Cost of Living Adjustment. Cost-of-living adjustments ("COLAs") are an increase in the benefits for eligible retirees to help maintain the purchasing power of benefits as consumer prices increase. Eligible retirees receive a COLA on the base pension portion of the monthly pension benefit in January following any year in which the 12-month average Consumer Price Index for All Urban Consumers ("CPI-U") exceeded by as much as one percent the 12-month average of the CPI-U for the preceding year. The minimum COLA</p>	<p>A higher COLA assumption increases the pension benefit obligation and correspondingly increases the net periodic pension benefit cost. A lower COLA assumption decreases the pension benefit obligation and the net periodic pension benefit cost. Assuming the other components of the calculation are held constant and excluding any impact for unamortized actuarial gains or losses, a 0.25 percent increase in the COLA assumption would increase the 2015 pension benefit obligation by \$268 million and increase the net periodic pension benefit cost by \$28 million.</p>

is one percent and the maximum is five percent. Prior to 2013, TVA had maintained a 2.5 percent COLA, but determined that a more accurate estimate would be to lower the COLA for the short-term with a gradual increase that would trend back up to the long-term expectations based upon the economic forecast and the Federal Reserve policy. As of 2015, the economy is recovering more slowly than anticipated, and the Federal Reserve has reaffirmed its intention to keep the target range for the federal funds rate at 0 to 0.25 percent. As a result, TVA determined it should decrease the COLA assumption in 2016 to zero percent with an increase to 2.20 percent in 2017, followed by gradual increases in successive years until it reaches the ultimate rate of 2.40 percent in 2021.

Contributions. The minimum contribution for 2015 was \$215 million; however, TVA made a \$275 million contribution to TVARS. The 2014 minimum contribution was \$198 million; however, TVA contributed \$250 million to TVARS. In 2015, TVA made contributions of \$7 million to the SERP and \$44 million to the other post-retirement benefit plans. In 2014, TVA made contributions of \$6 million to the SERP and \$47 million to the other post-retirement benefit plans. TVA expects to contribute \$275 million to TVARS, \$6 million to the SERP, and \$39 million to the other post-retirement benefit plans in 2016.

Fair Value Measurements

Investments

Investments classified as trading consist of amounts held in the Nuclear Decommissioning Trust ("NDT"), Asset Retirement Trust ("ART"), SERP, and Long-Term Deferred Compensation Plan ("LTDCP"). 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. and international equities, real estate investment trusts, fixed income investments, high-yield fixed

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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 Investments measured at net asset value. See Note 17 — Valuation Techniques for a discussion of valuation levels of the investments. See Note 21 — 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 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.

In addition to the tolerance checks performed by the investment portfolio trustee, TVA performs its own analytical testing on the change in fair value measurements each period to ensure the valuations are reasonable based on changes in general market assumptions. TVA also performs pricing tests on various portfolios comprised of securities classified in Levels 1 and 2 on a quarterly basis to confirm accuracy of the values received from the investment portfolio trustee.

Derivatives

TVA has entered into various derivative transactions, including commodity option contracts, forward contracts, swaps, swaptions, futures, and options on futures, to manage various market risks. Other than certain derivative instruments included in investment funds, it is TVA's policy to enter into these derivative transactions solely for hedging purposes and not for speculative purposes.

Currency and Interest Rate Derivatives. TVA has three currency swaps and four "fixed for floating" interest rate swaps. The currency swaps protect against changes in cash flows caused by volatility in exchange rates related to outstanding Bonds denominated in British pounds sterling. The currency 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. The application of credit valuation adjustments ("CVAs") did not materially affect the fair value of these assets and liabilities at September 30, 2015.

Commodity Contracts. TVA enters into commodity derivatives for coal and natural gas that require physical delivery of the contracted quantity of the commodity. The fair values of these derivative contracts are determined using internal models based on income approaches. TVA develops an overall coal forecast based on widely-used short-term and mid-range market data from an external pricing specialist in addition to long-term internal estimates. To value the volume option component of applicable coal contracts, TVA uses a Black-Scholes pricing model which includes inputs from the overall coal price forecast, contract-specific terms, and other market inputs. Based on the use of certain significant unobservable inputs, 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 did not materially affect the fair value of these assets and liabilities at September 30, 2015.

