Tennessee Valley Authority
Form 10-Q
May 03, 2016
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(MARK ONE)
x QUARTERLY REPORT PURSUANT TO SECTION 13, 15(d), OR 37 OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended March 31, 2016
OR
o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission file number 000-52313

TENNESSEE VALLEY AUTHORITY
(Exact name of registrant as specified in its charter)

A corporate agency of the United States created by an act of Congress	62-0474417
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
400 W. Summit Hill Drive Knoxville, Tennessee	37902
(Address of principal executive offices)	(Zip Code)

(865) 632-2101
(Registrant's telephone number, including area code)

None
(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13, 15(d), or 37 of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes x No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o	Accelerated filer o
Non-accelerated filer x	Smaller reporting company o
(Do not check if a smaller reporting company)	

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

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GLOSSARY OF COMMON ACRONYMS

Following are definitions of terms or acronyms that may be used in this Quarterly Report on Form 10-Q for the quarter ended March 31, 2016 (the "Quarterly 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
BREDL	Blue Ridge Environmental Defense League
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CCP	Coal combustion products
CCR	Coal combustion residual
CME	Chicago Mercantile Exchange
CO_2	Carbon dioxide
COL	Combined construction and operating license
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
DOE	Department of Energy
EPA	Environmental Protection Agency
ESPA	Early Site Permit Application
FASB	Financial Accounting Standards Board
FCM	Futures Commission Merchant
FERC	Federal Energy Regulatory Commission
FTP	Financial Trading Program
GAAP	Accounting principles generally accepted in the United States of America
GAO	Government Accountability Office
GHG	Greenhouse gas
GWh	Gigawatt hour(s)
IRP	Integrated Resource Plan
JSCCG	John Sevier Combined Cycle Generation LLC
kWh	Kilowatt hour(s)
LIBOR	London Interbank Offered Rate
LPC	Local power company customer of TVA
LTDCP	Long-Term Deferred Compensation Plan
MATS	Mercury and Air Toxics Standards
MD&A	Management's Discussion and Analysis of Financial Condition and Results of Operations
MISO	Midcontinent Independent System Operator, Inc.
mmBtu	Million British thermal unit(s)
MtM	Mark-to-market
MW	Megawatt
NAAQS	National Ambient Air Quality Standards

NAV	Net asset value

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NDT	Nuclear Decommissioning Trust
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NO_x	Nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
OCI	Other comprehensive income (loss)
PM	Particulate matter
QER	Quadrennial Energy Review
QTE	Qualified technological equipment and software
REIT	Real Estate Investment Trust
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
SSSL	Seven States Southaven, LLC
TCWN	Tennessee Clean Water Network
TDEC	Tennessee Department of Environment & Conservation
TOU	Time-of-use
TVARS	Tennessee Valley Authority Retirement System
TN Board	Tennessee Board of Water Quality, Oil and Gas
U.S. Treasury	United States Department of the Treasury
VIE	Variable interest entity
XBRL	eXtensible Business Reporting Language

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FORWARD-LOOKING INFORMATION

This Quarterly 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,” “beli “intend,” “project,” “plan,” “predict,” “assume,” “forecast,” “estimate,” “objective,” “possible,” “probably,” “likely,” “potentia 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 events such as 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, increased utilization of distributed generation, and improvements in alternative generation and energy storage technologies;
- Significant delays, cost increases, or cost overruns associated with the construction and maintenance of generation or transmission assets;
- Changes in the timing or amount of pension and health care costs and related funding;
- 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, economic conditions, 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;

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- Changes in the market price of commodities such as coal, uranium, natural gas, fuel oil, crude oil, construction materials, reagents, electricity, and emission allowances;
- Changes in the market price of equity securities, debt securities, and other investments;
- Changes in interest rates, currency exchange rates, and inflation rates;
- 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 in TVA’s Annual Report on Form 10-K for the fiscal year ended September 30, 2015 (the “Annual Report”), and
Part I, Item 2, Management’s Discussion and Analysis of Financial Condition and Results of Operations in this Quarterly Report for a discussion of factors that could cause actual results to differ materially from those in a forward-looking statement. New factors emerge from time to time, and it is not possible for TVA to predict all such factors or to assess the extent to which any factor or combination of factors may impact TVA’s business or cause results to differ materially from those contained in any forward-looking statement. TVA undertakes no obligation to update any forward-looking statement to reflect developments that occur after the statement is made.

GENERAL INFORMATION

Fiscal Year

References to years (2016, 2015, etc.) in this Quarterly Report are to TVA’s fiscal years ending September 30. Years that are preceded by “CY” are references to calendar years.

Notes

References to “Notes” are to the Notes to Consolidated Financial Statements contained in Part I, Item 1, Financial Statements in this Quarterly Report.

Available Information

TVA's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K for the preceding five years, as well as all amendments to those reports, are available on TVA's web site, free of charge, as soon as reasonably practicable after such reports are electronically filed with or furnished to the Securities and Exchange Commission ("SEC"). TVA's web site is www.tva.gov. Information contained on TVA’s web site shall not be deemed to be incorporated into, or to be a part of, this Quarterly Report. All TVA SEC reports are available to the public without charge from the web site maintained by the SEC at www.sec.gov.

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PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

TENNESSEE VALLEY AUTHORITY
CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)
(in millions)

	Three Months Ended March 31		Six Months Ended March 31	
	2016	2015	2016	2015
Operating revenues				
Revenue from sales of electricity	$2,529	$2,825	$4,775	$5,200
Other revenue	42	38	76	74
Total operating revenues	2,571	2,863	4,851	5,274
Operating expenses				
Fuel	484	586	964	1,136
Purchased power	237	259	484	492
Operating and maintenance	669	657	1,409	1,345
Depreciation and amortization	465	454	926	906
Tax equivalents	127	131	251	255
Total operating expenses	1,982	2,087	4,034	4,134
Operating income	589	776	817	1,140
Other income (expense), net	8	8	20	17
Interest expense				
Interest expense	337	341	672	683
Allowance for funds used during construction	(58)	(53)	(116)	(103)
Net interest expense	279	288	556	580
Net income (loss)	$318	$496	$281	$577

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

TENNESSEE VALLEY AUTHORITY
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (Unaudited)
(in millions)

	Three Months Ended March 31		Six Months Ended March 31	
	2016	2015	2016	2015
Net income (loss)	$318	$496	$281	$577
Other comprehensive income (loss)				
Net unrealized gain (loss) on cash flow hedges	(27)	(59)	(54)	(74)
Reclassification to earnings from cash flow hedges	22	46	46	84
Total other comprehensive income (loss)	$(5)	$(13)	$(8)	$10
Total comprehensive income (loss)	$313	$483	$273	$587

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

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TENNESSEE VALLEY AUTHORITY
CONSOLIDATED BALANCE SHEETS
(in millions)
ASSETS

	March 31, 2016	September 30, 2015
Current assets	(Unaudited)	
Cash and cash equivalents	$ 301	$ 300
Restricted cash and investments	—	15
Accounts receivable, net	1,233	1,600
Inventories, net	1,081	1,031
Regulatory assets	550	506
Other current assets	82	54
Total current assets	3,247	3,506
Property, plant, and equipment		
Completed plant	50,779	50,069
Less accumulated depreciation	(26,947)	(26,318)
Net completed plant	23,832	23,751
Construction in progress	7,625	7,147
Nuclear fuel	1,385	1,415
Capital leases	100	94
Total property, plant, and equipment, net	32,942	32,407
Investment funds	2,083	2,011
Regulatory and other long-term assets		
Regulatory assets	10,432	10,418
Other long-term assets	412	403
Total regulatory and other long-term assets	10,844	10,821
Total assets	$ 49,116	$ 48,745

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

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TENNESSEE VALLEY AUTHORITY
CONSOLIDATED BALANCE SHEETS
(in millions)
LIABILITIES AND PROPRIETARY CAPITAL

	March 31, 2016	September 30, 2015
Current liabilities	(Unaudited)	
Accounts payable and accrued liabilities	$ 1,909	$ 2,127
Accrued interest	380	366
Current portion of leaseback obligations	82	79
Current portion of energy prepayment obligations	100	100
Regulatory liabilities	153	164
Short-term debt, net	1,407	1,034
Current maturities of power bonds	554	32
Current maturities of long-term debt of variable interest entities	34	33
Total current liabilities	4,619	3,935
Other liabilities		
Post-retirement and post-employment benefit obligations	7,053	7,107
Asset retirement obligations	3,621	3,682
Other long-term liabilities	2,447	2,219
Leaseback obligations	477	537
Energy prepayment obligations	160	210
Regulatory liabilities	1	2
Total other liabilities	13,759	13,757
Long-term debt, net		
Long-term power bonds, net	22,049	22,617
Long-term debt of variable interest entities, net	1,216	1,233
Total long-term debt, net	23,265	23,850
Total liabilities	41,643	41,542
Commitments and contingencies		
Proprietary capital		
Power program appropriation investment	258	258
Power program retained earnings	6,640	6,357
Total power program proprietary capital	6,898	6,615
Nonpower programs appropriation investment, net	585	590
Accumulated other comprehensive income (loss)	(10)	(2)
Total proprietary capital	7,473	7,203
Total liabilities and proprietary capital	$ 49,116	$ 48,745

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

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TENNESSEE VALLEY AUTHORITY
CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)
For the six months ended March 31
(in millions)

	2016	2015
Cash flows from operating activities		
Net income (loss)	$281	$577
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)	949	929
Amortization of nuclear fuel cost	126	140
Non-cash retirement benefit expense	163	166
Prepayment credits applied to revenue	(50)	(50)
Fuel cost adjustment deferral	(16)	(61)
Fuel cost tax equivalents	(15)	(13)
Changes in current assets and liabilities		
Accounts receivable, net	385	243
Inventories and other, net	(62)	(139)
Accounts payable and accrued liabilities	(203)	(249)
Accrued interest	14	16
Regulatory assets costs	(17)	(17)
Pension contributions	(143)	(144)
Insurance recoveries	7	50
Other, net	(89)	(36)
Net cash provided by operating activities	1,330	1,412
Cash flows from investing activities		
Construction expenditures	(1,477)	(1,407)
Nuclear fuel expenditures	(138)	(216)
Purchases of investments	—	(1)
Loans and other receivables		
Advances	(4)	(11)
Repayments	3	5
Other, net	3	(14)
Net cash used in investing activities	(1,613)	(1,644)
Cash flows from financing activities		
Long-term debt		
Redemptions and repurchases of power bonds	(6)	(46)
Redemptions of variable interest entities	(16)	(15)
Short-term debt issues (redemptions), net	372	343
Payments on leases and leasebacks	(59)	(56)
Payments to U.S. Treasury	(3)	(4)
Other, net	(4)	12
Net cash provided by (used in) financing activities	284	234
Net change in cash and cash equivalents	1	2
Cash and cash equivalents at beginning of period	300	500
Cash and cash equivalents at end of period	$301	$502
Supplemental disclosures		
Significant non-cash transactions		
Accrued capital and nuclear fuel expenditures	$410	$251

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 (Unaudited)
For the three months ended March 31, 2016 and 2015
(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 December 31, 2014 (unaudited)	$ 258	$ 5,323	$ 598	$ 28	$ 6,207
Net income (loss)	—	499	(3)	—	496
Total other comprehensive income (loss)	—	—	—	(13)	(13)
Return on power program appropriation investment	—	(3)	—	—	(3)
Balance at March 31, 2015 (unaudited)	$ 258	$ 5,819	$ 595	$ 15	$ 6,687
Balance at December 31, 2015 (unaudited)	$ 258	$ 6,321	$ 587	$ (5)	$ 7,161
Net income (loss)	—	320	(2)	—	318
Total other comprehensive income (loss)	—	—	—	(5)	(5)
Return on power program appropriation investment	—	(1)	—	—	(1)
Balance at March 31, 2016 (unaudited)	$ 258	$ 6,640	$ 585	$ (10)	$ 7,473

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

TENNESSEE VALLEY AUTHORITY
CONSOLIDATED STATEMENTS OF CHANGES IN PROPRIETARY CAPITAL (Unaudited)
For the six months ended March 31, 2016 and 2015
(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, 2014	$ 258	$ 5,240	$ 601	$ 5	$ 6,104
Net income (loss)	—	583	(6)	—	577
Total other comprehensive income (loss)	—	—	—	10	10
Return on power program appropriation investment	—	(4)	—	—	(4)
Balance at March 31, 2015 (unaudited)	$ 258	$ 5,819	$ 595	$ 15	$ 6,687
Balance at September 30, 2015	$ 258	$ 6,357	$ 590	$ (2)	$ 7,203
Net income (loss)	—	286	(5)	—	281
Total other comprehensive income (loss)	—	—	—	(8)	(8)

Return on power program appropriation investment	—	(3)	—	—	(3)
Balance at March 31, 2016 (unaudited)	$ 258	$ 6,640	$ 585	$ (10)	$ 7,473

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

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

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1. Nature of Operations and 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 nine million people.

TVA also manages the Tennessee River, its tributaries, and certain shorelines to provide, among other things, year-round navigation, flood damage reduction, and affordable and reliable electricity. Consistent with these primary purposes, TVA also manages the river system to provide recreational opportunities, adequate water supply, improved water quality, natural resource protection, and economic development.

The power program has historically been separate and distinct from the stewardship programs. It is required to be self-supporting from power revenues and proceeds from power financings, such as proceeds from the issuance of bonds, notes, 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 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;

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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 (2016, 2015, 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 future recovery. This determination reflects the current regulatory and political environment and is subject to change in the future. If future recovery of regulatory assets ceases to be probable, or any of the other factors described above cease to be applicable, TVA would no longer be considered to be a regulated entity and would be required to write off these costs. Most regulatory asset write offs would be required to be recognized in earnings in the period in which future recovery ceases to be probable.

Basis of Presentation

TVA prepares its consolidated interim financial statements in conformity with GAAP for consolidated interim financial information. Accordingly, TVA's consolidated interim financial statements do not include all of the information and notes required by GAAP for annual financial statements. As such, they should be read in conjunction with the audited financial statements for the year ended September 30, 2015, and the notes thereto, which are contained in TVA's Annual Report on Form 10-K for the year ended September 30, 2015 (the “Annual Report”). In the opinion of management, all adjustments (consisting of items of a normal recurring nature) considered necessary for fair presentation are included in the interim financial statements.

The accompanying consolidated interim financial statements include the accounts of TVA and three variable interest entities ("VIEs"), of which TVA is the primary beneficiary. See Note 7. Intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

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

Reclassifications

In the Consolidated Balance Sheet at September 30, 2015, TVA reclassified $80 million of debt issuance costs previously presented in Other long-term assets and presented $67 million as a reduction to Long-term power bonds, net and $13 million as a reduction to Long-term debt, net of variable interest entities. See Note 2 – Debt Issuance Costs for additional information.

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Allowance for Uncollectible Accounts

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

The allowance for uncollectible accounts was $1 million at both March 31, 2016 and September 30, 2015, for accounts receivable. Additionally, loans receivable of $156 million and $129 million at March 31, 2016 and September 30, 2015, respectively, are included in Accounts receivable, net and Other long-term assets, for the current and long-term portions, respectively, and reported net of allowances for uncollectible accounts of $8 million at both March 31, 2016 and September 30, 2015.

Depreciation

Depreciation expense was $369 million and $383 million for the three months ended March 31, 2016, and 2015, respectively, and $733 million and $763 million for the six months ended March 31, 2016, and 2015, respectively. In September 2015, the Nuclear Regulatory Commission ("NRC") approved renewed licenses for Sequoyah Nuclear Plant ("Sequoyah") Units 1 and 2, which allow both units to operate for an additional 20 years, and TVA adjusted prospectively the Sequoyah depreciation rate. These license extensions contributed to $21 million and $43 million of the decrease in depreciation expense for the three and six months ended March 31, 2016, respectively, as compared to the three and six months ended March 31, 2015.

Blended Low-Enriched Uranium Program

Under the blended low-enriched uranium ("BLEU") program, TVA, the U.S. Department of Energy ("DOE"), and certain nuclear fuel contractors have entered into agreements providing for the DOE's surplus of enriched uranium to be blended with other uranium down to a level that allows the blended uranium to be fabricated into fuel that can be used in nuclear power plants. Under the terms of an interagency agreement between TVA and the DOE, in exchange for supplying highly enriched uranium materials to the appropriate third-party fuel processors for processing into usable BLEU fuel for TVA, the DOE participates to a degree in the savings generated by TVA’s use of this blended nuclear fuel. Over the life of the program, TVA projects that the DOE’s share of savings generated by TVA’s use of this blended nuclear fuel could result in payments to the DOE of as much as $165 million. TVA accrues an obligation with each BLEU reload batch related to the portion of the ultimate future payments estimated to be attributable to the BLEU fuel currently in use. At March 31, 2016, TVA had paid out approximately $131 million for this program, and the obligation recorded was $25 million.

2. Impact of New Accounting Standards and Interpretations

The following accounting standard was adopted by TVA on October 1, 2015.

