

Edgar Filing: Tennessee Valley Authority - Form 10-Q

Tennessee Valley Authority  
Form 10-Q  
May 01, 2015  
Table of Contents

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 10-Q

(MARK ONE)

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

For the quarterly period ended March 31, 2015

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 000-52313

TENNESSEE VALLEY AUTHORITY

(Exact name of registrant as specified in its charter)

A corporate agency of the United States created by an act of Congress  
(State or other jurisdiction of incorporation or organization)

62-0474417

(IRS Employer Identification No.)

400 W. Summit Hill Drive

Knoxville, Tennessee

(Address of principal executive offices)

(865) 632-2101

(Registrant's telephone number, including area code)

37902

(Zip Code)

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  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

Edgar Filing: Tennessee Valley Authority - Form 10-Q

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

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

1

---

Table of Contents

Table of Contents

GLOSSARY OF COMMON

<u>ACRONYMS</u> .....	3
<u>FORWARD-LOOKING</u>	
<u>INFORMATION</u> .....	5
<u>GENERAL</u>	
<u>INFORMATION</u> .....	6

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL

<u>STATEMENTS</u> .....	7
Consolidated <u>Statements of Operations (unaudited)</u> .....	7
Consolidated <u>Statements of Comprehensive Income (Loss) (unaudited)</u> .....	7
Consolidated <u>Balance Sheets (unaudited)</u> .....	8
Consolidated <u>Statements of Cash Flows (unaudited)</u> .....	10
Consolidated <u>Statements of Changes in Proprietary Capital (unaudited)</u> .....	11
<u>Notes to Consolidated Financial Statements (unaudited)</u> .....	11

ITEM 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS..

<u>Executive Overview</u> .....	44
<u>Results of Operations</u> .....	44
<u>Liquidity and Capital Resources</u> .....	49
<u>Key Initiatives and Challenges</u> .....	53
<u>Environmental Matters</u> .....	58
<u>Legal Proceedings</u> .....	59
<u>Off-Balance Sheet Arrangements</u> .....	59
<u>Critical Accounting Policies and Estimates</u> .....	60
<u>New Accounting Standards and Interpretations</u> .....	60
<u>Legislative and Regulatory Matters</u> .....	60

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET

<u>RISK</u> .....	61
-------------------	----

ITEM 4. CONTROLS AND

<u>PROCEDURES</u> .....	62
<u>Disclosure Controls and Procedures</u> .....	62
<u>Changes in Internal Control over Financial Reporting</u> .....	62

PART II - OTHER INFORMATION

ITEM 1. LEGAL

<u>PROCEEDINGS</u> .....	63
--------------------------	----

ITEM 1A. RISK  
FACTORS.....

6

ITEM 6.  
EXHIBITS.....

6

SIGNATURES.....

6

EXHIBIT  
INDEX.....

6

2



Table of Contents

## 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, 2015 (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
CCOLA	Combined construction and operating license application
CCP	Coal combustion products
CCR	Coal combustion residual
CME	Chicago Mercantile Exchange
CO <sub>2</sub>	Carbon dioxide
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
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
FTP	Financial Trading Program
GAAP	Accounting principles generally accepted in the United States of America
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
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
NDT	Nuclear Decommissioning Trust

NEPA  
NERC

National Environmental Policy Act  
North American Electric Reliability Corporation

3

---

Table of Contents

NO <sub>x</sub>	Nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
OCI	Other Comprehensive Income (Loss)
PM	Particulate matter
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 <sub>2</sub>	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

Table of Contents

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,” “believe,” “intend,” “project,” “plan,” “predict,” “assume,” “forecast,” “estimate,” “objective,” “possible,” “probably,” “likely,” “potential,” and other similar expressions.