Commodity Derivatives under the Financial Trading Program. TVA established a Financial Trading Program ("FTP") under which it could purchase and sell futures, swaps, options, and similar derivative instruments to hedge its exposure to changes in prices of natural gas, fuel oil, coal, and other commodities. Although certain natural gas futures and swaps under the FTP remain at September 30, 2015, future purchases under the program have been suspended. Management is currently evaluating the future use of financial instruments for price hedging. TVA is prohibited from taking speculative positions in its FTP.

Financial instruments under the FTP are valued based on market approaches which utilize Chicago Mercantile Exchange ("CME") quoted prices and other observable inputs. Futures and options contracts settled on the CME are classified as Level 1 valuations. Swap contracts are valued using a pricing model based on CME inputs and are subject to nonperformance risk outside of the exit price. These contracts are classified as Level 2 valuations. The application of CVAs did not materially affect the fair value of these assets and liabilities at September 30, 2015.

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. TVA plans to continue to manage fuel price volatility through various methods, but is currently evaluating the future use of financial instruments.

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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, Inc. ("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, 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 derivative instruments that 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 value the investment.

Nonperformance risk for most of TVA's derivative instruments is an adjustment to the initial asset/liability fair value. TVA 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 2014) 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, 2015, the aggregate counterparty credit risk adjustments applied to both TVA's derivative asset and liability positions were decreases of \$1 million.

Collateral. TVA's interest rate swaps, currency swaps, and commodity derivatives under the FTP 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 16 — Other Derivative Instruments — Collateral for a discussion of collateral related to TVA's derivative liabilities.

New Accounting Standards and Interpretations

See Note 2 for a discussion of recent accounting standards and pronouncements which were issued by the FASB, became effective for TVA, or were adopted by TVA during the presented periods.

Legislative and Regulatory Matters

TVA continues to monitor how regulatory agencies are interpreting and implementing the provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act, which was enacted in July 2010. As a result of this act and its implementing regulations, TVA has become subject to recordkeeping, reporting, and reconciliation requirements related to its derivative transactions. In addition, depending on how regulatory agencies interpret and implement the provisions of this act, TVA's hedging costs may increase, and TVA may have to post additional collateral and margin in connection with its derivative transactions.

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

TVA does not engage, and does not control any entity that is engaged, in any activity listed under Section 13(r) of the Exchange Act, which requires certain issuers to disclose certain activities relating to Iran involving the issuer and its affiliates. Based on information supplied by each such person, none of TVA's directors and executive officers are involved in any such activities. While TVA is an agency and instrumentality of the United States of America, TVA does not believe its disclosure obligations, if any, under Section 13(r), extend to the activities of any other departments, divisions, or agencies of the United States.

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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 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 its activities, as a result of catastrophic events or otherwise. TVA had accrued approximately \$115 million with respect to Legal Proceedings at September 30, 2015. 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 22 — Legal Proceedings, which discussion is incorporated 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, including 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. TVA plans to continue to manage fuel price volatility through various methods, but is currently evaluating the future use of financial instruments. See Note 16.

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); Executive Vice President and Chief Operating Officer; Executive Vice President and Chief External Relations Officer; Executive Vice President and Chief Financial Officer; Executive Vice President and General Counsel; Senior Vice President of Human Resources and Communications; Senior Vice President of Shared Services; and Senior Vice President and Chief Risk Officer. The ERC has at times designated a representative from Office of the Inspector General to act as an advisory member.

The ERC has established a subordinate Risk Management Steering Committee ("RMSC") and a Portfolio Risk Oversight Committee ("PROC"), both of which are comprised of business unit leaders with specific expertise. The RMSC is responsible for (1) driving accountability on the mitigation of key enterprise risks, (2) promoting cross business risk collaboration and management, and (3) actively identifying emerging risks. PROC is responsible for the evaluation of TVA's portfolio risk management processes and infrastructure for power, fuel, and other commodities critical to TVA's power supply.

TVA has a designated Enterprise Risk Management ("ERM") organization within its Financial Services organization responsible for (1) establishing enterprise risk management policies and guidelines, (2) developing an enterprise risk

profile aligned with the strategic objectives, (3) performing annual risk assessments across all TVA business units, (4) monitoring and reporting on identified enterprise risks and emerging risks, (5) facilitating enterprise risk discussions with the risk subject matter experts across the organization and at the RMSC, ERC, and TVA Board levels, and (6) developing and improving TVA's risk awareness culture. 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 electricity, coal, and natural gas. The magnitude of exposure to these risks is influenced by many factors including contract terms and market liquidity. TVA's commodity price risk is substantially mitigated by its cost-based rates, including its total fuel cost adjustment, and long-term fixed price commodity contracts.