Debt Issuance Costs. In April 2015, the Financial Accounting Standards Board ("FASB") issued guidance that changes the presentation of debt issuance costs in financial statements. This standard requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct reduction of that debt liability, consistent with debt discounts, including retrospectively adjusting all prior periods presented. TVA early adopted the standard on October 1, 2015. In the consolidated balance sheets, TVA reclassified $80 million of debt issuance costs previously presented in Other long-term assets on the September 30, 2015 Consolidated Balance Sheets and presented these amounts as a reduction to Long-term power bonds, net and Long-term debt, net of variable interest entities. The

guidance does not change the recognition and measurement of debt issuance costs.

The following accounting standards have been issued, but as of March 31, 2016, were not effective and had not been adopted by TVA.

Revenue Recognition. In May 2014, the FASB issued a new revenue recognition standard that applies to revenue from contracts with customers. The standard requires that an entity recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In August 2015, the FASB issued a one-year deferral of the effective date. The standard becomes effective for TVA on October 1, 2018, and allows for either a full retrospective or a modified retrospective application. Early adoption of the standard is permitted for TVA on October 1, 2017. TVA is currently evaluating the potential impact of these changes on its consolidated financial statements and related disclosures and the application method to be used.

Consolidation. In February 2015, the FASB issued guidance that amends the consolidation analysis for VIEs as well as voting interest entities. The standard reduces the number of consolidation models through the elimination of the indefinite deferral for certain entities that was previously allowed and places more emphasis on risk of loss when determining a controlling financial interest. The standard becomes effective for TVA on October 1, 2016, and allows for either a full retrospective or a

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modified retrospective application. TVA has evaluated the impact of adopting this guidance and expects no material impact on TVA's financial condition, results of operations, or cash flows.

Inventory Valuation. In July 2015, the FASB issued guidance that changes the model used for the subsequent measurement of inventory from the previous lower of cost or market model, to the lower of cost or net realizable value. The guidance applies only to inventory valued using methods other than last-in, first out or the retail inventory method (for example, first-in, first-out or average cost). This amendment is intended to simplify the subsequent measurement of inventory. The standard becomes effective for TVA on October 1, 2017, including interim periods within the fiscal year that begins on that date, and is required to be applied prospectively. Early adoption is permitted. TVA is currently evaluating the potential impact of these changes on its consolidated financial statements.

Lease Accounting. In February 2016, the FASB issued a new lease standard that changes the provisions of recognition in both the lessee and lessor accounting models. The standard requires entities that lease assets – referred to as “lessees” – to recognize on the balance sheet the assets and liabilities for the rights and obligations created by leases with terms of more than 12 months. The recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee primarily will depend on its classification as a finance (similar to current capital leases) or operating lease. However, unlike current lease accounting rules – which require only capital leases to be recognized on the balance sheet – the new standard will require both types of leases to be recognized on the balance sheet. Operating leases will result in straight-line expense, while finance leases will result in recognition of interest on the lease liability separately from amortization expense. The accounting for the owner of the assets leased by the lessee – also known as lessor accounting – will remain largely unchanged from current lease accounting rules. The standard becomes effective for TVA on October 1, 2019, including interim periods within that fiscal year, and is required to be applied using a modified retrospective transition. Early adoption is permitted. TVA is currently evaluating the potential impact of these changes on its consolidated financial statements and related disclosures.

3. Accounts Receivable, Net

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

Accounts Receivable, Net

	At March 31, 2016	At September 30, 2015
Power receivables	$1,150	$ 1,509
Other receivables	84	92
Allowance for uncollectible accounts	(1)	(1)
Accounts receivable, net	$1,233	$ 1,600

4. Inventories, Net

The table below summarizes the types and amounts of TVA’s inventories:

Inventories, Net

	At March 31, 2016	At September 30, 2015
Materials and supplies inventory	$680	$ 651
Fuel inventory	442	414

Emission allowance inventory, net	15	13
Allowance for inventory obsolescence	(56)	(47)
Inventories, net	$1,081	$ 1,031

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5. Other Long-Term Assets

The table below summarizes the types and amounts of TVA's other long-term assets:

Other Long-Term Assets

	At March 31, 2016	At September 30, 2015
EnergyRight® receivables	$ 120	$ 124
Loans and other long-term receivables, net	153	126
Prepaid capacity payments	48	52
Currency swap asset, net	—	25
Commodity contract derivative assets	1	1
Other	90	75
Other long-term assets	$ 412	$ 403

In association with the EnergyRight® Solutions program, local power company customers of TVA ("LPCs") offer financing to end-use customers for the purchase of energy-efficient equipment. Depending on the nature of the energy-efficiency project, loans may have a maximum term of five years or ten years. TVA purchases the resulting loans receivable from its LPCs. 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. Given this continuing involvement, TVA accounts for the transfer of the loans receivable as secured borrowings. The current and long-term portions of the loans receivable are reported in Accounts receivable, net and Other long-term assets, respectively, on TVA's consolidated balance sheets. As of March 31, 2016 and September 30, 2015, the carrying amount of the loans receivable, net of discount, reported in Accounts receivable, net was approximately $31 million and $32 million, respectively. See Note 8 for information regarding the associated financing obligation.

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6. Regulatory Assets and Liabilities

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 deferrals of gains that will be credited to customers in future periods. Components of regulatory assets and regulatory liabilities are summarized in the table below:

Regulatory Assets and Liabilities

	At March 31, 2016	At September 30, 2015
Current regulatory assets		
Deferred nuclear generating units	$237	$ 237
Unrealized losses on commodity derivatives	190	162
Environmental agreements	48	47
Environmental cleanup costs - Kingston ash spill	43	43
Fuel cost adjustment receivable	30	15
Other current regulatory assets	2	2
Total current regulatory assets	550	506
Non-current regulatory assets		
Deferred pension costs and other post-retirement benefits costs	5,549	5,565
Unrealized losses on interest rate derivatives	1,409	1,236
Nuclear decommissioning costs	982	1,003
Deferred nuclear generating units	953	1,042
Non-nuclear decommissioning costs	818	828
Environmental cleanup costs - Kingston ash spill	320	348
Unrealized losses on commodity derivatives	103	63
Environmental agreements	32	55
Other non-current regulatory assets	266	278
Total non-current regulatory assets	10,432	10,418
Total regulatory assets	$10,982	$ 10,924
Current regulatory liabilities		
Fuel cost adjustment tax equivalents	$150	$ 164
Unrealized gains on commodity derivatives	3	—
Total current regulatory liabilities	153	164
Non-current regulatory liabilities		
Unrealized gains on commodity derivatives	1	2
Total non-current regulatory liabilities	1	2
Total regulatory liabilities	$154	$ 166

7. Variable Interest Entities

A VIE is an entity that either (i) has insufficient equity to permit the entity to finance its activities without additional subordinated financial support or (ii) has equity investors who lack the characteristics of owning a controlling financial interest. When TVA determines that it has a variable interest in a variable interest entity, a qualitative evaluation is performed to assess which interest holders have the power to direct the activities that most significantly

impact the economic performance of the entity and have the obligation to absorb losses or receive benefits that could be significant to the entity. The evaluation considers the purpose and design of the business, the risks that the business was designed to create and pass along to other entities, the activities of the business that can be directed and which party can direct them, and the expected relative impact of those activities on the economic performance of the business through its life. TVA has the power to direct the activities of an entity when it has the ability to make key operating and financing decisions, including, but not limited to, capital investment and the issuance of debt. Based on the evaluation of these criteria, TVA has determined it is the primary beneficiary of several entities and as such is required to account for the VIEs on a consolidated basis. See discussion following.

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John Sevier VIE

In 2012, TVA entered into a $1.0 billion construction management agreement and lease financing arrangement with John Sevier Combined Cycle Generation LLC ("JSCCG") for the completion and lease by TVA of the John Sevier Combined Cycle Facility ("John Sevier CCF"). JSCCG is a special single-purpose limited liability company formed in January 2012 to finance the John Sevier CCF through a $900 million secured note issuance (the “JSCCG notes”) and the issuance of $100 million of membership interests subject to mandatory redemption. The membership interests were purchased by John Sevier Holdco LLC ("Holdco"). Holdco is a special single-purpose entity, also formed in January 2012, established to acquire and hold the membership interests in JSCCG. A non-controlling interest in Holdco is held by a third party through nominal membership interests, to which none of the income, expenses, and cash flows is allocated.

The membership interests held by Holdco in JSCCG were purchased with proceeds from the issuance of $100 million of secured notes (the “Holdco notes") and are subject to mandatory redemption pursuant to scheduled amortizing, semi-annual payments due each January 15 and July 15, with a final payment due in January 2042. The payment dates for the mandatorily redeemable membership interests are the same as those of the Holdco notes. The sale of the JSCCG notes, the membership interests in JSCCG, and the Holdco notes closed in January 2012. The JSCCG notes are secured by TVA’s lease payments, and the Holdco notes are secured by Holdco's investment in, and amounts receivable from, JSCCG. TVA’s lease payments to JSCCG are equal to and payable on the same dates as JSCCG’s and Holdco’s semi-annual debt service payments. In addition to the lease payments, TVA pays administrative and miscellaneous expenses incurred by JSCCG and Holdco. Certain agreements related to this transaction contain default and acceleration provisions.

Southaven VIE

In 2013, TVA entered into a lease financing arrangement with Southaven Combined Cycle Generation LLC ("SCCG") for the lease by TVA of the Southaven Combined Cycle Facility ("Southaven CCF"). SCCG is a special single-purpose limited liability company formed in June 2013 to finance the Southaven CCF through a $360 million secured notes issuance (the “SCCG notes”) and the issuance of $40 million of membership interests subject to mandatory redemption. The membership interests were purchased by Southaven Holdco LLC ("SHLLC"). SHLLC is a special single-purpose entity, also formed in June 2013, established to acquire and hold the membership interests of SCCG. A non-controlling interest in SHLLC is held by a third party through nominal membership interests, to which none of the income, expenses, and cash flows of SHLLC are allocated.

The membership interests held by SHLLC were purchased with proceeds from the issuance of $40 million of secured notes (the "SHLLC notes") and are subject to mandatory redemption pursuant to a schedule of amortizing, semi-annual payments due each February 15 and August 15, with a final payment due on August 15, 2033. The payment dates for the mandatorily redeemable membership interests are the same as those of the SHLLC notes and the payment amounts are sufficient to provide returns on, as well as returns of, capital until the investment has been repaid to SHLLC in full. The rate of return on investment to SHLLC is 7.0 percent, which is reflected as interest expense in the consolidated statements of operations. SHLLC is required to pay a pre-determined portion of the return on investment to Seven States Southaven, LLC ("SSSL") on each lease payment date as agreed in SHLLC's formation documents (the "Seven States Return"). The current and long-term portions of the Membership interests of VIE subject to mandatory redemption are included in Accounts payable and accrued liabilities and Other long-term liabilities, respectively.

The payment dates for the mandatorily redeemable membership interests are the same as those of the SHLLC notes. The SCCG notes are secured by TVA’s lease payments, and the SHLLC notes are secured by SHLLC’s investment in, and amounts receivable from, SCCG. TVA’s lease payments to SCCG are payable on the same dates as SCCG’s and

SHLLC’s semi-annual debt service payments and are equal to the sum of (i) the amount of SCCG’s semi-annual debt service payments, (ii) the amount of SHLLC’s semi-annual debt service payments, and (iii) the amount of the Seven States Return. In addition to the lease payments, TVA pays administrative and miscellaneous expenses incurred by SCCG and SHLLC. Certain agreements related to this transaction contain default and acceleration provisions.

In the event that TVA were to choose to exercise an early buy out feature of the Southaven Facility Lease, in part or in whole, TVA must pay to SCCG amounts sufficient for SCCG to repay or partially repay on a pro rata basis the membership interests held by SHLLC, including any outstanding investment amount plus accrued but unpaid return. TVA also has the right, at any time and without any early redemption of the other portions of the Southaven Facility Lease payments due to SCCG, to fully repay SHLLC's investment, upon which repayment SHLLC will transfer the membership interests to a designee of TVA.

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Impact on Consolidated Balance Sheets

The financial statement items attributable to carrying amounts and classifications of JSCCG, Holdco, and SCCG as of March 31, 2016 and September 30, 2015, as reflected in the consolidated balance sheets are as follows:

Summary of Impact of VIEs on Consolidated Balance Sheets

	At March 31, 2016	At September 30, 2015
Current liabilities of VIE		
Accrued interest of VIE	$11	$ 12
Current portion of membership interests of VIE subject to mandatory redemption	2	2
Current maturities of long-term debt of VIE	34	33
Total current liabilities of VIE	47	47
Other liabilities of VIE		
Membership interests of VIE subject to mandatory redemption	34	35
Long-term debt of VIE, net		
Long-term debt of VIE, net	1,216	1,233
Total liabilities of VIE	$1,297	$ 1,315

Creditors of the VIEs do not have any recourse to the general credit of TVA. TVA does not have any obligations to provide financial support to the VIEs other than as prescribed in the terms of the agreements related to these transactions.

8. Other Long-Term Liabilities

Other long-term liabilities consist primarily of liabilities related to certain derivative instruments as well as liabilities under agreements related to compliance with certain environmental regulations (see Note 16 — Legal Proceedings — Environmental Agreements). The table below summarizes the types and amounts of Other long-term liabilities:

Other Long-Term Liabilities

	At March 31, 2016	At September 30, 2015
Interest rate swap liabilities	$1,800	$ 1,627
EnergyRight® financing obligation	141	148
Environmental agreements liability	32	55
Currency swap liabilities	77	47
Membership interests of VIE subject to mandatory redemption	34	35
Commodity contract derivative liabilities	76	17
Commodity swap derivative liabilities	7	10
Other	280	280
Total other long-term liabilities	$2,447	$ 2,219

EnergyRight® Financing Obligation. TVA purchases certain loans receivable from its LPCs in association with the EnergyRight® Solutions program. The current and long-term portions of the resulting financing obligation are reported in Accounts payable and accrued liabilities and Other long-term liabilities, respectively, on TVA's consolidated balance sheets. As of March 31, 2016 and September 30, 2015, the carrying amount of the financing

obligation reported in Accounts payable and accrued liabilities was approximately $35 million and $37 million, respectively. See Note 5 for information regarding the associated loans receivable and for details regarding the EnergyRight® Solutions program.

9. Asset Retirement Obligations

During the six months ended March 31, 2016, TVA's total ARO liability decreased $35 million.

To estimate its decommissioning obligation related to its nuclear generating stations, TVA uses a probability-weighted, discounted cash flow model which, on a unit-by-unit basis, considers multiple outcome scenarios that include significant estimations and assumptions. Those assumptions include (1) estimates of the cost of decommissioning, (2) the method of decommissioning and the timing of the related cash flows, (3) the license period of the nuclear plant, considering the probability of license extensions, (4) cost escalation factors, and (5) the credit adjusted risk free rate to measure the obligation at the present value of the future estimated costs. TVA has ascribed probabilities to two different decommissioning methods related to its nuclear decommissioning obligation estimate: the DECON method and the SAFSTOR method. The DECON method

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requires radioactive contamination to be 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. 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.

TVA bases its nuclear decommissioning estimates on site-specific cost studies. These studies will be updated for each of TVA's nuclear units at least every 5 years. TVA plans to perform new cost studies in 2017.

In April 2015, the Environmental Protection Agency ("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 these rules, TVA recorded certain adjustments to its ARO liabilities in 2015. TVA continues to evaluate the impact of both the rule and the results of ongoing settlement activity on its cost and timing estimates of related projects. As a result, further adjustments to its ARO liability may be required as estimates are refined.

During the six months ended March 31, 2016, both the nuclear and non-nuclear liabilities were increased by periodic accretion, partially offset by settlement projects that were conducted during these periods. The nuclear and non-nuclear accretion amounts were deferred as regulatory assets. During the six months ended March 31, 2016, $72 million of the related regulatory assets were amortized into expense as these amounts were collected in rates. See Note 6. TVA maintains investment trusts to help fund its decommissioning obligations. See Note 13 and Note 16 — Contingencies — Decommissioning Costs for a discussion of the trusts' objectives and the current balances of the trusts.

Asset Retirement Obligation Activity

	Nuclear	Non-Nuclear	Total
Balance at September 30, 2015	$2,187	$ 1,656	$3,843
Settlements	—	(48)	(48)
Change in estimate	—	(76)	(76)
Additional obligations	—	15	15
Accretion (recorded as regulatory asset)	52	22	74
Balance at March 31, 2016	$2,239	$ 1,569	$3,808 (1)

Note

(1) The current portion of ARO in the amount of $187 million is included in Accounts payable and accrued liabilities at March 31, 2016.

10. Debt and Other Obligations

Debt Outstanding

Total debt outstanding at March 31, 2016, and September 30, 2015, consisted of the following:

Debt Outstanding

	At March 31, 2016	At September 30, 2015
Short-term debt		
Short-term debt, net	$1,407	$ 1,034
Current maturities of power bonds	554	32
Current maturities of long-term debt of variable interest entities	34	33
Total current debt outstanding, net	1,995	1,099
Long-term debt		
Long-term power bonds[1]	22,217	22,792
Long-term debt of variable interest entities	1,229	1,246
Unamortized discounts, premiums, issue costs, and other	(181)	(188)

Total long-term debt, net	23,265	23,850
Total outstanding debt	$25,260	$ 24,949

Note

(1) Includes net exchange gain from currency transactions of $67 million at March 31, 2016 and $21 million at September 30, 2015.