Although the Tennessee Valley Authority ("TVA") believes that the assumptions underlying the forward-looking statements are reasonable, TVA does not guarantee the accuracy of these statements. Numerous factors could cause actual results to differ materially from those in the forward-looking statements. These factors include, among other things:

- New or 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 events such as the Kingston Fossil Plant ("Kingston") ash spill as well as for environmental clean-up activities;
- Addition or loss of customers;
- Significant changes in demand for electricity which may result from, among other things, economic downturns, increased energy efficiency and conservation, and improvements in distributed generation and other alternative generation technologies;
- Significant delays, cost increases, or cost overruns associated with the construction of generation or transmission assets;
- Changes in the timing or amount of pension and health care costs;
- Increases in TVA's financial liabilities for decommissioning its nuclear facilities and retiring other assets;
- Physical or cyber attacks on TVA's assets;
- The outcome of legal and administrative proceedings;
- The failure of TVA's generation, transmission, flood control, and related assets, including coal combustion residual ("CCR") facilities, to operate as anticipated, resulting in lost revenues, damages, and other costs that are not reflected in TVA's financial statements or projections;
- Differences between estimates of revenues and expenses and actual revenues earned and expenses incurred;
- Weather conditions;
- Catastrophic events such as fires, earthquakes, explosions, solar events, electromagnetic pulses, droughts, floods, hurricanes, tornadoes, pandemics, wars, national emergencies, terrorist activities, and other similar events, especially if these events occur in or near TVA's service area;
- Events at a TVA facility, which, among other things, could result in loss of life, damage to the environment, damage to or loss of the facility, and damage to the property of others;
- Events or changes involving transmission lines, dams, and other facilities not operated by TVA, including those that affect the reliability of the interstate transmission grid of which TVA's transmission system is a part and those that increase flows across TVA's transmission grid;
- Disruption of fuel supplies, which may result from, among other things, weather conditions, production or transportation difficulties, labor challenges, or environmental laws or regulations affecting TVA's fuel suppliers or



transporters;

• Purchased power price volatility and disruption of purchased power supplies;

• Events which affect the supply of water for TVA's generation facilities;

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

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

• Inability to obtain, or loss of, regulatory approval for the construction or operation of assets, including Watts Bar Nuclear Plant ("Watts Bar") Unit 2;

• 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, and an increased reliance by TVA on alternative financing arrangements as TVA approaches its debt ceiling;

• Changes in the economy and volatility in financial markets;

• Changes in technology;

• Reliability and creditworthiness of counterparties;

## Table of Contents

• 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 and its internal control over financial reporting;

• Inability to eliminate identified deficiencies in TVA's systems, standards, controls, and 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 cost and schedule for completing Watts Bar Unit 2 and preserving Bellefonte Nuclear Plant ("Bellefonte") Unit 1 for possible completion, or cause TVA to forego future construction at these or other facilities;

• Loss of quorum of the TVA Board of Directors; and

• 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, 2014 (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 (2015, 2014, 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](http://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](http://www.sec.gov).



Table of Contents

## 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	
	2015	2014	2015	2014
Operating revenues				
Revenue from sales of electricity	\$2,825	\$2,901	\$5,200	\$5,251
Other revenue	38	37	74	69
Total operating revenues	2,863	2,938	5,274	5,320
Operating expenses				
Fuel	586	663	1,136	1,206
Purchased power	259	313	492	564
Operating and maintenance	657	793	1,345	1,600
Depreciation and amortization	454	453	906	894
Tax equivalents	131	140	255	262
Total operating expenses	2,087	2,362	4,134	4,526
Operating income	776	576	1,140	794
Other income (expense), net	8	13	17	27
Interest expense				
Interest expense	341	336	683	675
Allowance for funds used during construction	(53	) (42	) (103	) (82
Net interest expense	288	294	580	593
Net income (loss)	\$496	\$295	\$577	\$228

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	
	2015	2014	2015	2014
Net income (loss)	\$496	\$295	\$577	\$228
Other comprehensive income (loss)				
Net unrealized gain (loss) on cash flow hedges	(59	) 2	(74	) 22
Reclassification to earnings from cash flow hedges	46	(7	) 84	(29
Total other comprehensive income (loss)	\$(13	) \$(5	) \$10	\$(7
Total comprehensive income (loss)	\$483	\$290	\$587	\$221