TVA previously used its FTP to help manage cost volatility for its wholesale and directly served customers. Although management has suspended future use of financial instruments under the program, certain natural gas hedges remained in place at September 30, 2015, for the mitigation of risks associated with the price of natural gas. A hypothetical 10 percent decline in the market price of natural gas on September 30, 2015, and 2014, would have resulted in decreases of approximately \$14 million and \$41 million, respectively, in the fair value of TVA's natural gas trading derivative instruments at these dates.

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Additionally, TVA manages risk with commodity contract derivatives for both coal and natural gas that require physical delivery of the contracted quantity. A hypothetical 10 percent decline in the market price of coal on September 30, 2015, and 2014, would have resulted in decreases of approximately \$61 million and \$109 million, respectively, in the fair value of TVA's coal derivative instruments at these dates. A hypothetical 10 percent decline in the market price of natural gas on September 30, 2015, and 2014, would have resulted in decreases of approximately \$40 million and \$26 million, respectively, in the fair value of TVA's natural gas derivative instruments at these dates.

Investment Price Risk

TVA's investment price risk relates primarily to investments in TVA's NDT, ART, pension fund, SERP, and Long-Term Deferred Compensation Plan ("LTDCP").

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, private partnerships and limited liability companies, 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, domestic debt, U.S. Treasury Inflation-Protected Securities ("TIPS"), commodities, and private real estate, private equity, and absolute return strategies. At September 30, 2015, and 2014, an immediate 10 percent decrease in the price of the investments in the trust would have reduced the value of the trust by \$148 million.

Asset Retirement Trust. The ART is presently invested to achieve a return in line with equity and debt market performance. The assets of the trust are invested in securities directly and indirectly through commingled funds. At September 30, 2015, and 2014, an immediate 10 percent decrease in the price of the investments in the trust would have reduced the value of the trust by \$43 million and \$40 million, respectively.

Qualified Pension Plan. TVARS has a long-term investment plan which contains a dynamic de-risking strategy that allocates investments to assets that better match the liability, such as long duration fixed income securities, over time as funding status targets are met. The current investment asset allocation policy approved by the TVARS Board has targets of 47 percent equity including U.S., non-U.S., private, and low volatility global public equity investments, 28 percent fixed income securities, 15 percent public real assets including TIPS, commodities, and Master Limited Partnerships ("MLPs"), and 10 percent private real assets. The qualified pension plan assets are invested across global public equity, private equity, cash, core fixed income, long-term core fixed income, investment grade credit, high yield fixed income, emerging markets fixed income, global TIPS, commodities, MLPs, and private real assets. The TVARS asset allocation policy includes permissible deviations from these target allocations. The TVARS Board can take action, as appropriate, to rebalance the system's assets consistent with the asset allocation policy. At September 30, 2015, and 2014, an immediate 10 percent decrease in the value of the net assets of the fund would have reduced the value of the fund by approximately \$680 million and \$751 million, respectively.

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 presently invested to achieve a return in line with overall equity market performance. At September 30, 2015, and 2014, an immediate 10 percent decrease in the value of the SERP investments would have reduced the value by \$5 million.

Long-Term Deferred Compensation Plan. The LTDCP is designed to provide long-term incentives to executives to encourage them to stay with TVA and to provide competitive levels of total compensation to such executives. The plan assists in the recruitment of top executive talent for TVA. As in other corporations, deferred compensation can be an integral part of a total compensation package. Assets include long-term deferred compensation and any other deferred balances. The default return on investment of the accounts is interest calculated based on the composite rate of all marketable U.S. Treasury issues. Executives may alternatively choose to have their balances adjusted based on the return of certain mutual funds. At September 30, 2015, and 2014, an immediate 10 percent decrease in the value of the deferred compensation accounts would have reduced the value by \$4 million and \$5 million, respectively.

Interest Rate Risk

TVA's interest rate risk is related primarily to its short-term investments, short-term debt, long-term debt, and interest rate derivatives.