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Debt Securities Activity

The table below summarizes the long-term debt securities activity for the period from October 1, 2015, to March 31, 2016:

Debt Securities Activity

	Date	Amount[1]	Interest Rate
Redemptions/Maturities			
electronotes®	First Quarter 2016	$ 1	2.65 %
electronotes®	Second Quarter 2016	2	3.51 %
2009 Series A	November 2015	2	2.25 %
2009 Series B	December 2015	1	3.77 %
Total redemptions/maturities of power bonds		6	
Variable interest entities		16	4.30 %
Total redemptions/maturities of debt		$ 22	

Note

(1) All redemptions were at 100 percent of par.

Credit Facility Agreements

TVA and the U.S. Treasury, pursuant to the TVA Act, have entered into a memorandum of understanding under which the U.S. Treasury provides TVA with a $150 million credit facility. This credit facility was renewed for 2016 with a maturity date of September 30, 2016. Access to this credit facility or other similar financing arrangements with the U.S. Treasury has been available to TVA since the 1960s. TVA can borrow under the U.S. Treasury credit facility only if it cannot issue Bonds in the market on reasonable terms, and TVA considers the U.S. Treasury credit facility a secondary source of liquidity. The interest rate on any borrowing under this facility is based on the average rate on outstanding marketable obligations of the United States with maturities from date of issue of one year or less. There were no outstanding borrowings under the facility at March 31, 2016. The availability of this credit facility may be impacted by how the U.S. government addresses the situation of approaching its debt limit.

TVA also has funding available in the form of three long-term revolving credit facilities totaling $2.5 billion. The $500 million credit facility matures on February 1, 2020, one $1.0 billion credit facility matures on June 2, 2020, and another $1.0 billion credit facility matures on September 30, 2020. The interest rate on any borrowing under these facilities varies based on market factors and the rating of TVA's senior unsecured long-term non-credit-enhanced debt. TVA is required to pay an unused facility fee on the portion of the total $2.5 billion that TVA has not borrowed or committed under letters of credit. This fee, along with letter of credit fees, may fluctuate depending on the rating of TVA's senior unsecured long-term non-credit-enhanced debt. At March 31, 2016 and September 30, 2015, there were approximately $1.3 billion and $1.1 billion, respectively, of letters of credit outstanding under the facilities. See Note 12 — Other Derivative Instruments — Collateral.

The following table provides additional information regarding TVA's funding available in the form of three long-term credit facilities:

Summary of Long-Term Credit Facilities
At March 31, 2016
(in billions)

Maturity Date	Facility Limit	Letters of Credit	Cash Borrowings	Availability

		Outstanding		
February 2020	$ 0.5	$ 0.5	$ —	$ —
June 2020	1.0	0.4	—	0.6
September 2020	1.0	0.4	—	0.6
Total	$ 2.5	$ 1.3	$ —	$ 1.2

Lease/Leaseback Obligations

Prior to 2004, TVA received approximately $945 million in proceeds by entering into lease/leaseback transactions for 24 new peaking combustion turbine units. TVA also received approximately $389 million in proceeds by entering into lease/leaseback transactions for qualified technological equipment and software in 2003. Due to TVA's continuing involvement in the operation and maintenance of the leased units and equipment and its control over the distribution of power produced by the combustion turbine facilities during the leaseback term, TVA accounted for the lease proceeds as financing obligations. At

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March 31, 2016, and September 30, 2015, the outstanding lease/leaseback obligations were $559 million and $616 million, respectively.

11. Accumulated Other Comprehensive Income (Loss)

Accumulated other comprehensive income (loss) ("AOCI") represents market valuation adjustments related to TVA's currency swaps. The currency swaps are cash flow hedges and are the only derivatives in TVA's portfolio that have been designated and qualify for hedge accounting treatment. TVA records exchange rate gains and losses on its foreign currency-denominated debt in net income and marks its currency swap assets and liabilities to market through other comprehensive income (loss) ("OCI"). TVA then reclassifies an amount out of AOCI into net income, offsetting the exchange gain/loss recorded on the debt. During the three months ended March 31, 2016 and 2015, TVA reclassified $22 million and $46 million of losses, respectively, related to its cash flow hedges from AOCI to Interest expense. During the six months ended March 31, 2016 and 2015, TVA reclassified $46 million and $84 million of losses, respectively, related to its cash flow hedges from AOCI to Interest expense.

TVA records certain assets and liabilities that result from the regulated ratemaking process that would not be recorded under GAAP for non-regulated entities. As such, certain items that would generally be reported in AOCI or that would impact the statements of operations are recorded as regulatory assets or regulatory liabilities.

See Note 6 for a schedule of regulatory assets and liabilities. See Note 12 for a discussion of the recognition in AOCI of gains and losses associated with certain derivative contracts. See Note 13 for a discussion of the recognition of certain investment fund gains and losses as regulatory assets and liabilities. See Note 15 for a discussion of the regulatory accounting related to components of TVA's benefit plans.

12. Risk Management Activities and Derivative Transactions

TVA is exposed to various risks. These include risks related to commodity prices, investment prices, interest rates, currency exchange rates, and inflation as well as counterparty credit and performance risks. To help manage certain of these risks, TVA has entered into various derivative transactions, principally commodity option contracts, forward contracts, swaps, swaptions, futures, and options on futures. Other than certain derivative instruments in its trust investment funds, it is TVA's policy to enter into these derivative transactions solely for hedging purposes and not for speculative purposes. TVA has suspended its FTP and no longer uses financial instruments to hedge risks related to commodity prices; however, TVA plans to continue to manage fuel price volatility through other methods and to periodically reevaluate its suspended FTP program for future use of financial instruments.

Overview of Accounting Treatment

TVA recognizes certain of its derivative instruments as either assets or liabilities on its consolidated balance sheets at fair value. The accounting for changes in the fair value of these instruments depends on (1) whether TVA uses regulatory accounting to defer the derivative gains and losses, (2) whether the derivative instrument has been designated and qualifies for hedge accounting treatment, and (3) if so, the type of hedge relationship (for example, cash flow hedge).

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The following tables summarize the accounting treatment that certain of TVA's financial derivative transactions receive:

Summary of Derivative Instruments That Receive Hedge Accounting Treatment (part 1)
Amount of Mark-to-Market Gain (Loss) Recognized in OCI

			Three Months Ended March 31		Six Months Ended March 31	
Derivatives in Cash Flow Hedging Relationship	Objective of Hedge Transaction	Accounting for Derivative Hedging Instrument	2016	2015	2016	2015
Currency swaps	To protect against changes in cash flows caused by changes in foreign currency exchange rates (exchange rate risk)	Unrealized gains and losses are recorded in AOCI and reclassified to interest expense to the extent they are offset by gains and losses on the hedged transaction	$(27)	$(59)	$(54)	$(74)

Summary of Derivative Instruments That Receive Hedge Accounting Treatment (part 2)
Amount of Gain (Loss) Reclassified from OCI to Interest Expense

	Three Months Ended March 31		Six Months Ended March 31	
Derivatives in Cash Flow Hedging Relationship	2016	2015	2016	2015
Currency swaps	$(22)	$(46)	$(46)	$(84)

Note
There were no ineffective portions or amounts excluded from effectiveness testing for any of the periods presented. Based on forecasted foreign currency exchange rates, TVA expects to reclassify approximately $82 million of losses from AOCI to interest expense within the next twelve months to offset amounts anticipated to be recorded in interest expense related to exchange gain on the debt.

Summary of Derivative Instruments That Do Not Receive Hedge Accounting Treatment
Amount of Gain (Loss) Recognized in Income on Derivatives

			Three Months Ended March 31[(1)]		Six Months Ended March 31[(1)]	
Derivative Type	Objective of Derivative	Accounting for Derivative Instrument	2016	2015	2016	2015
Interest rate swaps	To fix short-term debt variable rate to a fixed rate (interest rate risk)	Mark-to-market gains and losses are recorded as regulatory assets or liabilities. Realized gains and losses are recognized in interest expense when payments are made or received on the swap settlement dates.	$(27)	$(28)	$(55)	$(57)
Commodity contract derivatives	To protect against fluctuations in market prices of purchased coal	Mark-to-market gains and losses are recorded as regulatory assets or liabilities. Realized gains and losses due to contract settlements	—	—	—	—

	or natural gas (price risk)	are recognized in fuel expense as incurred.				
Commodity derivatives under financial trading program ("FTP")	To protect against fluctuations in market prices of purchased commodities (price risk)	Mark-to-market gains and losses are recorded as regulatory assets or liabilities. Realized gains and losses are recognized in fuel expense or purchased power expense when the related commodity is used in production.	(21)	(26)	(56)	(39)

Notes
(1) All of TVA's derivative instruments that do not receive hedge accounting treatment have unrealized gains (losses) that would otherwise be recognized in income
but instead are deferred as regulatory assets and liabilities. As such, there was no related gain (loss) recognized in income for these unrealized gains (losses) for the three months and six months ended March 31, 2016 and 2015.

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Fair Values of TVA Derivatives

	At March 31, 2016		At September 30, 2015	
Derivatives That Receive Hedge Accounting Treatment	Balance	Balance Sheet Presentation	Balance	Balance Sheet Presentation
Currency swaps				
£200 million Sterling	$(55)	Other long-term liabilities	$(41)	Other long-term liabilities
£250 million Sterling	(2)	Other long-term liabilities	25	Other long-term assets
£150 million Sterling	(20)	Other long-term liabilities	(6)	Other long-term liabilities

	At March 31, 2016		At September 30, 2015	
Derivatives That Do Not Receive Hedge Accounting Treatment	Balance	Balance Sheet Presentation	Balance	Balance Sheet Presentation
Interest rate swaps				
$1.0 billion notional	(1,294)	Other long-term liabilities	(1,177)	Other long-term liabilities
$476 million notional	(494)	Other long-term liabilities	(438)	Other long-term liabilities
$42 million notional	(12)	Other long-term liabilities	(12)	Other long-term liabilities
Commodity contract derivatives	(194)	Other current assets $3; Other long-term assets $1; Other long-term liabilities $(76); Accounts payable and accrued liabilities $(122)	(97)	Other long-term assets $1; Other long-term liabilities $(17); Accounts payable and accrued liabilities $(81)
FTP				
Derivatives under FTP[(1)]	(87)	Other current assets $(69); Other long-term liabilities $(7); Accounts payable and accrued liabilities $(11)	(116)	Other current assets $(89); Other long-term liabilities $(10); Accounts payable and accrued liabilities $(17)

Note

(1) Fair values of certain derivatives under the FTP that were in net liability positions totaling $69 million and $89 million at March 31, 2016 and September 30, 2015, respectively, are recorded in TVA's margin cash accounts in Other current assets. These derivatives are transacted with futures commission merchants, and cash deposits have been posted to the margin cash accounts held with each futures commission merchant to offset the net liability positions in full.

Cash Flow Hedging Strategy for Currency Swaps

To protect against exchange rate risk related to three British pound sterling denominated Bond transactions, TVA entered into foreign currency hedges at the time the Bond transactions occurred. TVA had the following currency swaps outstanding as of March 31, 2016:

Currency Swaps Outstanding
At March 31, 2016

Effective Date of Currency Swap Contract	Associated TVA Bond Issues Currency Exposure	Expiration Date of Swap	Overall Effective Cost to TVA
1999	£200 million	2021	5.81%
2001	£250 million	2032	6.59%
2003	£150 million	2043	4.96%

When the dollar strengthens against the British pound sterling, the exchange gain on the Bond liability is offset by an exchange loss on the swap contract. Conversely, when the dollar weakens against the British pound sterling, the exchange loss on the Bond liability is offset by an exchange gain on the swap contract. All such exchange gains or losses on the Bond liability are included in Long-term debt, net. The offsetting exchange losses or gains on the swap contracts are recognized in AOCI. If any gain (loss) were to be incurred as a result of the early termination of the foreign currency swap contract, the resulting income (expense) would be amortized over the remaining life of the associated Bond as a component of Interest expense.

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Derivatives Not Receiving Hedge Accounting Treatment

Interest Rate Derivatives. TVA uses regulatory accounting treatment to defer the mark-to-market ("MtM") gains and losses on its interest rate swaps. The net deferred unrealized gains and losses are classified as regulatory assets or liabilities on TVA's consolidated balance sheets and are included in the ratemaking formula when the transactions settle. The values of these derivatives are included in Other long-term assets or Other long-term liabilities on the consolidated balance sheets, and realized gains and losses, if any, are included in TVA's consolidated statements of operations. For the three months ended March 31, 2016 and 2015, the changes in fair market value of the interest rate swaps resulted in deferred unrealized losses of $262 million and $165 million, respectively. For the six months ended March 31, 2016 and 2015, the changes in fair market value of the interest rate swaps resulted in deferred unrealized losses of $173 million and $349 million, respectively.

Commodity Derivatives. TVA enters into certain derivative contracts for coal and natural gas that require physical delivery of the contracted quantity of the commodity. TVA marks to market all such contracts and defers the fair market values as regulatory assets or liabilities on a gross basis. At March 31, 2016, TVA's coal and natural gas contract derivatives both had terms of up to 3 years.

Commodity Contract Derivatives

	At March 31, 2016			At September 30, 2015		
	Number of Contracts	Notional Amount	Fair Value (MtM)	Number of Contracts	Notional Amount	Fair Value (MtM)
Coal contract derivatives	12	25 million tons	$(187)	14	19 million tons	$ (98)
Natural gas contract derivatives	32	172 million mmBtu	$(7)	33	134 million mmBtu	$ 1

Derivatives Under FTP. While TVA has suspended its FTP and no longer uses financial instruments to hedge risks related to commodity prices, certain natural gas swaps with a maturity of two years or less remain as part of the suspended FTP.

Derivatives Under Financial Trading Program

	At March 31, 2016		At September 30, 2015	
	Notional Amount	Fair Value (MtM) (in millions)	Notional Amount	Fair Value (MtM) (in millions)
Natural gas (in mmBtu)				
Swap contracts	34,332,500	$ (87)	51,495,000	$ (116)

Note

Fair value amounts presented are based on the net commodity position with the counterparty. Notional amounts disclosed represent the net absolute value of contractual amounts.

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TVA defers all FTP unrealized gains (losses) as regulatory liabilities (assets) and records only realized gains or losses to match the delivery period of the underlying commodity. In addition to the open commodity derivatives disclosed above, TVA had closed derivative contracts with market values of $(7) million at March 31, 2016, and $(11) million at September 30, 2015. TVA experienced the following unrealized and realized gains and losses related to the FTP at the dates and during the periods, as applicable, set forth in the tables below:

Financial Trading Program Unrealized Gains (Losses)

	At March 31, 2016	At September 30, 2015
FTP unrealized gains (losses) deferred as regulatory liabilities (assets)		
Natural gas	$ (87)	$ (116)

Financial Trading Program Realized Gains (Losses)

	Three Months Ended March 31		Six Months Ended March 31	
	2016	2015	2016	2015
Decrease (increase) in fuel expense				
Natural gas	$(17)	$(21)	$(45)	$(32)
Fuel oil/crude oil	—	—	—	1

Financial Trading Program Realized Gains (Losses)

	Three Months Ended March 31		Six Months Ended March 31	
	2016	2015	2016	2015
Decrease (increase) in purchased power expense				
Natural gas	$(4)	$(5)	$(11)	$(8)

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Offsetting of Derivative Assets and Liabilities

The amounts of TVA's derivative instruments as reported in the Consolidated Balance Sheets as of March 31, 2016, and September 30, 2015, are shown in the table below:

Derivative Assets and Liabilities

	As of March 31, 2016		
	Gross Amounts of Recognized Assets/Liabilities	Gross Amounts Offset in the Balance Sheet [1]	Net Amounts of Assets/Liabilities Presented in the Balance Sheet [2]
Assets			
Currency swap(s)[3][4]	$—	$ —	$ —
Commodity derivatives under FTP	28	(28)	—
Total derivatives subject to master netting or similar arrangement	28	(28)	—
Total derivatives not subject to master netting or similar arrangement	4	—	4
Total	$32	$ (28)	$ 4
Liabilities			
Currency swap(s) [4]	$77	$ —	$ 77
Interest rate swaps [4]	1,800	—	1,800
Commodity derivatives under FTP	115	(97)	18
Total derivatives subject to master netting or similar arrangement	1,992	(97)	1,895
Total derivatives not subject to master netting or similar arrangement	198	—	198
Total	$2,190	$ (97)	$ 2,093

	As of September 30, 2015		
	Gross Amounts of Recognized Assets/Liabilities	Gross Amounts Offset in the Balance Sheet [1]	Net Amounts of Assets/Liabilities Presented in the Balance Sheet [2]
Assets			
Currency swap(s)[3][4]	$25	$ —	$ 25
Commodity derivatives under FTP	49	(49)	—
Total derivatives subject to master netting or similar arrangement	74	(49)	25
Total derivatives not subject to master netting or similar arrangement	1	—	1
Total	$75	$ (49)	$ 26
Liabilities			
Currency swap(s) [4]	$47	$ —	$ 47
Interest rate swaps [4]	1,627	—	1,627
Commodity derivatives under FTP	165	(138)	27

Total derivatives subject to master netting or similar arrangement	1,839	(138)	1,701
Total derivatives not subject to master netting or similar arrangement	98	—	98
Total	$1,937	$ (138)	$ 1,799

Notes

(1) Amounts primarily include counterparty netting of derivative contracts, margin account deposits for futures commission merchants transactions, and cash collateral received or paid in accordance with the accounting guidance for derivatives and hedging transactions.