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

Table of ContentsTENNESSEE VALLEY AUTHORITY  
CONSOLIDATED BALANCE SHEETS

(in millions)

## ASSETS

	March 31, 2015 (Unaudited)	September 30, 2014
Current assets		
Cash and cash equivalents	\$502	\$500
Restricted cash and investments	17	19
Accounts receivable, net	1,432	1,676
Inventories, net	1,135	1,056
Regulatory assets	629	481
Other current assets	77	56
Total current assets	3,792	3,788
Property, plant, and equipment		
Completed plant	48,229	47,564
Less accumulated depreciation	(25,278)	) (24,589)
Net completed plant	22,951	22,975
Construction in progress	6,518	5,951
Nuclear fuel	1,365	1,322
Capital leases	98	102
Total property, plant, and equipment, net	30,932	30,350
Investment funds	2,071	1,981
Regulatory and other long-term assets		
Regulatory assets	9,113	8,994
Other long-term assets	486	483
Total regulatory and other long-term assets	9,599	9,477
Total assets	\$46,394	\$45,596

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

Table of Contents

TENNESSEE VALLEY AUTHORITY  
 CONSOLIDATED BALANCE SHEETS  
 (in millions)

LIABILITIES AND PROPRIETARY CAPITAL

	March 31, 2015 (Unaudited)	September 30, 2014
Current liabilities		
Accounts payable and accrued liabilities	\$1,804	\$2,050
Accrued interest	396	380
Current portion of leaseback obligations	78	75
Current portion of energy prepayment obligations	100	100
Regulatory liabilities	174	184
Short-term debt, net	939	596
Current maturities of power bonds	1,086	1,032
Current maturities of long-term debt of variable interest entities	33	32
Total current liabilities	4,610	4,449
Other liabilities		
Post-retirement and post-employment benefit obligations	5,791	5,839
Asset retirement obligations	3,108	3,089
Other long-term liabilities	2,347	1,962
Leaseback obligations	559	616
Energy prepayment obligations	260	310
Regulatory liabilities	1	—
Total other liabilities	12,066	11,816
Long-term debt, net		
Long-term power bonds, net	21,768	21,948
Long-term debt of variable interest entities	1,263	1,279
Total long-term debt, net	23,031	23,227
Total liabilities	39,707	39,492
Proprietary capital		
Power program appropriation investment	258	258
Power program retained earnings	5,819	5,240
Total power program proprietary capital	6,077	5,498
Nonpower programs appropriation investment, net	595	601
Accumulated other comprehensive income (loss)	15	5
Total proprietary capital	6,687	6,104
Total liabilities and proprietary capital	\$46,394	\$45,596

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

Table of Contents

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

	2015	2014	
Cash flows from operating activities			
Net income (loss)	\$577	\$228	
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)	929	917	
Amortization of nuclear fuel cost	140	143	
Non-cash retirement benefit expense	166	286	
Prepayment credits applied to revenue	(50)	(50)	)
Fuel cost adjustment deferral	(61)	(162)	)
Fuel cost tax equivalents	(13)	(3)	)
Changes in current assets and liabilities			
Accounts receivable, net	243	116	
Inventories and other, net	(139)	62	)
Accounts payable and accrued liabilities	(249)	(96)	)
Accrued interest	16	19	
Regulatory assets costs	(17)	(39)	)
Pension contributions	(144)	(132)	)
Insurance recoveries	50	161	
Other, net	(36)	(24)	)
Net cash provided by operating activities	1,412	1,426	
Cash flows from investing activities			
Construction expenditures	(1,407)	(1,141)	)
Nuclear fuel expenditures	(216)	(239)	)
Purchases of investments	(1)	—	)
Loans and other receivables			
Advances	(11)	(1)	)
Repayments	5	4	
Other, net	(14)	3	)
Net cash used in investing activities	(1,644)	(1,374)	)
Cash flows from financing activities			
Long-term debt			
Redemptions and repurchases of power bonds	(46)	(333)	)
Redemptions of variable interest entities	(15)	(15)	)
Short-term debt issues (redemptions), net	343	(741)	)
Payments on leases and leasebacks	(56)	(50)	)
Payments to U.S. Treasury	(4)	(7)	)
Other, net	12	(2)	)
Net cash provided by (used in) financing activities	234	(1,148)	)
Net change in cash and cash equivalents	2	(1,096)	)
Cash and cash equivalents at beginning of period	500	1,602	
Cash and cash equivalents at end of period	\$502	\$506	