Investments. At September 30, 2015, TVA had \$300 million of cash and cash equivalents, and the average balance of cash and cash equivalents for 2015 was \$600 million. The average interest rate that TVA received on its short-term investments during 2015 was less than one percent. If the rates of interest that TVA received on its short-term investments during 2015 were zero percent, TVA would have received less than \$1 million less in interest from its short-term investments during 2015. At

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September 30, 2014, TVA had \$500 million of cash and cash equivalents, and the average balance of cash and cash equivalents for 2014 was \$755 million. The average interest rate that TVA received on its short-term investments during 2014 was less than one percent. If the rates that TVA received on its short-term investments during 2014 were zero percent, TVA would have received less than \$1 million less in interest on short-term investments during 2014. 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 plan, ART, NDT, and SERP. See Risk Management Activities — Investment Price Risk above.

Short-Term Debt. At September 30, 2015, TVA's short-term borrowings were \$1.0 billion, and the current maturities of long-term debt were \$65 million. Based on TVA's interest rate exposure at September 30, 2015, an immediate one percentage point increase in interest rates would have resulted in an increase of \$11 million in TVA's short-term interest expense. At September 30, 2014, TVA's short-term borrowings were \$596 million, and the current maturities of long-term debt were \$1.1 billion. Based on TVA's interest rate exposure at September 30, 2014, an immediate one percentage point increase in interest rates would have resulted in an increase of \$17 million in TVA's short-term interest expense.

Long-Term Debt. At September 30, 2015, and 2014, the interest rates on all of TVA's outstanding long-term debt were fixed (or subject only to downward adjustment under certain conditions). 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, 2015, and 2014, the average life of TVA's debt portfolio was 17.8 years and 16.6 years, respectively. A schedule of TVA's debt maturities is contained in Note 14 — Debt Outstanding.

Interest Rate Derivatives. Changes in interest rates also affect the mark-to-market valuation of TVA's interest rate derivatives. TVA had four interest rate swaps outstanding at September 30, 2015 and September 30, 2014. Net unrealized gains and losses on these instruments are reflected on TVA's consolidated 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, 2015, an immediate one-half percentage point decrease in interest rates would have increased the interest rate swap liabilities by \$266 million. Based on TVA's interest rate exposure at September 30, 2014, an immediate one-half percentage point decrease in interest rates would have increased the interest rate swap liabilities by \$237 million.

Currency Exchange Rate Risk

At September 30, 2015, and 2014, 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 currency swap agreements. Accordingly, at September 30, 2015, and 2014, 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 as these instruments are completely hedged.

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 LPCs, 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.

TVA had concentrations of accounts receivable from three customers that represented 27 percent of total accounts receivable at September 30, 2015 and 2014, respectively.

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The table below summarizes TVA's customer credit risk from trade accounts receivable at September 30, 2015 and 2014:

Customer Credit Risk

At September 30

	2015	2014
Trade accounts receivable ⁽¹⁾		
Investment grade		
Local power companies	\$770	\$798
Exchange power arrangements	2	1
Industries and federal agencies directly served	41	49
Internally rated - investment grade		
Local power companies	677	704
Exchange power arrangements	—	1
Industries and federal agencies directly served	5	9
Non-investment grade		
Industries and federal agencies directly served	7	4
Internally rated - non-investment grade		
Exchange power arrangements	3	3
Industries and federal agencies directly served	4	7
Total trade accounts receivable	1,509	1,576
Other accounts receivable		
Miscellaneous accounts	92	101
Provision for uncollectible accounts	(1	) (1
Total other accounts receivable	91	100
Accounts receivable, net	\$1,600	\$1,676

Note

(1) Includes unbilled power receivables of \$17 million and \$19 million at September 30, 2015 and September 30, 2014, 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 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. TVA has determined that the supplier has the equivalent of a non-investment grade credit rating. 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.