(2) There are no derivative contracts subject to a master netting arrangement or similar agreement which are not offset in the balance sheets.

(3) At March 31, 2016 and September 30, 2015, there were no securities posted by a counterparty on TVA's behalf to partially secure the asset position(s) of currency swaps in accordance with the collateral requirements for these derivatives.

(4) Letters of credit of approximately $1.3 billion and $1.1 billion were posted as collateral at March 31, 2016 and September 30, 2015, respectively, to partially secure the liability positions of one of the currency swaps and one of the interest rate swaps in accordance with the collateral requirements for these derivatives. At March 31, 2016, TVA held no cash collateral in excess of collateral requirements. At September 30, 2015, TVA held $15 million cash collateral in excess of collateral requirements. Cash collateral held in excess of collateral requirements is recorded in Restricted cash and investments with a corresponding obligation of the same amount recorded in Accounts payable and accrued liabilities.

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Other Derivative Instruments

Investment Fund Derivatives. Investment funds consist primarily of funds held in the Nuclear Decommissioning Trust ("NDT"), the Asset Retirement Trust ("ART"), the Supplemental Executive Retirement Plan ("SERP"), and the Long-Term Deferred Compensation Plan ("LTDCP"). All securities in the trusts are classified as trading. See Note 13 — Investment Funds for a discussion of the trusts' objectives and the types of investments included in the various trusts. These trusts may invest in derivative instruments which may include swaps, futures, options, forwards, and other instruments. At September 30, 2015, the NDT held investments in forward contracts to purchase debt securities. The fair values of these derivatives were in net liability positions totaling $59 million at September 30, 2015. At March 31, 2016, the NDT held no investments in these forward contracts.

At March 31, 2016 and September 30, 2015, the fair value of other derivative instruments in these trusts was not material to TVA's consolidated financial statements.

Collateral. TVA's interest rate swaps and currency swaps 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. At March 31, 2016, the aggregate fair value of all derivative instruments with credit-risk related contingent features that were in a liability position was $1.9 billion. TVA's collateral obligations at March 31, 2016, under these arrangements were approximately $1.3 billion, for which TVA had posted approximately $1.3 billion in letters of credit. These letters of credit reduce the available balance under the related credit facilities. TVA's assessment of the risk of its nonperformance includes a reduction in its exposure under the contract as a result of this posted collateral.

For all of its derivative instruments with credit-risk related contingent features:

- If TVA remains a majority-owned U.S. government entity but Standard & Poor's Financial Services, LLC ("S&P") or Moody's Investors Service, Inc. ("Moody's") downgrades TVA's credit rating to AA or Aa2, respectively, TVA's collateral obligations would likely increase by $22 million and

- If TVA ceases to be majority-owned by the U.S. government, TVA's credit rating would likely be downgraded and TVA would be required to post additional collateral.

Counterparty Credit Risk

Credit risk is the exposure to economic loss that would occur as a result of a counterparty's nonperformance of its contractual obligations. 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 associated with 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 revenue from six LPCs that accounted for 32 percent of total operating revenue for both the six months ended March 31, 2016 and 2015.

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. Nuclear fuel requirements including uranium mining and milling, conversion services, enrichment services, and fabrication services are met from various suppliers, depending on type of service. TVA purchases the majority of its natural gas requirements from a variety of suppliers under short-term contracts.

To help ensure a reliable supply of coal, TVA had coal contracts with multiple suppliers at March 31, 2016. The contracted supply of coal is sourced from multiple geographic regions of the United States and is to be delivered via various transportation methods (i.e., barge, rail, and truck). Emerging technologies, environmental regulations, and low gas prices have contributed to weak demand for coal. As a result, coal suppliers are facing increased financial pressure which has led to relatively poor credit ratings and bankruptcies. Continued difficulties by coal suppliers could result in consolidations, additional bankruptcies, restructurings, contract renegotiations, or other scenarios. Under these scenarios and TVA’s potential available responses, TVA does not anticipate a significant financial impact in obtaining continued fuel supply for its coal-fired generation.

TVA has a power purchase agreement that expires on March 31, 2032, with a supplier of electricity for 440 megawatts ("MW") of summer net capability from a lignite-fired generating plant. TVA has determined that the supplier has the equivalent of

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a non-investment grade credit rating; therefore, the supplier has provided credit assurance to TVA under the terms of the agreement.

Credit of Derivative Counterparties. TVA has entered into physical and financial contracts that qualify as derivatives for hedging purposes, and TVA's NDT fund and qualified defined benefit 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 fund and the pension plan have entered for investment purposes defaults, the value of the investment could decline significantly or perhaps become worthless. TVA has concentrations of credit risk from the banking and coal industries because multiple companies in these industries serve as counterparties to TVA in various derivative transactions. At March 31, 2016, all of TVA's currency swaps, interest rate swaps, and commodity derivatives under the FTP were with banking counterparties whose Moody's credit ratings were Baa1 or higher.

TVA classifies qualifying forward coal and natural gas contracts as derivatives. See Derivatives Not Receiving Hedge Accounting Treatment above. At March 31, 2016, the coal contracts were with counterparties whose Moody's credit rating, or TVA’s internal analysis when such information was unavailable, ranged from C or D, respectively, to Ba3. At March 31, 2016, the natural gas contracts were with counterparties whose ratings ranged from B1 to A2. See Credit of Suppliers for discussion of challenges facing the coal industry. TVA does not have any derivative contracts with coal counterparties in an asset position as of March 31, 2016.

TVA currently utilizes two futures commission merchants ("FCMs") to clear commodity contracts, including futures, options, and similar financial derivatives. These transactions are executed under the FTP by the FCMs on exchanges on behalf of TVA. TVA maintains margin cash accounts with the FCMs. TVA makes deposits to the margin cash accounts to adequately cover any net liability positions on its derivatives transacted with the FCMs. See the note to the Fair Values of TVA Derivatives table above.

13. Fair Value Measurements

Fair value is determined based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the asset or liability's principal market, or in the absence of a principal market, the most advantageous market for the asset or liability in an orderly transaction between market participants. TVA uses market or observable inputs as the preferred source of values, followed by assumptions based on hypothetical transactions in the absence of market inputs.

Valuation Techniques

The measurement of fair value results in classification into a hierarchy by the inputs used to determine the fair value as follows:

Level 1	— Unadjusted quoted prices in active markets accessible by the reporting entity for identical assets or liabilities. Active markets are those in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing.
Level 2	— Pricing inputs other than quoted market prices included in Level 1 that are based on observable market data and that are directly or indirectly observable for substantially the full term of the asset or liability. These include quoted market prices for similar assets or liabilities, quoted market prices for identical or similar assets in markets that are not active, adjusted quoted market prices, inputs from observable data such as interest rate and yield curves, volatilities and default rates observable at commonly quoted intervals, and inputs derived from observable market data by correlation or other means.

Level 3	Pricing inputs that are unobservable, or less observable, from objective sources. Unobservable inputs are only to be used to the extent observable inputs are not available. These inputs maintain the concept of an exit price from the perspective of a market participant and should reflect assumptions of other market participants. An entity should consider all market participant assumptions that are available without unreasonable cost and effort. These are given the lowest priority and are generally used in internally developed methodologies to generate management's best estimate of the fair value when no observable market data is available.

A financial instrument's level within the fair value hierarchy (where Level 3 is the lowest and Level 1 is the highest) is based on the lowest level of input significant to the fair value measurement.

The following sections describe the valuation methodologies TVA uses to measure different financial instruments at fair value. Except for gains and losses on SERP and LTDCP assets, all changes in fair value of these assets and liabilities have been recorded as changes in regulatory assets, regulatory liabilities, or AOCI on TVA's consolidated balance sheets and consolidated statements of comprehensive income (loss). Except for gains and losses on SERP and LTDCP assets, there has been no impact to the consolidated statements of operations or the consolidated statements of cash flows related to these fair value measurements.

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Investment Funds

At March 31, 2016, Investment funds were composed of $2.1 billion of securities classified as trading and measured at fair value and less than $1 million of equity investments not required to be measured at fair value. Trading securities are held in the NDT, ART, SERP, and LTDCP. The NDT holds funds for the ultimate decommissioning of TVA's nuclear power plants. The ART holds funds primarily for the costs related to the future closure and retirement of TVA's other long-lived assets. The balances in the NDT and ART were $1.6 billion and $449 million, respectively, at March 31, 2016.

TVA established a SERP for certain executives in critical positions to provide supplemental pension benefits tied to compensation that exceeds limits set by Internal Revenue Service rules applicable to the qualified defined benefit pension 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 NDT and SERP are invested in securities generally designed to achieve a return in line with overall equity market performance, and the ART and LTDCP are invested in securities generally designed to achieve a return in line with overall debt and equity market performance.

The NDT, ART, SERP, and LTDCP are composed of multiple types of investments and are managed by external institutional managers. Most U.S. and international equities, Treasury inflation-protected securities, real estate investment trust securities, and cash securities and certain derivative instruments are measured based on quoted exchange prices in active markets and are classified as Level 1 valuations. Fixed-income investments, high-yield fixed-income investments, currencies, and most derivative instruments are non-exchange traded and are classified as Level 2 valuations. These measurements are based on market and income approaches with observable market inputs.

Private partnership investments may include holdings of investments in private real estate, venture capital, buyout, mezzanine or subordinated debt, restructuring or distressed debt, and special situations through funds managed by third-party investment managers. Investments in private partnerships generally involve a three-to-four-year period where the investor contributes capital. This is followed by a period of distribution, typically over several years. The investment period is generally, at a minimum, ten years or longer. The NDT had unfunded commitments related to private partnerships of $76 million at March 31, 2016. These investments have no redemption or limited redemption options and may also have imposed restrictions on the NDT’s ability to liquidate its investment. There are no readily available quoted exchange prices for these investments. The fair value of the investments is based on TVA’s ownership percentage of the fair value of the underlying investments as provided by the investment managers. These investments are typically valued on a quarterly basis. TVA’s private partnership investments are valued at net asset values ("NAV") as a practical expedient for fair value. TVA classifies its interest in these types of investments as investments measured at net asset value in the fair value hierarchy.

Commingled funds represent investment funds comprising multiple individual financial instruments. The commingled funds held by the NDT, ART, SERP, and LTDCP consist of either a single class of securities, such as equity, debt, or foreign currency securities, or multiple classes of securities. All underlying positions in these commingled funds are either exchange traded or measured using observable inputs for similar instruments. The fair value of commingled funds is based on NAV per fund share (the unit of account), derived from the prices of the underlying securities in the funds. These commingled funds can be redeemed at the measurement date NAV and are classified as investments measured at net asset value in the fair value hierarchy.

Realized and unrealized gains and losses on trading securities are recognized in current earnings and are based on average cost. The gains and losses of the NDT and ART are subsequently reclassified to a regulatory asset or liability account in accordance with TVA's regulatory accounting policy. See Note 1 — Cost-Based Regulation. TVA recorded

unrealized gains and losses related to its trading securities held as of the end of each period as follows:

Unrealized Investment Gains (Losses)

		Three Months Ended March 31		Six Months Ended March 31	
Fund	Financial Statement Presentation	2016	2015	2016	2015
SERP	Other income (expense)	$ —	$ 1	$ —	$ —
LTDCP	Other income (expense)	—	—	—	(1)
NDT	Regulatory asset	9	11	48	34
ART	Regulatory asset	(3)	9	9	15

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Currency and Interest Rate Swaps

See Note 12 — Cash Flow Hedging Strategy for Currency Swaps and Derivatives Not Receiving Hedge Accounting Treatment for a discussion of the nature, purpose, and contingent features of TVA's currency swaps and interest rate swaps. These swaps are classified as Level 2 valuations and are valued based on income approaches using observable market inputs for similar instruments.

Commodity Contract Derivatives and Commodity Derivatives Under FTP

Commodity Contract Derivatives. Most of these contracts are valued based on market approaches which utilize short- and mid-term market-quoted prices from an external industry brokerage service. A small number of these contracts are valued based on a pricing model using long-term price estimates from TVA's coal price forecast. To value the volume option component of applicable coal contracts, TVA uses a Black-Scholes pricing model which includes inputs from the forecast, contract-specific terms, and other market inputs. These contracts are classified as Level 3 valuations.

Commodity Derivatives Under FTP. These contracts are valued based on market approaches which utilize Chicago Mercantile Exchange ("CME") quoted prices and other observable inputs. 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.

See Note 12 — Derivatives Not Receiving Hedge Accounting Treatment — Commodity Derivatives and — Derivatives Under FTP for a discussion of the nature and purpose of coal contracts and derivatives under TVA's FTP.

Nonperformance Risk

The assessment of nonperformance risk, which includes credit risk, 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 currency swaps, interest rate swaps, commodity contracts, and other derivatives which subject TVA to nonperformance risk. Nonperformance risk on the majority of investments and certain exchange-traded instruments held by TVA is incorporated into the exit price that is derived from quoted market data that is used to mark the investment to market.

Nonperformance risk for most of TVA's derivative instruments is an adjustment to the initial asset/liability fair value. TVA adjusts for nonperformance risk, both of TVA (for liabilities) and the counterparty (for assets), by applying credit valuation adjustments ("CVAs"). 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 2015) for companies with a similar credit rating over a time period consistent with the remaining term of the contract. The application of CVAs resulted in a less than $1 million decrease in the fair value of assets and a $1 million decrease in the fair value of liabilities at March 31, 2016.

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Fair Value Measurements

The following tables set forth by level, within the fair value hierarchy, TVA's financial assets and liabilities that were measured at fair value on a recurring basis as of March 31, 2016, and September 30, 2015. Financial assets and liabilities have been classified in their entirety based on the lowest level of input that is significant to the fair value measurement. TVA's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the determination of the fair value of the assets and liabilities and their classification in the fair value hierarchy levels.

Fair Value Measurements
At March 31, 2016

Assets	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Investments				
Equity securities	$ 186	$ —	$ —	$186
Debt securities				
U.S. government corporations and agencies	89	50	—	139
Corporate debt securities	—	267	—	267
Residential mortgage-backed securities	—	13	—	13
Commercial mortgage-backed securities	—	8	—	8
Collateralized debt obligations	—	34	—	34
Institutional mutual funds	82	—	—	82
Forward debt securities contracts	—	—	—	—
Private partnerships measured at net asset value[1]	—	—	—	245
Commingled funds measured at net asset value[1]	—	—	—	1,109
Total investments	357	372	—	2,083
Currency swap(s) [2]	—	—	—	—
Commodity contract derivatives	—	4	—	4
Commodity derivatives under FTP[2]				
Swap contracts	—	—	—	—
Total	$ 357	$ 376	$ —	$2,087

Liabilities	Quoted Prices in Active Markets for Identical Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total

Currency swap(s) [2]	$ —	$ 77	$ —	$77
Interest rate swaps	—	1,800	—	1,800
Commodity contract derivatives	—	11	187	198
Commodity derivatives under FTP[2]				
Swap contracts	—	18	—	18
Total	$ —	$ 1,906	$ 187	$2,093

Notes
(1) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheets.
(2) Due to the right of setoff and method of settlement, TVA elects to record commodity derivatives under the FTP based on its net commodity position with the counterparty or FCM. Deposits are made to TVA's margin cash accounts held with each FCM to offset any net liability positions in full for derivatives that are transacted with FCMs. TVA records currency swaps net of cash collateral received from or paid to the counterparty, to the extent such amount is not recorded in Accounts payable and accrued liabilities. See Note 12 — Offsetting of Derivative Assets and Liabilities.