## Supplemental Disclosures

Edgar Filing: Tennessee Valley Authority - Form 10-Q

Significant non-cash transactions

Accrued capital and nuclear fuel expenditures	\$251	\$180
---	-------	-------

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

10

---



Table of Contents

TENNESSEE VALLEY AUTHORITY  
CONSOLIDATED STATEMENTS OF CHANGES IN PROPRIETARY CAPITAL (Unaudited)  
For the three months ended March 31, 2015 and 2014  
(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, 2013 (unaudited)	\$265	\$4,701	\$607	\$1	\$5,574	
Net income (loss)	—	297	(2	) —	295	
Total other comprehensive income (loss)	—	—	—	(5	) (5	)
Return on power program appropriation investment	—	(1	) —	—	(1	)
Return of power program appropriation investment	(2	) —	—	—	(2	)
Balance at March 31, 2014 (unaudited)	\$263	\$4,997	\$605	\$(4	) \$5,861	
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	

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, 2015 and 2014  
(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, 2013	\$268	\$4,767	\$609	\$3	\$5,647

Edgar Filing: Tennessee Valley Authority - Form 10-Q

Net income (loss)	—	232	(4	) —	228
Total other comprehensive income (loss)	—	—	—	(7	) (7
Return on power program appropriation investment	—	(2	) —	—	(2
Return of power program appropriation investment	(5	) —	—	—	(5
Balance at March 31, 2014 (unaudited)	\$263	\$4,997	\$605	\$(4	) \$5,861
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

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

Table of Contents

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

(Dollars in millions except where noted)

Note No.		Page No.
<u>1</u>	<u>Summary of Significant Accounting Policies</u>	<u>12</u>
<u>2</u>	<u>Impact of New Accounting Standards and Interpretations</u>	<u>14</u>
<u>3</u>	Restructuring	<u>15</u>
<u>4</u>	<u>Accounts Receivable, Net</u>	<u>15</u>
<u>5</u>	<u>Inventories, Net</u>	<u>16</u>
<u>6</u>	<u>Other Long-Term Assets</u>	<u>16</u>
<u>7</u>	<u>Regulatory Assets and Liabilities</u>	<u>17</u>
<u>8</u>	Variable Interest Entities	<u>17</u>
<u>9</u>	<u>Kingston Fossil Plant Ash Spill</u>	<u>19</u>
<u>10</u>	<u>Other Long-Term Liabilities</u>	<u>20</u>
<u>11</u>	<u>Asset Retirement Obligations</u>	<u>20</u>
<u>12</u>	<u>Debt and Other Obligations</u>	<u>21</u>
<u>13</u>	Accumulated Other Comprehensive Income (Loss)	<u>22</u>
<u>14</u>	<u>Risk Management Activities and Derivative Transactions</u>	<u>23</u>
<u>15</u>	<u>Fair Value Measurements</u>	<u>30</u>
<u>16</u>	<u>Other Income (Expense), Net</u>	<u>37</u>
<u>17</u>	<u>Benefit Plans</u>	<u>37</u>
<u>18</u>	Contingencies and <u>Legal Proceedings</u>	<u>38</u>
<u>19</u>	Subsequent Events	<u>43</u>

## 1. Summary of Significant Accounting Policies

## General

The Tennessee Valley Authority ("TVA") is a corporate agency and instrumentality of the United States that was created in 1933 by legislation enacted by the United States ("U.S.") Congress in response to a request by President Franklin D. Roosevelt. TVA was created to, among other things, improve navigation on the Tennessee River, reduce the damage from destructive flood waters within the Tennessee River system and downstream on the lower Ohio and Mississippi Rivers, further the economic development of TVA's service area in the southeastern United States, and sell the electricity generated at the facilities TVA operates.