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Credit of TVA

A downgrade in TVA's credit rating could have material adverse effects on TVA's cash flows, results of operations, 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.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Quantitative and qualitative disclosures about market risk are reported in Item 7, Management's Discussion and Analysis of Financial Condition and 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
CONSOLIDATED STATEMENTS OF OPERATIONS

For the years ended September 30

(in millions)

	2015	2014	2013
Operating revenues			
Revenue from sales of electricity	\$10,847	\$10,999	\$10,829
Other revenue	156	138	127
Total operating revenues	11,003	11,137	10,956
Operating expenses			
Fuel	2,444	2,730	2,820
Purchased power	950	1,094	1,027
Operating and maintenance	2,838	3,341	3,428
Depreciation and amortization	2,031	1,843	1,680
Tax equivalents	525	540	548
Total operating expenses	8,788	9,548	9,503
Operating income	2,215	1,589	1,453
Other income (expense), net	29	49	44
Interest expense			
Interest expense	1,347	1,344	1,394
Allowance for funds used during construction	(214	) (175	) (168
Net interest expense	1,133	1,169	1,226
Net income (loss)	\$1,111	\$469	\$271

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

TENNESSEE VALLEY AUTHORITY
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

For the years ended September 30

(in millions)

	2015	2014	2013
Net income (loss)	\$1,111	\$469	\$271
Other comprehensive income (loss)			
Net unrealized gain (loss) on cash flow hedges	(72	) 4	78
Reclassification to earnings from cash flow hedges	65	(2	) (1
Total other comprehensive income (loss)	\$(7	) \$2	\$77
Total comprehensive income (loss)	\$1,104	\$471	\$348

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

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CONSOLIDATED BALANCE SHEETS

At September 30

(in millions)

ASSETS

	2015	2014
Current assets		
Cash and cash equivalents	\$ 300	\$ 500
Restricted cash and investments	15	19
Accounts receivable, net	1,600	1,676
Inventories, net	1,031	1,056
Regulatory assets	506	481
Other current assets	54	56
Total current assets	3,506	3,788
Property, plant, and equipment		
Completed plant	50,069	47,564
Less accumulated depreciation	(26,318	) (24,589
Net completed plant	23,751	22,975
Construction in progress	7,147	5,951
Nuclear fuel	1,415	1,322
Capital leases	94	102
Total property, plant, and equipment, net	32,407	30,350
Investment funds	2,011	1,981
Regulatory and other long-term assets		
Regulatory assets	10,418	8,994
Other long-term assets	483	483
Total regulatory and other long-term assets	10,901	9,477
Total assets	\$48,825	\$45,596

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

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CONSOLIDATED BALANCE SHEETS

At September 30

(in millions)

LIABILITIES AND PROPRIETARY CAPITAL

	2015	2014
Current liabilities		
Accounts payable and accrued liabilities	\$2,127	\$2,050
Accrued interest	366	380
Current portion of leaseback obligations	79	75
Current portion of energy prepayment obligations	100	100
Regulatory liabilities	164	184
Short-term debt, net	1,034	596
Current maturities of power bonds	32	1,032
Current maturities of long-term debt of variable interest entities	33	32
Total current liabilities	3,935	4,449
Other liabilities		
Post-retirement and post-employment benefit obligations	7,107	5,839
Asset retirement obligations	3,682	3,089
Other long-term liabilities	2,219	1,962
Leaseback obligations	537	616
Energy prepayment obligations	210	310
Regulatory liabilities	2	—
Total other liabilities	13,757	11,816
Long-term debt, net		
Long-term power bonds, net	22,684	21,948
Long-term debt of variable interest entities	1,246	1,279
Total long-term debt, net	23,930	23,227
Total liabilities	41,622	39,492
Commitments and contingencies (Note 22)		
Proprietary capital		
Power program appropriation investment	258	258
Power program retained earnings	6,357	5,240
Total power program proprietary capital	6,615	5,498
Nonpower programs appropriation investment, net	590	601
Accumulated other comprehensive income (loss)	(2	) 5
Total proprietary capital	7,203	6,104
Total liabilities and proprietary capital	\$48,825	\$45,596

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

Table of ContentsTENNESSEE VALLEY AUTHORITY
CONSOLIDATED STATEMENTS OF CASH FLOWSFor the years ended September 30
(in millions)