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Fair Value Measurements
At September 30, 2015

Assets	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Investments				
Equity securities	$ 166	$ —	$ —	$166
Debt securities				
U.S. government corporations and agencies	203	31	—	234
Corporate debt securities	—	225	—	225
Residential mortgage-backed securities	—	17	—	17
Commercial mortgage-backed securities	—	7	—	7
Collateralized debt obligations	—	29	—	29
Institutional mutual funds	91	—	—	91
Forward debt securities contracts	—	(59)	—	(59)
Private partnerships measured at net asset value[1]	—	—	—	240
Commingled funds measured at net asset value[1]	—	—	—	1,061
Total investments	460	250	—	2,011
Currency swap(s) [2]	—	25	—	25
Commodity contract derivatives	—	1	—	1
Commodity derivatives under FTP[2]				
Swap contracts	—	—	—	—
Total	$ 460	$ 276	$ —	$2,037

Liabilities	Quoted Prices in Active Markets for Identical Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Currency swap(s) [2]	$ —	$ 47	$ —	$47
Interest rate swaps	—	1,627	—	1,627
Commodity contract derivatives	—	—	98	98
Commodity derivatives under FTP[2]				
Swap contracts	—	27	—	27
Total	$ —	$ 1,701	$ 98	$1,799

Notes
(1) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheets.
(2) Due to the right of setoff and method of settlement, TVA elects to record commodity derivatives under the FTP based on its net commodity position with the counterparty or FCM. Deposits are made to TVA's margin cash accounts held with each FCM to offset any net liability positions in full for derivatives that are transacted with FCMs. TVA records currency swaps net of cash collateral received from or paid to the counterparty, to the extent such amount is not recorded in Accounts payable and accrued liabilities. See Note 12 — Offsetting of Derivative Assets and Liabilities.

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TVA uses internal valuation specialists for the calculation of its commodity contract derivatives fair value measurements classified as Level 3. Analytical testing is performed on the change in fair value measurements each period to ensure the valuation is reasonable based on changes in general market assumptions. Significant changes to the estimated data used for unobservable inputs, in isolation or combination, may result in significant variations to the fair value measurement reported.

The following table presents a reconciliation of all commodity contract derivatives measured at fair value on a recurring basis using significant unobservable inputs (Level 3):

Fair Value Measurements Using Significant Unobservable Inputs

	Commodity Contract Derivatives Three Months Ended March 31	Commodity Contract Derivatives Six Months Ended March 31
Balance at beginning of period	$(107)	$(85)
Purchases	—	—
Issuances	—	—
Sales	—	—
Settlements	—	—
Net unrealized gains (losses) deferred as regulatory assets and liabilities	(47)	(69)
Balance at March 31, 2015	$(154)	$(154)
Balance at beginning of period	$(123)	$(98)
Purchases	—	—
Issuances	—	—
Sales	—	—
Settlements	—	—
Net unrealized gains (losses) deferred as regulatory assets and liabilities	(64)	(89)
Balance at March 31, 2016	$(187)	$(187)

The following table presents quantitative information related to the significant unobservable inputs used in the measurement of fair value of TVA's assets and liabilities classified as Level 3 in the fair value hierarchy:

Quantitative Information about Level 3 Fair Value Measurements

	Fair Value at March 31 2016	Valuation Technique(s)	Unobservable Inputs	Range
Assets				
Commodity contract derivatives	$ —	Pricing model	Coal supply and demand	0.4 - 0.7 billion tons/year
			Long-term market prices	$9.45 - $76.25/ton
Liabilities				
Commodity contract derivatives	$ 187	Pricing model	Coal supply and demand	0.4 - 0.7 billion tons/year
			Long-term market prices	$9.45 - $76.25/ton

Quantitative Information about Level 3 Fair Value Measurements

	Fair Value at September 30 2015	Valuation Technique(s)	Unobservable Inputs	Range
Assets				
Commodity contract derivatives	$ —	Pricing model	Coal supply and demand	0.8 - 1.0 billion tons/year
			Long-term market prices	$10.64 - $103.41/ton
Liabilities				
Commodity contract derivatives	$ 98	Pricing model	Coal supply and demand	0.8 - 1.0 billion tons/year
			Long-term market prices	$10.64 - $103.41/ton

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Other Financial Instruments Not Recorded at Fair Value

TVA uses the methods and assumptions described below to estimate the fair value of each significant class of financial instrument. The fair values of the financial instruments held at March 31, 2016, and September 30, 2015, may not be representative of the actual gains or losses that will be recorded when these instruments mature or are called or presented for early redemption. The estimated fair values of TVA's financial instruments not recorded at fair value at March 31, 2016, and September 30, 2015, were as follows:

Estimated Values of Financial Instruments Not Recorded at Fair Value

		At March 31, 2016		At September 30, 2015	
	Valuation Classification	Carrying Amount	Fair Value	Carrying Amount	Fair Value
EnergyRight® receivables (including current portion)	Level 2	$151	$156	$156	$162
Loans and other long-term receivables, net (including current portion)	Level 2	$156	$144	$129	$117
EnergyRight® financing obligation (including current portion)	Level 2	$176	$198	$185	$208
Unfunded loan commitments	Level 2	$—	$16	$—	$9
Membership interest of variable interest entity subject to mandatory redemption (including current portion)	Level 2	$36	$47	$37	$47
Long-term outstanding power bonds (including current maturities), net	Level 2	$22,603	$27,375	$22,649	$25,468
Long-term debt of variable interest entities (including current maturities), net	Level 2	$1,250	$1,444	$1,266	$1,407

Due to the short-term maturity of Cash and cash equivalents, Restricted cash and investments, and Short-term debt, net (each considered a Level 1 valuation classification), the carrying amounts of these instruments approximate their fair values.

The fair value for loans and other long-term receivables is estimated by determining the present value of future cash flows using a discount rate equal to lending rates for similar loans made to borrowers with similar credit ratings and for similar remaining maturities, where applicable.

The fair value of long-term debt traded in the public market is determined by multiplying the par value of the debt by the indicative market price at the balance sheet date. The fair value of other long-term debt and membership interests of variable interest entity subject to mandatory redemption is estimated by determining the present value of future cash flows using current market rates for similar obligations, giving effect to credit ratings and remaining maturities.

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14. Other Income (Expense), Net

Income and expenses not related to TVA's operating activities are summarized in the following table:

Other Income (Expense), Net

	Three Months Ended March 31		Six Months Ended March 31	
	2016	2015	2016	2015
External services	$3	$ 3	$7	$6
Interest income	6	6	12	12
Gains (losses) on investments	—	2	3	3
Miscellaneous	(1)	(3)	(2)	(4)
Total other income (expense), net	$8	$ 8	$20	$17

15. Benefit Plans

TVA sponsors a qualified defined benefit pension plan (the "Plan") that covers most of its full-time employees hired before July 1, 2014, a qualified defined contribution plan that covers most of its full-time employees, two unfunded post-retirement health care plans that provide for non-vested contributions toward the cost of eligible retirees' medical coverage, other postemployment benefits, such as workers' compensation, and the SERP.

The components of net periodic benefit cost and other amounts recognized as changes in regulatory assets for the three and six months ended March 31, 2016, and 2015, were as follows:

Components of TVA's Benefit Plans

	For the Three Months Ended March 31				For the Six Months Ended March 31			
	Pension Benefits		Other Post-Retirement Benefits		Pension Benefits		Other Post-Retirement Benefits	
	2016	2015	2016	2015	2016	2015	2016	2015
Service cost	$34	$31	$ 4	$ 3	$66	$65	$ 8	$ 8
Interest cost	142	137	8	7	282	270	15	15
Expected return on plan assets	(112)	(109)	—	—	(223)	(218)	—	—
Amortization of prior service credit	(5)	(6)	(2)	(1)	(11)	(11)	(3)	(3)
Recognized net actuarial loss	82	81	1	2	155	150	3	4
Total net periodic benefit cost as actuarially determined	141	134	11	11	269	256	23	24
Amount capitalized due to actions of regulator	(71)	(63)	—	—	(129)	(114)	—	—
Total net periodic benefit cost	$70	$71	$ 11	$ 11	$140	$142	$ 23	$ 24

TVA contributes to the Plan such amounts as are necessary on an actuarial basis to provide the Plan with assets sufficient to meet TVA-funded benefit obligations to be paid to members. TVA contributed $275 million to the Plan in 2015 and expects to contribute the same amount in 2016. As of March 31, 2016, TVA had contributed $138 million to the Plan and expects to contribute the remaining $137 million by September 30, 2016. TVA does not separately set aside assets to fund other benefit costs, but rather funds such costs on an as-paid basis. For the six months ended March 31, 2016, TVA provided approximately $21 million, net of rebates and subsidies, to other post-retirement benefit plans and approximately $6 million to the SERP. For the six months ended March 31, 2015, TVA provided approximately $21 million, net of rebates and subsidies, to other post-retirement benefit plans and approximately $7 million to the SERP. TVA includes its cash contributions to the pension plan in the rate-making formula; accordingly,

TVA recognizes pension costs as regulatory assets to the extent that the amount calculated under GAAP as pension expense differs from the amount TVA contributes to the pension plan.

16. Contingencies and Legal Proceedings

Contingencies

Nuclear Insurance. The Price-Anderson Act provides a layered framework of protection to compensate for losses arising from a nuclear event in the United States. For the first layer, all of the NRC nuclear plant licensees, including TVA, purchase $375 million of nuclear liability insurance from American Nuclear Insurers for each plant with an operating license. Funds for the second layer, the Secondary Financial Program, would come from an assessment of up to $127 million

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from the licensees of each of the 103 NRC licensed reactors in the United States. The assessment for any nuclear accident would be limited to $19 million per year per unit. American Nuclear Insurers, under a contract with the NRC, administers the Secondary Financial Program. With its seven licensed units, TVA could be required to pay a maximum of $891 million per nuclear incident, but it would have to pay no more than $133 million per incident in any one year. When the contributions of the nuclear plant licensees are added to the insurance proceeds of $375 million, over $13.0 billion, including a five percent surcharge for legal expenses, would be available. Under the Price-Anderson Act, if the first two layers are exhausted, the U.S. Congress is required to take action to provide additional funds to cover the additional losses.

TVA carries property, decommissioning, and decontamination insurance of $5.1 billion for its licensed nuclear plants, with up to $2.1 billion available for a loss at any one site, to cover the cost of stabilizing or shutting down a reactor after an accident. Some of this insurance, which is purchased from Nuclear Electric Insurance Limited ("NEIL"), may require the payment of retrospective premiums up to a maximum of approximately $127 million.

TVA purchases accidental outage (business interruption) insurance for TVA’s nuclear sites from NEIL. In the event that an accident covered by this policy takes a nuclear unit offline or keeps a nuclear unit offline, NEIL will pay TVA, after a waiting period, an indemnity (a set dollar amount per week) up to a maximum indemnity of $490 million per unit. This insurance policy may require the payment of retrospective premiums up to a maximum of approximately $36 million.

Decommissioning Costs. TVA recognizes legal obligations associated with the future retirement of certain tangible long-lived assets related primarily to coal-fired generating plants and nuclear generating plants, hydroelectric generating plants/dams, transmission structures, and other property-related assets. See Note 9.

Nuclear Decommissioning. Provision for decommissioning costs of nuclear generating units is based on options prescribed by the NRC procedures to dismantle and decontaminate the facilities to meet the NRC criteria for license termination. At March 31, 2016, the present value of the estimated future decommissioning cost of $2.2 billion was included in AROs. The actual decommissioning costs may vary from the derived estimates because of, among other things, changes in current assumptions, such as the assumed dates of decommissioning, changes in regulatory requirements, changes in technology, and changes in the cost of labor, materials, and equipment. Utilities that own and operate nuclear plants are required to use different procedures in calculating nuclear decommissioning costs under GAAP than those that are used in calculating nuclear decommissioning costs when reporting to the NRC. The two sets of procedures produce different estimates for the costs of decommissioning primarily because of the difference in the discount rates used to calculate the present value of decommissioning costs.

TVA maintains a NDT to provide funding for the ultimate decommissioning of its nuclear power plants. See Note 13. TVA monitors the value of its NDT and believes that, over the long term and before cessation of nuclear plant operations and commencement of decommissioning activities, adequate funds from investments will be available to support decommissioning. TVA’s operating nuclear power units are licensed through 2033 - 2055, depending on the unit. It may be possible to extend the operating life of some of the units with approval from the NRC.

Non-Nuclear Decommissioning. The present value of the estimated future non-nuclear decommissioning ARO was $1.6 billion at March 31, 2016. This decommissioning cost estimate involves estimating the amount and timing of future expenditures and making judgments concerning whether or not such costs are considered a legal obligation. Estimating the amount and timing of future expenditures includes, among other things, making projections of the timing and duration of the asset retirement process and how costs will escalate with inflation. The actual decommissioning costs may vary from the derived estimates because of changes in current assumptions, such as the assumed dates of decommissioning, changes in regulatory requirements, changes in technology, and changes in the cost of labor, materials, and equipment.

TVA maintains an ART to help fund the ultimate decommissioning of its power assets. See Note 13. Estimates involved in determining if additional funding will be made to the ART include inflation rate and rate of return projections on the fund investments.

Environmental Matters. TVA's power generation activities, like those across the utility industry and in other industrial sectors, are subject to most federal, state, and local environmental laws and regulations. Major areas of regulation affecting TVA's activities include air quality control, water quality control, and management and disposal of solid and hazardous wastes. In the future, regulations in all of these areas are expected to become more stringent. Regulations are also expected to apply to new emissions and sources, with a particular emphasis on climate change, renewable generation, and energy efficiency.

TVA has incurred, and expects to continue to incur, substantial capital and operating and maintenance costs to comply with evolving environmental requirements primarily associated with, but not limited to, the operation of TVA's coal-fired generating units. It is virtually certain that environmental requirements placed on the operation of TVA's coal-fired and other generating units will continue to become more restrictive and potentially apply to new emissions and sources. Litigation over emissions or discharges from coal-fired generating units is also occurring, including litigation against TVA. Failure to comply with environmental and safety laws can result in TVA being subject to enforcement actions, which can lead to the imposition of significant civil liability, including fines and penalties, criminal sanctions, and/or the shutting down of non-compliant facilities.

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TVA estimates that compliance with future Clean Air Act ("CAA") requirements (excluding greenhouse gas ("GHG") requirements) could lead to additional costs of approximately $480 million from 2016 to 2025 for additional clean air controls. There could be additional material costs if reductions of GHGs, including carbon dioxide ("CO_2"), are mandated under the CAA or by legislation or regulation, or if future legislative, regulatory, or judicial actions lead to more stringent emission reduction requirements for conventional pollutants. These costs cannot reasonably be predicted at this time because of the uncertainty of such potential actions.

Liability for releases and cleanup of hazardous substances is primarily regulated by the federal Comprehensive Environmental Response, Compensation, and Liability Act, and other federal and parallel state statutes. In a manner similar to many other industries and power systems, TVA has generated or used hazardous substances over the years.

TVA is aware of alleged hazardous-substance releases at certain non-TVA areas in connection with which other potentially responsible parties may seek monetary damages from TVA. There is information indicating that TVA sent a small amount of equipment to Ward Transformer ("Ward"), a non-TVA site in Raleigh, North Carolina. The site is contaminated by PCBs from electrical equipment due to Ward’s practice of draining such equipment. A working group of potentially responsible parties is cleaning up on-site contamination in accordance with an agreement with the EPA. The cleanup effort has been divided into multiple phases, including on-site and downstream cleanup activities, two phases of soil cleanup, supplemental groundwater remediation, and cleanup of off-site contamination in the downstream drainage basin. TVA settled its potential liability for the on-site removal action for $300 thousand and has agreed to pay approximately $8 thousand to settle its potential liability in connection with an EPA study of the site. TVA believes that its liability for the remaining cleanup and remediation activities as well as any natural resource damages will be less than $1 million.

TVA operations at some TVA facilities have resulted in contamination that TVA is addressing. At March 31, 2016, TVA’s estimated liability for cleanup and similar environmental work for those sites for which sufficient information is available to develop a cost estimate (primarily the TVA sites) was approximately $22 million on a non-discounted basis, and was included in Accounts payable and accrued liabilities and Other long-term liabilities on the March 31, 2016 Consolidated Balance Sheet.

In November 2015, TDEC informed TVA that it agreed that TVA had complied with all the requirements of the orders issued by TDEC after the December 22, 2008 ash spill at the Kingston Fossil Plant. This closes all TDEC orders related to the ash spill. TVA has requested that the EPA close its CERCLA order related to the spill, but the order currently remains open.

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 a catastrophic event or otherwise.

General. At March 31, 2016, TVA had accrued $89 million of probable losses with respect to Legal Proceedings. Of the accrued amount, $34 million is included in Other long-term liabilities and $55 million is included in Accounts payable and accrued liabilities. TVA is currently unable to estimate any amount or any range of amounts of reasonably possible losses, and 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.

Environmental Agreements. In April 2011, TVA entered into two substantively similar agreements, a Federal Facilities Compliance Agreement with the EPA and a consent decree with Alabama, Kentucky, North Carolina, Tennessee, and three environmental advocacy groups: the Sierra Club, National Parks Conservation Association, and Our Children's Earth Foundation (collectively, the "Environmental Agreements"). They became effective in June 2011. Under the Environmental Agreements, TVA committed to (1) retire on a phased schedule 18 coal-fired units with a combined summer net dependable capability of 2,200 MW, (2) control, convert, or retire additional coal-fired units with a combined summer net dependable capability of 3,500 MW, (3) comply with annual, declining emission caps for sulfur dioxide ("SO_2") and nitrogen oxide ("NO_x"), (4) invest $290 million in certain TVA environmental projects, (5) provide $60 million to Alabama, Kentucky, North Carolina, and Tennessee to fund environmental projects, and (6) pay civil penalties of $10 million. In exchange for these commitments, most existing and possible claims against TVA based on alleged New Source Review and associated violations were waived and cannot be brought against TVA. Some possible claims for sulfuric acid mist and GHG emissions can still be brought against TVA, and claims for increases in particulates can also be pursued at many of TVA’s coal-fired units. Additionally, the Environmental Agreements do not address compliance with new laws and regulations or the cost associated with such compliance.