Today, TVA operates the nation's largest public power system and supplies power in most of Tennessee, northern Alabama, northeastern Mississippi, and southwestern Kentucky and in portions of northern Georgia, western North Carolina, and southwestern Virginia to a population of 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.

## Table of Contents

Power rates are established by the TVA Board of Directors (the "TVA Board") as authorized by the Tennessee Valley Authority Act of 1933, as amended, 16 U.S.C. §§ 831-831ee (the "TVA Act"). The TVA Act requires TVA to charge rates for power that will produce gross revenues sufficient to provide funds for operation, maintenance, and administration of its power system; payments to states and counties in lieu of taxes ("tax equivalents"); debt service on outstanding indebtedness; payments to the U.S. Treasury in repayment of and as a return on the Power Program Appropriation Investment; and such additional margin as the TVA Board may consider desirable for investment in power system assets, retirement of outstanding Bonds in advance of maturity, additional reduction of the Power Program Appropriation Investment, and other purposes connected with TVA's power business. In setting TVA's rates, the TVA Board is charged by the TVA Act to have due regard for the primary objectives of the TVA Act, including the objective that power shall be sold at rates as low as are feasible. Rates set by the TVA Board are not subject to review or approval by any state or other federal regulatory body. TVA fulfilled its requirement to repay \$1.0 billion of the Power Program Appropriation Investment at the end of 2014.

## Fiscal Year

TVA's fiscal year ends September 30. Years (2015, 2014, etc.) refer to TVA's fiscal years unless they are preceded by "CY," in which case the references are to calendar years.

## Cost-Based Regulation

Since the TVA Board is authorized by the TVA Act to set rates for power sold to its customers, TVA is self-regulated. Additionally, TVA's regulated rates are designed to recover its costs. Based on current projections, TVA believes that rates, set at levels that will recover TVA's costs, can be charged and collected. As a result of these factors, TVA records certain assets and liabilities that result from the regulated ratemaking process that would not be recorded under GAAP for non-regulated entities. Regulatory assets generally represent incurred costs that have been deferred because such costs are probable of future recovery in customer rates. Regulatory liabilities generally represent obligations to make refunds to customers for previous collections for costs that are not likely to be incurred or deferral of gains that will be credited to customers in future periods. TVA assesses whether the regulatory assets are probable of future recovery by considering factors such as applicable regulatory changes, potential legislation, and changes in technology. Based on these assessments, TVA believes the existing regulatory assets are probable of 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, 2014, and the notes thereto, which are contained in TVA's Annual Report on Form 10-K for the year ended September 30, 2014 (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 8. 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

Certain reclassifications have been made to the Consolidated Statement of Cash Flows for the six months ended March 31, 2015 in the Cash flows from operating activities section as \$34 million previously reported as Environmental cleanup costs — Kingston ash spill — non cash and \$(43) million previously reported as Environmental cleanup costs — Kingston ash spill for the for the six months ended March 31, 2014, were reclassified to \$(9) million Other, net.

## Table of Contents

### Allowance for Uncollectible Accounts

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

The allowance for uncollectible accounts was \$1 million at March 31, 2015 and September 30, 2014, for accounts receivable. Additionally, loans receivable of \$121 million and \$92 million at March 31, 2015 and September 30, 2014, 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 and \$9 million at March 31, 2015 and September 30, 2014, respectively.

### Depreciation

Depreciation expense was \$383 million and \$382 million for the three months ended March 31, 2015, and 2014, respectively, and \$763 million and \$750 million for the six months ended March 31, 2015, and 2014, respectively.

### 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 \$162 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, 2015, TVA had paid out approximately \$101 million for this program, and the obligation recorded was \$39 million.