	2015	2014	2013
Cash flows from operating activities			
Net income (loss)	\$1,111	\$469	\$271
Adjustments to reconcile net income (loss) to net cash provided by operating activities			
Depreciation and amortization (including amortization of debt issuance costs and premiums/discounts)	2,077	1,888	1,723
Amortization of nuclear fuel cost	277	279	268
Non-cash retirement benefit expense	332	572	622
Prepayment credits applied to revenue	(100)	) (100)	) (102)
Fuel cost adjustment deferral	(6)	) (38)	) 97
Fuel cost tax equivalents	(18)	) 6	2
Changes in current assets and liabilities			
Accounts receivable, net	93	(79)	) 114
Inventories and other current assets, net	(12)	) 34	27
Accounts payable and accrued liabilities	(121)	) 147	(296)
Accrued interest	(13)	) 2	1
Regulatory assets costs	(23)	) (56)	) (21)
Pension contributions	(282)	) (256)	) (6)
Insurance recoveries	63	175	47
Other, net	(63)	) (63)	) (150)
Net cash provided by operating activities	3,315	2,980	2,597
Cash flows from investing activities			
Construction expenditures	(2,850)	) (2,384)	) (2,051)
Combustion turbine asset acquisition	(342)) —	—
Nuclear fuel expenditures	(350)	) (326)	) (287)
Purchases of investments, net	(52)	) (48)	) (48)
Loans and other receivables			
Advances	(17)	) (6)	) (6)
Repayments	8	6	9
Other, net	18	2	(2)
Net cash used in investing activities	(3,585)	) (2,756)	) (2,385)
Cash flows from financing activities			
Long-term debt			
Issues of power bonds	973	989	2,122
Issues of variable interest entities	—	—	360
Redemptions and repurchases of power bonds	(1,180)	) (365)	) (2,358)
Payments on debt of variable interest entities	(32)	) (30)	) (13)
Short-term debt issues (redemptions), net	437	(1,837)	) 924
Payments on leases and leasebacks	(80)	) (73)	) (446)
Financing costs, net	(7)	) (4)	) (20)
Payments to U.S. Treasury	(5)	) (14)	) (27)
Other, net	(36)	) 8	(20)
Net cash (used in) provided by financing activities	70	(1,326)) 522
Net change in cash and cash equivalents	(200)) (1,102)) 734

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Cash and cash equivalents at beginning of year	500	1,602	868
Cash and cash equivalents at end of year	\$ 300	\$ 500	\$ 1,602

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

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TENNESSEE VALLEY AUTHORITY
CONSOLIDATED 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)from Net Gains (Losses) on Cash Flow Hedges	Total	
Balance at September 30, 2012	\$288	\$4,492	\$620	\$(74	) \$5,326
Net income (loss)	—	282	(11	) —	271
Total other comprehensive income (loss)	—	—	—	77	77	
Return on power program appropriation investment	—	(7) —	—	(7)
Return of power program appropriation investment	(20) —	—	—	(20)
Balance at September 30, 2013	\$268	\$4,767	\$609	\$3	\$5,647	
Net income (loss)	—	477	(8	) —	469
Total other comprehensive income (loss)	—	—	—	2	2	
Return on power program appropriation investment	—	(4) —	—	(4)
Return of power program appropriation investment	(10) —	—	—	(10)
Balance at September 30, 2014	\$258	\$5,240	\$601	\$5	\$6,104	
Net income (loss)	—	1,122	(11	) —	1,111
Total other comprehensive income (loss)	—	—	—	(7) (7)
Return on power program appropriation investment	—	(5) —	—	(5)
Balance at September 30, 2015	\$258	\$6,357	\$590	\$(2	) \$7,203

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

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Dollars in millions except where noted)

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1. Summary of Significant Accounting Policies

General

The Tennessee Valley Authority ("TVA") is a corporate agency and instrumentality of the United States that was created in 1933 by legislation enacted by the United States ("U.S.") Congress in response to a request by President Franklin D. Roosevelt. 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 and public lands to provide recreational opportunities, adequate water supply, improved water quality, cultural and natural resource protection, and economic development.

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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, or other evidences of indebtedness ("Bonds"). Although TVA does not currently receive congressional appropriations, it is required to make annual payments to the United States Department of the Treasury ("U.S. Treasury") 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 nonpower or stewardship 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

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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 ("the TVA Board") as authorized by the Tennessee Valley Authority Act of 1933, as amended, 16 U.S.C. §§ 831-831ee (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 other federal regulatory body. TVA fulfilled its requirement to repay \$1.0 billion of the Power Program Appropriation Investment in 2014.

Fiscal Year

TVA's fiscal year ends September 30. Years (2015, 2014, etc.) refer to TVA's fiscal years unless they are preceded 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. Based on current projections, TVA believes 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. All regulatory asset write offs would be required to be recognized in earnings in the period in which future recovery ceases to be probable.