Case Involving Tennessee Valley Authority Retirement System. In March 2010, eight current and former participants in and beneficiaries of TVARS filed suit in the United States District Court for the Middle District of Tennessee challenging the TVARS Board's 2009 decision to make changes to the TVARS Rules and Regulations (“Rules”) in exchange for a $1 billion contribution from TVA. The changes approved by the TVARS Board (1) suspended the TVA contribution requirements for 2010 through 2013, (2) reduced the calculation for COLA benefits for CY 2010 through CY 2013, (3) reduced the interest crediting rate for the fixed fund accounts, and (4) increased the eligibility age to receive COLAs from age 55 to 60. The plaintiffs alleged that

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these changes violated their constitutional rights (due process, equal protection, and property rights), violated the Administrative Procedure Act, and breached statutory duties owed to the plaintiffs. TVA and the plaintiffs filed cross motions for summary judgment. In August 2015, the court granted TVA's motion for summary judgment and dismissed the case with prejudice. In September 2015, the plaintiffs appealed this decision to the United States Court of Appeals for the Sixth Circuit (the "Sixth Circuit"). The time period for the plaintiffs to appeal the Sixth Circuit's decision has expired, so the proceeding has now ended.

Cases Involving Gallatin Fossil Plant CCR Facilities. In January 2015, the State of Tennessee filed a lawsuit against TVA in the Chancery Court for Davidson County, Tennessee. The lawsuit alleges that waste materials have been released into waters of the state from coal combustion residual ("CCR") facilities at Gallatin Fossil Plant ("Gallatin") in violation of the Tennessee Water Quality Control Act and the Tennessee Solid Waste Disposal Act. TDEC is seeking injunctive relief as well as civil penalties of up to $17,000 per day for each day TVA is found to have violated the statutes. In February 2015, the court issued an order allowing the Tennessee Scenic Rivers Association ("TSRA") and the Tennessee Clean Water Network ("TCWN") to intervene in the case. In January 2016, the court issued an agreed temporary injunction proposed by the State of Tennessee and TVA requiring TVA to conduct further environmental studies at Gallatin to determine the extent of soil, surface water, and groundwater contamination by CCR material at the site and to support the development of any necessary corrective action plan in cooperation with the other parties. Pursuant to the injunction, TVA submitted an Environmental Investigation Plan to the State of Tennessee on March 18, 2016.

In April 2015, TSRA and TCWN filed a separate lawsuit against TVA in the United States District Court for the Middle District of Tennessee alleging that waste materials have been released into the Cumberland River from CCR facilities at Gallatin in violation of the Clean Water Act. The plaintiffs are seeking injunctive relief and civil penalties of up to $37,500 per violation per day. In June 2015, TVA filed a motion to dismiss the majority of the claims in the federal case based on the State of Tennessee's diligent prosecution of substantially overlapping claims in its state court action. Since then, TVA has filed several other motions seeking to dismiss all claims in the case on other bases as well. These motions remain pending.

Case Involving the NRC Waste Confidence Decision on Spent Nuclear Fuel Storage. In June 2012, the U.S. Court of Appeals for the District of Columbia Circuit ("D.C. Circuit") vacated the NRC's updated Waste Confidence Decision ("WCD"). The WCD is a generic determination by the NRC that spent nuclear fuel can be safely managed until a permanent off-site repository is established; this determination has been a key component of NRC licensing activities since 1984. In August 2014, the NRC issued its final rule on continued storage of spent nuclear fuel (the "Continued Storage Rule"), which replaced the WCD. Several petitions for review were filed in October 2014 in the D.C. Circuit challenging the Continued Storage Rule.

Administrative Proceeding Regarding Renewal of Operating License for Sequoyah Nuclear Plant. In May 2013, the Blue Ridge Environmental Defense League ("BREDL"), the Bellefonte Efficiency and Sustainability Team ("BEST"), and Mothers Against Tennessee River Radiation filed a petition with the NRC opposing the renewal of the operating license for Sequoyah Units 1 and 2. The petition contained eight specific contentions challenging the adequacy of the license renewal application that TVA submitted to the NRC in January 2013. TVA filed a response with the Atomic Safety and Licensing Board ("ASLB") opposing the admission of all eight of the petitioners' contentions. In July 2013, the ASLB concluded that BREDL was the only one of the three petitioners that had standing to intervene in this proceeding. The ASLB also held that seven of the contentions were inadmissible, and held one portion of the remaining contention related to the WCD in abeyance pending further direction from the NRC. In September 2014, the ASLB denied BREDL's contention related to the WCD. Following the publication of the Continued Storage Rule, BREDL filed a petition with the NRC seeking suspension of the issuance of a final decision in the Sequoyah proceeding and a motion with the ASLB seeking leave to file a new, late-filed contention related to the Continued Storage Rule. The NRC rejected this petition in February 2015. See Case Involving the NRC Waste Confidence

Decision on Spent Nuclear Fuel Storage. With the NRC’s rejection of the final pending contention, the ASLB issued an order terminating the administrative proceeding in March 2015. In April 2015, BREDL filed motions with the NRC to reopen the record and to admit a new contention arguing that the environmental impact statement for Sequoyah must incorporate by reference the generic environmental impact statement released in connection with the Continued Storage Rule. The NRC rejected these motions in June 2015. In August 2015, BREDL asked the D.C. Circuit to review the NRC's decision after the court issues a decision on BREDL's petition for review challenging the Continued Storage Rule. The NRC issued the license renewal of the facility operating licenses for both units effective September 28, 2015.

Administrative Proceedings Regarding Bellefonte Units 3 and 4. TVA submitted its combined construction and operating license ("COL") application for two Advanced Passive 1000 reactors at Bellefonte Nuclear Plant ("Bellefonte") Units 3 and 4 to the NRC in October 2007. In June 2008, BEST, BREDL, and Southern Alliance for Clean Energy ("SACE") submitted a joint petition for intervention and a request for a hearing. The ASLB denied standing to BEST and admitted four of the 20 contentions submitted by BREDL and SACE. The NRC reversed the ASLB's decision to admit two of the four contentions, leaving only two contentions (concerning the estimated costs of the new nuclear plant and the impact of the facility's operations on aquatic ecology) to be litigated in a future hearing. In January 2012, TVA notified the ASLB that the NRC had placed the COL in “suspended” status indefinitely at TVA's request, and TVA requested that the ASLB hold the proceeding in abeyance pending a decision by TVA regarding the best path forward with regards to the COL. In April 2012, the ASLB issued an order maintaining the proceeding in "active" status, but amending the disclosure schedule. The ASLB again modified the disclosure schedule in December 2015. In February 2016, TVA filed a motion with the ASLB to withdraw its COL application for Bellefonte Units 3 and 4. On February 29, 2016, the ASLB granted TVA’s motion and terminated the proceeding. On March 28, 2016, TVA requested that the NRC remove the COL application from the docket.

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Administrative Proceedings Regarding Watts Bar Unit 2. In October 2015, the NRC issued the operating license for Watts Bar Unit 2. In November 2015, SACE filed a petition in the D.C. Circuit seeking review of the issuance of the operating license for Watts Bar Unit 2. TVA moved to intervene in the proceeding in December 2015. The case has been held in abeyance while the D.C. Circuit resolves the ongoing challenge to the Continued Storage Rule.

National Environmental Policy Act Challenge at Paradise Fossil Plant. To comply with the EPA's Mercury and Air Toxics Standards, TVA chose to retire two coal-fired units at Paradise Fossil Plant and replace them with natural gas generation. Prior to making this decision, TVA completed an Environmental Assessment in November 2013 under the National Environmental Policy Act ("NEPA"). In July 2014, the Kentucky Coal Association and several individuals filed suit in the United States District Court for the Western District of Kentucky alleging that TVA violated NEPA and the Energy Policy Act of 1992 in deciding to switch to natural gas generation. The plaintiffs demanded that TVA prepare an Environmental Impact Statement and asked the court to preliminarily enjoin TVA from taking any further action relating to these matters pending compliance with NEPA. The court denied the plaintiffs' motion for a preliminary injunction in December 2014 and dismissed the case in February 2015. In March 2015, the plaintiffs appealed the court's decision to the Sixth Circuit, and in October 2015, the Sixth Circuit affirmed the court's decision.

Kingston Fossil Plant NPDES Permit Administrative Appeal. The Sierra Club filed a challenge to the National Pollutant Discharge Elimination System ("NPDES") permit issued by Tennessee for the scrubber-gypsum impoundment discharge at Kingston in November 2009 before the Tennessee Board of Water Quality, Oil and Gas ("TN Board"). TDEC is the defendant in the challenge, and TVA has intervened in support of TDEC's decision to issue the permit.

Bull Run Fossil Plant NPDES Permit Administrative Appeal. SACE and the TCWN filed a challenge to the NPDES permit for the Bull Run Fossil Plant in November 2010. TDEC is the defendant in the challenge, and TVA's motion to intervene to support TDEC's decision to issue the permit was granted in January 2011. At the contested case hearing in October 2013, the TN Board granted TDEC's and TVA's joint motion for involuntary dismissal following the conclusion of the petitioners' presentation of evidence. In December 2013, TCWN and SACE filed a petition for review of the TN Board's decision in the Chancery Court for Davidson County, Tennessee. In March 2015, the court issued a final order affirming the TN Board's decision, and the petitioners subsequently appealed the court's decision to the Tennessee Court of Appeals. The appeal has been fully briefed, and the parties have agreed to forego oral argument; accordingly, a decision could be issued any time.

Gallatin Fossil Plant NPDES Permit Administrative Appeal. SACE, TCWN, and the Sierra Club filed a challenge to the NPDES permit for Gallatin in June 2012. TDEC is the defendant in the challenge. TVA's motion to intervene was granted in September 2012. Following discovery, SACE, TCWN, and the Sierra Club voluntarily dismissed seven of the eight claims asserted in their petition. TVA moved to dismiss the remaining claim, and the Administrative Law Judge ("ALJ") assigned to the matter granted TVA's motion and dismissed the case. On November 7, 2014, SACE, TWCN, and the Sierra Club filed a petition for review of the ALJ's dismissal in the Chancery Court for Davidson County, Tennessee. In February 2015, the court issued a final order affirming that the Gallatin NPDES permit was lawfully issued. In March 2015, the petitioners appealed the court's decision to the Tennessee Court of Appeals. The appeal has been fully briefed, and the parties have agreed to forego oral argument; accordingly, a decision could be issued any time.

Bull Run Fossil Plant Clean Air Act Permit. In September 2015, the Sierra Club and Environmental Integrity Project filed a petition with the EPA requesting that the EPA object to the CAA renewal permit issued by TDEC to TVA for operations at Bull Run. The petitioners allege that the permit contains impermissibly lax monitoring requirements for opacity. In February 2016, the petitioners sued the EPA for not responding to the petition in a timely manner.

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ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS
(Dollars in millions except where noted)

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") explains the results of operations and general financial condition of the Tennessee Valley Authority ("TVA"). The MD&A should be read in conjunction with the accompanying unaudited consolidated financial statements and TVA's Annual Report on Form 10-K for the fiscal year ended September 30, 2015 (the "Annual Report").

Executive Overview

TVA's net income for the three months and six months ended March 31, 2016, was $318 million and $281 million, respectively, as compared with net income of $496 million and $577 million for the same periods of 2015. TVA's service territory experienced an extremely mild winter in 2016 compared to significantly colder weather in the prior year. Degree days during the six months ended March 31, 2016, were approximately twenty percent less than normal while degree days during the same period of the prior year were ten percent above normal. As a result, energy sales were approximately six and seven percent lower and total operating revenues were approximately ten and eight percent lower during the three months and six months ended March 31, 2016, respectively, as compared to the same periods of the prior year.

Total operating expenses decreased slightly during the three months and six months ended March 31, 2016, as compared to the same period of the prior year primarily due to lower fuel and purchased power expense as a result of lower natural gas prices, decreased demand, and a change in TVA's generation mix. Operating and maintenance expense increased slightly during the three months and six months ended March 31, 2016, as compared to same period of the prior year primarily due to the timing and duration of nuclear outages, other projects, including the remediation of Boone Dam, and inventory write-offs. For a more detailed discussion related to revenues and expenses, see Results of Operations.

TVA continues to support its goal of having a diversified, cleaner portfolio and responding to changing regulatory requirements including environmental regulations. Four coal-fired units at Colbert Fossil Plant ("Colbert") were removed from service in March 2016 while construction is underway on new combined cycle natural-gas units at the Allen Fossil Plant ("Allen") and Paradise Fossil Plant ("Paradise") sites and the installation of emission controls at the Gallatin Fossil Plant ("Gallatin"). The Watts Bar Nuclear Plant ("Watts Bar") Unit 2 reactor is expected to reach initial criticality in May 2016 with commercial operation in summer 2016 at a total estimated project cost of $4.7 billion. These initiatives are expected to provide more flexibility to meet demand under a variety of future scenarios. TVA continues to review the Clean Power Plan, and these actions, in conjunction with other initiatives already undertaken by TVA, have positioned TVA well in regards to carbon emission reductions.

As the amount of distributed generation grows and technologies around renewable generation, energy storage, and energy efficiency improve and become more cost effective, TVA is projecting that demand for electricity will see little if any growth in the upcoming years. Under TVA's 2015 Integrated Resource Plan, it may be two decades before additional large baseload generation sources are needed. Because of these factors, TVA is beginning to explore options for repurposing its Bellefonte Nuclear Plant ("Bellefonte") site, including options contributing towards TVA's mission of economic development in the Tennessee Valley.

TVA's mission of environmental stewardship includes flood control, and TVA personnel worked to avert millions of dollars of damage in the Tennessee Valley after record-breaking rainfall experienced earlier this year. TVA also coordinated with the U.S. Army Corps of Engineers to reduce impacts on the Ohio and Mississippi Rivers by the coordinated use of TVA's system of dams to control the water. TVA continues its work around flooding preparedness

and dam safety initiatives, including remediation efforts at Boone Dam.

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Results of Operations

Sales of Electricity

The following tables compare TVA’s energy sales for the three and six months ended March 31, 2016, and 2015:

Sales of Electricity (millions of kWh)		Sales of Electricity (millions of kWh)	

TVA uses degree days to measure the impact of weather on its power operations since weather affects both demand and market prices for electricity. Degree days measure the extent to which average temperatures in the five largest cities in TVA's service area vary from 65 degrees Fahrenheit.

Notes
* Normal heating degree days for the three and six months ended March 31, 2016, were 1,833 and 3,136, respectively. Normal heating degree days for the three and six months ended March 31, 2015, were 1,812 and 3,115, respectively. This calculation is updated every five years in order to incorporate data for the then most recent 30 years. It was last updated in 2011. The 2016 Normal Heating Degree days differ from 2015 due to the occurrence of a leap year in 2016.
** Normal cooling degree days for the three and six months ended March 31, 2016 and 2015, were 12 and 79, respectively. This calculation is updated every five years in order to incorporate data for the then most recent 30 years. It was last updated in 2011.

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Sales of electricity decreased 2.3 billion kilowatt hours ("kWh") for the three months ended March 31, 2016, as compared to the same period of the prior year, primarily due to decreased sales volume for LPCs resulting from a 19 percent decrease in heating degree days. Additionally, a decrease in sales to federal agencies and other occurred primarily as a result of a decrease in off-system sales, as TVA had less excess generation available for sale to the market as compared to the same period of the prior year. Partially offsetting these decreases was an increase in sales to industries directly served as a result of increased demand from two customers increasing production at their facilities.

Sales of electricity decreased 5.4 billion kWh for the six months ended March 31, 2016, as compared to the same period of the prior year, primarily due to decreased sales volume for LPCs resulting from a 28 percent decrease in heating degree days. Additionally, a decrease in sales to industries directly served occurred as a result of economic conditions affecting certain customers. Partially offsetting these decreases was an increase in sales to federal agencies and other, primarily from an increase in sales to a single federal agency.

Financial Results

The following table compares operating results for the three and six months ended March 31, 2016, and 2015:
Summary Consolidated Statements of Operations

	Three Months Ended March 31			Six Months Ended March 31		
	2016	2015	Percent Change	2016	2015	Percent Change
Operating revenues	$2,571	$2,863	(10.2)%	$4,851	$5,274	(8.0)%
Operating expenses	1,982	2,087	(5.0)%	4,034	4,134	(2.4)%
Operating income	589	776	(24.1)%	817	1,140	(28.3)%
Other income, net	8	8	—%	20	17	17.6%
Interest expense, net	279	288	(3.1)%	556	580	(4.1)%
Net income (loss)	$318	$496	(35.9)%	$281	$577	(51.3)%

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Operating Revenues. Operating revenues for the three and six months ended March 31, 2016, and 2015, consisted of the following:

The rate structures provide 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 these structures, weather can positively or negatively impact both volume and effective rates. 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 structures also include 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.

Operating revenues decreased $292 million and $423 million for the three and six months ended March 31, 2016, compared to the three and six months ended March 31, 2015, due to the following:

	Three Month Change	Six Month Change
Base revenue	$ (145)	$ (212)
Fuel cost recovery	(147)	(210)
Off-system sales	(4)	(3)
Other revenue	4	2
Total	$ (292)	$ (423)

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Operating revenues decreased $292 million for the three months ended March 31, 2016, as compared to the same period of the prior year, primarily due to a $145 million decrease in base revenue and a $147 million decrease in fuel cost recovery revenues. The $145 million decrease in base revenue was predominantly driven by a decrease of $120 million resulting from lower sales volume and a decrease of $25 million attributable to a decrease in effective rates. The $25 million decrease attributable to effective rates was driven primarily by lower levels of peak customer usage due to the milder weather experienced during the three months ended March 31, 2016, as compared to the same period of the prior year. The effect of the rate adjustment that became effective October 1, 2015 partially offset the impact caused by the milder weather. The $147 million decrease in fuel cost recovery reflects a $102 million decrease attributable to lower fuel rates and a $45 million decrease attributable to lower energy sales. The lower fuel rates experienced were primarily driven by favorable market prices for natural gas and a change in the mix of generation resources.

Operating revenues decreased $423 million for the six months ended March 31, 2016, as compared to the same period of the prior year, primarily due to a $212 million decrease in base revenue and a $210 million decrease in fuel cost recovery revenues. The $212 million decrease in base revenue was predominantly driven by a decrease of $263 million resulting from lower sales volume which was partially offset by an increase of $51 million attributable to an increase in effective rates resulting primarily from the rate adjustment that became effective October 1, 2015. The increase attributable to the rate adjustment was partially offset by lower levels of peak customer usage due to the milder weather experienced during the six months ended March 31, 2016, as compared to the same period of the prior year. The $210 million decrease in fuel cost recovery reflects a $102 million decrease attributable to lower fuel rates and a $108 million decrease attributable to lower energy sales. The lower fuel rates experienced were primarily driven by favorable market prices for natural gas and a change in the mix of generation resources.

Operating Expenses. Operating expenses for the three and six months ended March 31, 2016, and 2015, consisted of the following:

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

Power Supply from TVA-Owned Generation
Facilities and Purchased Power
Three Months Ended March 31
(millions of kWh)
Notes
(1) TVA's net generation and purchased power totaled 39,744 million kWh and 42,014 million kWh for the three months ended March 31, 2016 and March 31, 2015, respectively.
(2) Renewable resources (non-hydro) is less than 1% for all periods shown, and therefore is not represented on the chart above.
(3) Purchased power amounts include generation from Caledonia Combined-Cycle Gas Plant, which is currently a leased facility operated by TVA. Generation from Caledonia Combined-Cycle Gas Plant was 1,013 million kWh and 889 million kWh for the three months ended March 31, 2016 and March 31, 2015, respectively.

Power Supply from TVA-Owned Generation
Facilities and Purchased Power
Six Months Ended March 31
(millions of kWh)
Notes
(1) TVA's net generation and purchased power totaled 74,615 million kWh and 79,867 million kWh for the six months ended March 31, 2016 and March 31, 2015, respectively.
(2) Renewable resources (non-hydro) is less than 1% for all periods shown, and therefore is not represented on the chart above.
(3) Purchased power amounts include generation from Caledonia Combined-Cycle Gas Plant, which is currently a leased facility operated by TVA. Generation from Caledonia Combined-Cycle Gas Plant was 1,827 million kWh and 1,485 million kWh for the six months ended March 31, 2016 and March 31, 2015, respectively.

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Three Months Ended March 31, 2016, Compared to Three Months Ended March 31, 2015

Fuel expense decreased $102 million for the three months ended March 31, 2016, as compared to the same period of the prior year. This decrease was primarily due to favorable market prices for natural gas and a change in the mix of generation resources, which contributed approximately $63 million to the decrease. As an indication of general market direction, the average Henry Hub natural gas spot price for the three months ended March 31, 2016, was approximately 31 percent lower than the prior year. Additionally, a decrease of six percent in sales of electricity contributed approximately $41 million to the decrease in fuel expense.

Purchased power expense decreased $22 million for the three months ended March 31, 2016, as compared to the same period of the prior year. Lower market prices for natural gas for the three months ended March 31, 2016, as compared to the same period of the prior year contributed approximately $29 million to the decrease in purchased power expense. A two percent increase in the volume of power purchased partially offset this decrease in purchased power expense, contributing approximately $7 million. The increase in volume was driven by more purchases of lower cost hydroelectric generation during the three months ended March 31, 2016, as compared to the three months ended March 31, 2015.

Operating and maintenance expense increased $12 million for the three months ended March 31, 2016, compared with the same period of the prior year. This increase was primarily attributable to a $20 million increase in inventory and project write-offs during the three months ended March 31, 2016, as compared with the same period of the prior year. This increase was partially offset by a $5 million decrease in fuel-related operating and maintenance expense primarily attributable to lower coal generation during the three months ended March 31, 2016, as compared to the same period of the prior year.

Depreciation and amortization expense increased $11 million for the three months ended March 31, 2016, as compared to the same period of the prior year. The increase was primarily a result of an increase of $25 million in the amortization of the non-nuclear decommissioning regulatory asset, as well as net additions to Completed plant. Partially offsetting this increase was a $21 million decrease in depreciation and amortization expense related to the 20-year license extension for Sequoyah Nuclear Plant ("Sequoyah"), as well as a decrease related to the retirement of Widows Creek Unit 7 on September 30, 2015.

Tax equivalents expense decreased $4 million for the three months ended March 31, 2016, 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 three months ended March 31, 2016, as compared to the same period of the prior year.

Six Months Ended March 31, 2016, Compared to Six Months Ended March 31, 2015

Fuel expense decreased $172 million for the six months ended March 31, 2016, as compared to the same period of the prior year. The decrease in fuel expense was due in part to favorable market prices for natural gas and a change in the mix of generation resources, which contributed approximately $108 million to the decrease. As an indication of general market direction, the average Henry Hub natural gas spot price for the six months ended March 31, 2016, was approximately 39 percent lower than the prior year. Additionally, a seven percent decrease in the sales of electricity contributed approximately $96 million to the decrease in fuel expense. Partially offsetting these decreases was an increase in fuel expense driven by the timing of collections of fluctuations in fuel costs during the six months ended March 31, 2016, as compared to the same period of the prior year, which accounted for a $32 million increase.

Purchased power expense decreased $8 million for the six months ended March 31, 2016, as compared to the same period of the prior year. Lower market prices for natural gas for the six months ended March 31, 2016, as compared to the same period of the prior year contributed approximately $43 million to the decrease in purchased power expense. Partially offsetting this decrease was a $23 million increase in purchased power expense due to an increase of four percent in the volume of power purchased. The increase in volume was driven by more nuclear outages in the six months ended March 31, 2016, as compared to the six months ended March 31, 2015, and by the favorability of natural gas prices as compared to other sources of generation, as TVA's primary source of purchased power is natural gas-fired generation. Also offsetting the decrease in purchased power expense was the timing of collections of fluctuations in fuel costs, which accounted for approximately $12 million of the increase.

Operating and maintenance expense increased $64 million for the six months ended March 31, 2016, compared with the same period of the prior year. This increase was partially attributable to a $16 million increase in expenses related to planned outages primarily due to an increase in the number of planned nuclear outage days during the six months ended March 31, 2016, as compared with the same period of the prior year. In addition, expenses related to major projects, including dam safety and remediation projects, increased $19 million during the six months ended March 31, 2016, as compared with the same period of the prior year. See Key Initiatives and Challenges — Dam Safety and Remediation Initiatives. Additionally, a $32 million increase in inventory and project write-offs contributed to the increase in operating and maintenance expense during the six months ended March 31, 2016, as compared with the same period of the prior year. These increases were partially offset by a $7 million decrease in fuel-related operating and maintenance expense primarily attributable to lower coal generation during the six months ended March 31, 2016, as compared to the same period of the prior year.

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Depreciation and amortization expense increased $20 million for the six months ended March 31, 2016, as compared to the same period of the prior year. The increase was primarily a result of an increase of $50 million in the amortization of the non-nuclear decommissioning regulatory asset, as well as net additions to Completed plant. Partially offsetting this increase was a $43 million decrease in depreciation and amortization expense related to the 20-year license extension for Sequoyah, as well as a decrease related to the retirement of Widows Creek Unit 7 on September 30, 2015. It is expected that the impact of the non-nuclear regulatory asset amortization will increase amortization expense by $100 million for 2016 as compared to 2015, while the impact of the license extension at Sequoyah will decrease depreciation expense by $79 million for 2016 as compared to 2015.

Tax equivalents expense decreased $4 million for the six months ended March 31, 2016, 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 six months ended March 31, 2016, as compared to the same period of the prior year.

Interest Expense. Interest expense and interest rates for the three and six months ended March 31, 2016, and 2015, were as follows:

Interest Expense

	Three Months Ended March 31			Six Months Ended March 31		
	2016	2015	Percent Change	2016	2015	Percent Change
Interest Expense[(1)]						
Interest expense	$337	$341	(1.2)%	$672	$683	(1.6)%
Allowance for funds used during construction	(58)	(53)	9.4 %	(116)	(103)	12.6 %
Net interest expense	$279	$288	(3.1)%	$556	$580	(4.1)%
Average blended interest rate	5.14 %	5.24 %	(1.9)%	5.15 %	5.26 %	(2.1)%

Notes

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

Net interest expense decreased $9 million for the three months ended March 31, 2016, as compared to the same period of the prior year. This was attributable primarily to an increase of $5 million in allowance for funds used during construction ("AFUDC") as a result of ongoing construction activities at Watts Bar Unit 2 and a decrease in interest expense of $4 million primarily due to a lower average interest rate on long-term debt.

Net interest expense decreased $24 million for the six months ended March 31, 2016, as compared to the same period of the prior year. This was attributable primarily to an increase of $13 million in AFUDC as a result of ongoing construction activities at Watts Bar Unit 2 and a decrease in interest expense of $11 million primarily due to a lower average interest rate on long-term debt.

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 United States Department of the Treasury ("U.S. Treasury"), three long-term revolving credit facilities totaling $2.5 billion, and proceeds from financings. See Note 10 — Credit Facility Agreements. Other financing arrangements may include sales of receivables, loans, and other assets.

The TVA Act authorizes TVA to issue bonds, notes, or other evidences of indebtedness ("Bonds") in an amount not to exceed $30.0 billion outstanding at any time. At March 31, 2016, TVA had $24.2 billion of Bonds outstanding (not including noncash items of foreign currency exchange gain of $67 million, unamortized debt issue costs of $64 million, and net discount on sale of Bonds of $104 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 7), 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

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adequate capability to fund its ongoing operational liquidity needs and make planned capital investments over the next decade through a combination of Bonds, additional power revenues through power rate increases, cost reductions, or other ways. See Lease Financings below, Note 7, and Note 10 — Credit Facility Agreements for additional information.

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. 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. In addition to power bonds and discount notes, TVA had outstanding at March 31, 2016, the long-term debt of three variable interest entities. See Lease Financings below, Note 7, and Note 10 — Credit Facility Agreements for additional information.

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

Short-Term Borrowing Table

	At March 31 2016	Three Months Ended March 31 2016	Six Months Ended March 31 2016	At March 31 2015	Three Months Ended March 31 2015	Six Months Ended March 31 2015
Amount Outstanding (at End of Period) or Average Amount Outstanding (During Period)						
Discount Notes	$1,407	$1,384	$1,273	$939	$941	$859
Weighted Average Interest Rate						
Discount Notes	0.282 %	0.280 %	0.190 %	0.036%	0.046 %	0.046 %
Maximum Month-End Amount Outstanding (During Period)						
Discount Notes	N/A	$1,635	$1,635	N/A	$1,155	$1,155

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. See Note 7. TVA may seek to enter into similar arrangements in the future, but has no immediate plans to do so.

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 $1 million and $2 million for the six months ended March 31, 2016, and 2015, respectively. A summary of cash flow components for the six months ended March 31 follows:

Cash provided by (used in):
Operating Activities

TVA's operating cash flows from operations are primarily driven by sales of electricity, fuel costs, and operating and maintenance costs. The timing and level of cash flows from operations can be affected by the weather, changes in working capital, commodity price fluctuations, outages, and other project expenses. For the six months ended March

31, 2016, net cash flows provided by operating activities decreased $82 million as compared to the same period of the prior year, primarily as a

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result of lower revenue collections due to milder weather and decreases in receipts of Kingston ash spill insurance proceeds. These changes were partially offset by decreases in fuel expenditures and the timing of payments related to operating and maintenance activities.

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. Net cash flows used in investing activities decreased by $31 million for the six months ended March 31, 2016, compared to the same period of the prior year, primarily attributable to a decrease in nuclear fuel expenditures partially offset by an increase in construction expenditures. Changes in nuclear fuel expenditures were driven primarily by the timing of nuclear outages as TVA purchases nuclear fuel in advance of these outages. The increase in construction expenditures was primarily attributable to the ongoing transmission upgrades and capacity expansion spending for natural gas-fired generation facilities.

Financing Activities

Net cash flows provided by financing activities increased by $50 million for the six months ended March 31, 2016, as compared to the same period of the prior year. This increase was due primarily to more net issuances of short-term debt to fund additional cash needed for investing and other activities, and less cash used for net redemptions of long-term debt, while maintaining a steady cash level based on near-term expectations.

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Cash Requirements and Contractual Obligations

TVA has certain contractual obligations and other commitments to make future payments. The following table sets forth TVA's estimates of future payments at March 31, 2016.

Commitments and Contingencies

Payments Due in the Year Ending September 30

	2016[1]	2017	2018	2019	2020	Thereafter	Total
Debt[2]	$1,435	$1,555	$1,682	$1,032	$30	$ 18,511	$24,245
Interest payments relating to debt	623	1,196	1,107	1,032	1,022	17,980	22,960
Debt of VIEs[3]	16	35	36	38	40	1,098	1,263
Interest payments relating to debt of VIEs	29	58	56	54	52	640	889
Lease obligations							
Capital	7	14	14	13	12	172	232
Non-cancelable operating	22	42	31	25	25	38	183
Purchase obligations							
Power	130	255	259	256	253	2,186	3,339
Fuel	803	1,057	896	580	410	1,567	5,313
Other	109	169	169	164	149	1,506	2,266
Environmental Agreements	25	37	5	3	2	8	80
Membership interest of VIE subject to mandatory redemption	1	2	2	2	3	26	36
Interest payments related to membership interests of VIE subject to mandatory redemption	1	2	2	2	2	14	23
Flood response commitment to NRC	8	14	10	—	—	—	32
Litigation settlements	7	2	—	—	—	—	9
Unfunded loan commitments	6	4	—	—	—	—	10
Environmental cleanup costs -Kingston ash spill	4	—	—	—	—	—	4
Long-term monitoring costs -Kingston ash spill	1	1	1	1	1	10	15
Payments on other financings	31	104	104	96	73	232	640
Payments to U.S. Treasury - Return on Power Program Appropriation Investment	5	6	7	7	8	77	110
Retirement plan[4]	71	214	—	—	—	—	285
Total	$3,334	$4,767	$4,381	$3,305	$2,082	$ 44,065	$61,934

Notes

(1) This period covers April 1 – September 30, 2016.

(2) Debt does not include noncash items of foreign currency exchange gain of $67 million, unamortized debt issue costs of $64 million, and net discount on sale of Bonds of $104 million.

(3) Debt of VIEs does not include the noncash item of unamortized debt issue costs of $13 million.

(4) 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 2017 is the minimum required contribution, and the calculation has not yet been completed for any years beyond 2017. See Note 15.

In addition to the obligations above, TVA has energy prepayment obligations in the form of revenue discounts.

Energy Prepayment Obligations

Obligations Due in the Year Ending September 30

	2016[1]	2017	2018	2019	2020	Thereafter	Total
Energy Prepayment Obligations	$ 50	$100	$100	$ 10	$ —	$ —	$260

Note

(1) This period covers April 1 – September 30, 2016.

EnergyRight® Solutions Program. TVA purchases certain loans receivable from its LPCs in association with the EnergyRight® Solutions program. As of March 31, 2016, the total carrying amount of the loans receivable, net of discount, was approximately $151 million. Such amounts are not reflected in the Commitments and Contingencies table above. The total

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carrying amount of the financing obligation was approximately $176 million at March 31, 2016. See Note 5 and Note 8 for additional information.

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 March 31, 2016, TVA had spent $242 million on modifications at all its nuclear plants, including Watts Bar Unit 2, and expects to spend an additional $41 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 continues and is expected to be completed by February 1, 2017, to meet the Watts Bar Unit 2 licensing commitment.

Since 2009, TVA has performed further hydrology modeling of portions of the TVA watershed using updated modeling tools. TVA also substantially completed a series of permanent modifications 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. As of March 31, 2016, TVA had spent $146 million on these modifications, and expects to spend an additional $32 million to complete the modifications.
The revised hydrology models were reviewed and approved by the NRC for Watts Bar Units 1 and 2. However, TVA identified an error in the modeling that will require TVA to resubmit models for Watts Bar Units 1 and 2. TVA plans to seek NRC approval for similar modeling for Sequoyah Units 1 and 2 and will subsequently address conditions at Browns Ferry Nuclear Plant ("Browns Ferry") as needed. The updated models for Watts Bar and Sequoyah are expected to be submitted to the NRC in early CY 2018 for review and approval.
The hydrology analyses discussed above relate to the current operation and current requirements of TVA’s existing nuclear fleet. In addition, the NRC has required all utilities to reexamine flood hazards at nuclear plants in light of the lessons learned from the Fukushima events. In March 2015, TVA sent its flood hazard analyses to the NRC for all three of its 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.

Supplementary NRC rulemaking is under development to mitigate beyond design basis flooding events. The NRC staff will submit their proposed final rule to the NRC in December 2016. The final rule isn't expected to be issued until mid-2017. 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.

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, 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.

Supplementary NRC rulemaking is under development to mitigate beyond design basis seismic events. The NRC staff will submit its proposed final rule to the NRC in December 2016. The final rule is not expected to be issued until mid-2017. 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.

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Watts Bar Nuclear Plant. In March 2016, the NRC issued a Chilling Effect Letter (“CEL”) to TVA regarding work environment concerns identified at Watts Bar. It is not anticipated at this time that this CEL will affect the pre-operational testing, reactor start-up, or power-ascension testing that will lead to commercial operations of Watts Bar Unit 2.

Watts Bar Unit 2. On October 22, 2015, the NRC approved the operating license for Watts Bar Unit 2. The license will expire in 2055. Fuel load was completed in December 2015, and initial criticality of the reactor is expected in May 2016. Pre-commercial operations will continue until project milestones, including various power ascension testing, are successfully completed and 100 percent power is achieved and sustained. Commercial operation is expected in summer 2016. Project costs are within the $4.7 billion limit approved by the TVA Board in January 2016. Challenges potentially affecting completion of the unit include completing complex work and testing, addressing emergent work, and successfully transitioning the site into dual unit operation.

Bellefonte Nuclear Plant. TVA has been investing at a minimal level to preserve the Bellefonte site for future generating use, should it be needed. Given current economic conditions, greater advancements in energy efficiencies and distributed generation technologies, and projections in TVA’s 2015 Integrated Resource Plan, it may be two decades before additional large baseload generation is needed. TVA is beginning to explore options for the future of the Bellefonte site. Public comments were solicited through March 2016, and management and the TVA Board have begun to review the comments, along with other pertinent information, to help decide on the repurposing of the property.

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 two agreements into which TVA entered in April 2011 to resolve a dispute under the Clean Air Act (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. During the first quarter of 2016, TVA provided notice to the Environmental Protection Agency ("EPA") of its election to retire Colbert Unit 5 and Allen Units 1-3 on or before December 31, 2018, and Colbert Units 1-4 on or before June 30, 2019. TVA removed Colbert Units 1-4, with a summer net capability of 712 megawatts ("MW"), from service in March 2016. Colbert Unit 5 was previously removed from service in 2013. As of March 31, 2016, TVA had retired 19 coal-fired units with a summer net capability of 3,210 MW. The retirements of sixteen of these units, with a summer net capability of 2,148 MW, were carried out to comply with the Environmental Agreements. TVA continues to evaluate the appropriate mix of generation and assess the status of individual power generating facilities.

On April 16, 2016 the EPA issued an Administrative Order ("AO") allowing Paradise Units 1 and 2 to operate for an additional year beyond the compliance date allowed by the Mercury and Air Toxics Standards ("MATS") rule. The AO allows TVA to continue to operate these units, which, in their current configuration, are not capable of meeting certain requirements of the MATS rule. The AO allows TVA to continue to operate Paradise Units 1 and 2 to maintain electric reliability pending the availability of commercial power from the natural gas-fired units currently under construction at the Paradise site without incurring penalties under the Clean Air Act ("CAA"). 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. Under this program (the “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:

Dry generation and dewatering projects. Conversion of coal plant CCR wet processes to dry generation or dewatering is complete at Bull Run Fossil Plant and underway at Kingston, Gallatin, Cumberland, Shawnee, and Paradise Fossil Plants.

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

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 operational or (2) plant operations cease. Closure project schedules and costs are driven by the selected closure technology (such as cap and close in place or closure by removal). As environmental studies are performed and closure methodologies are determined, detailed project schedules and estimates will be prepared.

Groundwater monitoring. Compliance with the EPA’s CCR rule will require additional engineering and analysis as well as implementation of a comprehensive groundwater monitoring program.

The CCR Conversion Program is scheduled to be completed by 2022 with two exceptions. First, a new landfill at Shawnee will be required to accommodate the addition of air pollution controls and is scheduled to be completed by 2026. Once the new landfill is in service, the existing bottom ash impoundment and dry stack will be closed in accordance with federal and state requirements. Second, the impoundments at Gallatin are pending additional studies to determine the final closure methodology and schedule.

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Through March 31, 2016, TVA had spent approximately $835 million on its CCR Conversion Program. TVA expects to spend an additional $1.3 billion on the CCR Conversion Program through 2022. Once the CCR Conversion Program is completed, TVA will continue to undertake certain CCR projects to support long-term plant generation, including building new landfill sections under existing permits and closing existing sections once they reach capacity. See Environmental Matters — Cleanup of Solid and Hazardous Wastes — Coal Combustion Residuals.

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. 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.

Small Modular Reactors. TVA plans to submit an Early Site Permit Application ("ESPA") for review by the NRC in May 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. TVA is considering the four SMR designs under development in the United States and will evaluate the designs and vendors for the SMR technology. 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 2019, 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. A decision to build a SMR will need TVA Board approval.

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 including commercial and industrial customers who are beginning to integrate sustainability strategies and environmental policies into their business models. 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 growth in use of distributed generation to help understand how increased use could 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 ensuring the pricing of electricity remains as low as feasible. Due to numerous assumptions TVA cannot currently determine what the potential financial impacts could be from future growth in distributed generation.

Dam Safety and Remediation Initiatives

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. Thirty reassessments have been completed through March 31, 2016, and eight additional reassessments 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. Results of the completed reassessments identified areas for further studies at several TVA dams, including Pickwick Dam. Additional studies

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began in 2016. TVA has spent $50 million on the dam safety assurance program, and expects to spend an additional $12 million through the remainder of 2016.

Boone Dam Remediation. 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. This preferred method of repair consists of the construction of a composite seepage barrier in the dam’s earthen embankment. An environmental assessment review through TVA's National Environmental Policy Act process was completed on January 7, 2016, and a Finding of No Significant Impact was published. 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. TVA continues to test grouting and other activities at the site in support of the project design and began limited construction in January 2016 with the embankment grouting program and construction to repair the dam is expected to begin during the third quarter of 2016. Benchmarking durations and costs of similar activities at the 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, due to contracting issues and scheduling, are now scheduled to be completed in December 2016. This estimate will not include any future repairs or projects that may be required as a result of the change in water flow once the composite seepage barrier is complete. The cost and duration of additional work efforts will be determined as design and construction plans are finalized.

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.

Summary Table of Major Projects

Projects	Estimated Project Cost (in billions)	Ending Estimated In-Service Date
Capacity Expansion Projects		
Watts Bar Unit 2	$ 4.7	Summer 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

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 $210 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 on the four coal-fired units at the Gallatin and on Units 1 and 4 at Shawnee.

Transmission Issues. TVA anticipates expenditures related to transmission facilities 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 $11 million since the approval of the standard on existing transmission facilities and anticipates spending an additional $49 million through 2018 to ensure compliance with the 2013 revision of the TPL standards. Total costs of compliance with the standard, including those beyond 2018, are estimated to be $652 million.

Pension Fund

As of September 30, 2015, TVA's qualified pension plan had assets of $6.8 billion compared with liabilities of $12.8 billion. The potential for the plan's funded status to quickly improve is limited because of expected equity performance and the significant amount of benefits paid each year to plan beneficiaries. The plan currently has approximately 34,500 participants, of which approximately 23,700 are retirees and beneficiaries currently receiving benefits. Benefits of approximately $700 million are expected to be paid in 2016.

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Ratemaking

At its August 21, 2015 meeting, the TVA Board approved rate structure revisions and a rate adjustment, which took effect on October 1, 2015. 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. The rate structure revisions included small changes to revenue allocation, changes to the environmental adjustment to conform to the new base rate structures, and changes to the manner in which fuel costs are recovered. The rate structure revisions were designed to recover the same overall revenue for TVA. The rate adjustment took effect on October 1, 2015, and is expected to contribute approximately $200 million to fiscal year 2016 revenues.

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 of the need to physically protect facilities. TVA is working with the Department of Homeland Security ("DHS"), Federal Energy Regulatory Commission, NERC, Southeastern 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 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 — Operational Risks — TVA's facilities and information infrastructure may not operate as planned due to physical and cyber threats to TVA's security in TVA's Annual Report on Form 10-K for the fiscal year ended September 30, 2015.

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. Emissions from all TVA-owned and operated units (including small combustion turbine units of less than 25 MWs whose emissions are not required to be reported to the EPA) have been reduced from historic peaks. Emissions of nitrogen oxide ("NO_x") have been reduced by 92 percent below peak 1995

levels and emissions of sulfur dioxide ("SO_2") have been reduced by 94 percent below 1977 levels through CY 2015. For CY 2015, TVA's emission of carbon dioxide ("CO_2") from its sources was 70.1 million tons, a 34 percent reduction from 2005 levels. This includes 5,248 tons from units rated at less than 25 MWs whose emissions are not required to be reported to the EPA. To remain consistent and provide clear information and to align with the EPA's reporting requirements, TVA intends to continue to report CO_2 emissions on a calendar year basis.

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"), SO_2, nitrogen dioxide ("NO_2"), 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 as attainment areas. Areas not meeting a NAAQS are designated as nonattainment areas, and more stringent requirements apply in those areas.

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This includes stricter controls on industrial facilities and more complicated permitting processes. TVA fossil-fired plants can be impacted by these requirements. As of March 31, 2016, Knoxville was the only area in the Tennessee Valley region that was designated as non-attainment for fine particulate matter NAAQS. TVA expects the EPA to designate the Knoxville area as attainment in the near future. However, 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.

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 shifted the compliance deadlines by three years. Under the revised compliance deadlines, Phase I emission reductions in SO_2 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 prior reductions in SO_2 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. TVA and several other parties submitted substantial comments on the proposed rule. TVA cannot fully determine impacts to its operations until the rule is finalized; however, TVA does not currently anticipate significant changes to its operations based on the proposed rule.

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. In April of 2016, the EPA completed its cost analysis and released a finding that determined the benefits of the rule far outweigh the costs, and that it is appropriate and necessary to regulate hazardous pollution from coal and oil-fired electric utility steam generating units. 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 at the site. 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.

Cleanup of Solid and Hazardous Wastes

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. See Key Initiatives and Challenges — Generation Resources — Coal Combustion Residuals for a discussion of the impact on TVA's 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 in July 2016.

Water Quality Developments

Steam-Electric Effluent Guidelines. On November 3, 2015, the EPA published a final rule to revise the existing steam electric effluent limitation guidelines ("ELGs") that updates the existing technology-based water discharge limitations for power plants nationwide. The new ELGs establish more stringent performance standards for existing and new sources that will require

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power plants that generate more than 50 MW to regulate discharges of toxic pollutants from seven primary wastewater streams. The primary impact for TVA is on the operation of existing and any potential new coal-fired generation facilities. The rule 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. TVA is performing engineering studies and evaluations of treatment methodologies to prepare for compliance. As these activities are completed, detailed project schedules and cost estimates will be completed.

Climate Change

Clean Power Plan. 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 CO_2 emissions from power plants, targeting a 32 percent nationwide reduction in CO_2 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.

On February 9, 2016, the aforementioned requirements were all put on hold when the U.S. Supreme Court granted a stay of the Clean Power Plan. The stay will last not only through the period of time during which the D.C. Circuit is reviewing the rule, but also during any subsequent appeals to the United States Supreme Court that may occur after the D.C. Circuit issues its opinion. The stay means that the Clean Power Plan has no legal effect while courts are reviewing the rule to determine whether it is lawful.

Estimated Required Environmental Expenditures

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

Air, Water, and Waste Quality Estimated Potential Environmental Expenditures[1]
At March 31, 2016
(in millions)

	Estimated Timetable	Total Estimated Expenditures
Site environmental remediation costs[2]	2016+	$ 22
Coal combustion residual conversion program[3]	2016-2022	$ 1,300
Proposed clean air projects[4]	2016-2025	$ 480
Clean Water Act requirements[5]	2016-2023	$ 580

Notes
(1) These estimates are subject to change as additional information becomes available and as 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 impoundment 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.

(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 greenhouse gas 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).

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 $89 million with respect to Legal Proceedings as of March 31, 2016. 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 16 — Legal Proceedings, which discussion is incorporated into this Part I, Item 2, Management's Discussion and Analysis of Financial Condition and Results of Operations.

Off-Balance Sheet Arrangements

At March 31, 2016, TVA had no off-balance sheet arrangements.

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Critical Accounting Policies and Estimates

The preparation of financial statements requires TVA to estimate the effects of various matters that are inherently uncertain as of the date of the financial statements. Although the financial statements are prepared in conformity with accounting principles generally accepted in the U.S., TVA is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the amounts of revenues and expenses reported during the reporting period. Each of these estimates varies in regard to the level of judgment involved and its potential impact on TVA's financial results. Estimates are deemed critical either when a different estimate could have reasonably been used, or where changes in the estimate are reasonably likely to occur from period to period, and such use or change would materially impact TVA's financial condition, results of operations, or cash flows. TVA's critical accounting policies are discussed in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies and Estimates and Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

New Accounting Standards and Interpretations

For a discussion of new accounting standards and interpretations, see Note 2, which discussion is incorporated into this Part I, Item 2, Management’s Discussion and Analysis of Financial Condition and Results of Operations.

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.

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.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There are no material changes related to market risks disclosed under Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Management Activities in the Annual Report. See Note 12 for additional information regarding TVA's derivative transactions and risk management activities.

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ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

TVA’s management, including the President and Chief Executive Officer, the Executive Vice President and Chief Financial Officer, and members of the Disclosure Control Committee, including the Vice President and Controller (Principal Accounting Officer), evaluated the effectiveness of TVA’s disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) as of March 31, 2016. Based on this evaluation, TVA’s management, including the President and Chief Executive Officer, the Executive Vice President and Chief Financial Officer, and members of the Disclosure Control Committee, including the Vice President and Controller (Principal Accounting Officer), concluded that TVA’s disclosure controls and procedures were effective as of March 31, 2016, to ensure that information required to be disclosed by TVA in reports that it files or submits under the Exchange Act, is recorded, processed, summarized, and reported, within the time periods specified in the Securities and Exchange Commission’s rules and forms, and include controls and procedures designed to ensure that information required to be disclosed by TVA in such reports is accumulated and communicated to TVA’s management, including the President and Chief Executive Officer, the Executive Vice President and Chief Financial Officer, and members of the Disclosure Control Committee, including the Vice President and Controller (Principal Accounting Officer), as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

During the three months ended March 31, 2016, there were no changes in TVA's internal control over financial reporting that materially affected, or are reasonably likely to materially affect, TVA's internal control over financial reporting.

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PART II - OTHER INFORMATION

ITEM 1. 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. 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 financial condition, results of operations, and cash flows.

For a discussion of certain current material Legal Proceedings, see Note 16 — Legal Proceedings, which discussion is incorporated by reference into this Part II, Item 1, Legal Proceedings.

ITEM 1A. RISK FACTORS

There are no material changes related to risk factors from the risk factors disclosed in Item 1A, Risk Factors in the Annual Report.

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ITEM 6. EXHIBITS

Exhibit No.	Description
31.1	Rule 13a-14(a)/15d-14(a) Certification Executed by the Chief Executive Officer
31.2	Rule 13a-14(a)/15d-14(a) Certification Executed by the Chief Financial Officer
32.1	Section 1350 Certification Executed by the Chief Executive Officer
32.2	Section 1350 Certification Executed by the Chief Financial Officer
101.INS	TVA XBRL Instance Document
101.SCH	TVA XBRL Taxonomy Extension Schema
101.CAL	TVA XBRL Taxonomy Extension Calculation Linkbase
101.DEF	TVA XBRL Taxonomy Extension Definition Linkbase
101.LAB	TVA XBRL Taxonomy Extension Label Linkbase
101.PRE	TVA XBRL Taxonomy Extension Presentation Linkbase

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SIGNATURES

Pursuant to the requirements of Section 13, 15(d), or 37 of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: May 2, 2016 TENNESSEE VALLEY AUTHORITY
(Registrant)

By: _/s/ William D. Johnson _____
William D. Johnson
President and Chief Executive Officer
(Principal Executive Officer)

By: _/s/ John M. Thomas, III_____
John M. Thomas, III
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

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