## 2. Impact of New Accounting Standards and Interpretations

The following accounting standard became effective for TVA on October 1, 2014.

**Liabilities.** In February 2013, the Financial Accounting Standards Board ("FASB") issued ASU 2013-04, "Liabilities (Topic 405): Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date," which defines how entities measure obligations from joint and several liability arrangements for which the total amount of the obligation is fixed at the reporting date and for which no guidance exists, except for obligations addressed within existing guidance in GAAP. The guidance also requires entities to disclose the nature and amount of the obligation as well as other information about those obligations. The standard became effective for TVA on October 1, 2014, and is applied on a retrospective basis for all comparative periods presented. Adoption of this guidance did not have a material impact on TVA's financial condition, results of operations, or cash flows.

The following accounting standards have been issued, but as of March 31, 2015, were not effective and have 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. The standard becomes effective for TVA on October 1, 2017, and allows for either a full retrospective or a modified retrospective application. Early adoption of the standard is not permitted. In April 2015, the FASB proposed a one-year delay in the effective date. If the proposal is finalized, entities will be given the option to adopt the standard upon either the deferred effective date or the effective date as issued in the original guidance. 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 ASU 2015-02, "Consolidation: Amendments to the Consolidation Analysis," which affects a reporting entity's evaluation of variable interests in entities in which it is involved in determining whether consolidation is required. 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 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.



Table of Contents

Debt Issuance Costs. In April 2015, the FASB issued ASU 2015-03, "Interest - Imputation of Interest: Simplifying the Presentation of Debt Issuance Costs." This standard requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct reduction of the carrying amount of that debt liability, consistent with debt discounts. The recognition and measurement guidance for debt issuance costs are not affected by the amendments of this update. The standard becomes effective for TVA on October 1, 2016, and will be applied on a retrospective basis for all comparative periods presented. TVA has evaluated the impact of adopting this guidance, and if adopted currently would move \$78 million of debt issues costs from Other long-term assets to reduce Long-term power bonds, net and Long-term debt, net of variable interest entities.

## 3. Restructuring

TVA is undertaking cost reduction initiatives with the goal of keeping rates low, keeping reliability high, and continuing to fulfill its broader mission of environmental stewardship and economic development. TVA's current focus is on reducing operating and maintenance costs through further efficiency gains and streamlining the organization. The goal is to reduce TVA's operating and maintenance costs by \$500 million by the end of 2015 as compared to its 2013 budget. As part of these cost reduction initiatives, an organizational restructuring occurred in 2014, which resulted in approximately 2,000 position reductions achieved through attrition, elimination of vacant positions, and employees leaving TVA either voluntarily or involuntarily. Certain employees were eligible for severance payments as a result of these cost reduction initiatives. These severance amounts are included in Accounts payable and accrued liabilities on the March 31, 2015 and 2014 Consolidated Balance Sheets and the restructuring expenses are included in Operating and maintenance on the Consolidated Statements of Operations. The table below summarizes the activity related to severance costs:

## Severance Cost Liability Activity

	Three Months Ended March		Six Months Ended March 31	
	2015	2014	2015	2014
Severance cost liability at beginning of period	\$4	\$12	\$45	\$—
Liabilities incurred during the period	—	17	—	29
Actual costs paid during the period	(3	) (4	) (43	) (4
Adjustments to estimate during the period	—	—	(1	) —
Severance cost liability at end of period	\$1	\$25	\$1	\$25

TVA plans to continue to evaluate its operations after reaching its 2015 cost reduction goal. These evaluations could include additional staff restructuring and severance costs.

## 4. 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, 2015	At September 30, 2014
Power receivables	\$1,364	\$1,576
Other receivables	69	101
Allowance for uncollectible accounts	(1	) (1
Accounts receivable, net	\$1,432	\$1,676

## 5. Inventories, Net

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

Edgar Filing: Tennessee Valley Authority - Form 10-Q

Inventories, Net

	At March 31, 2015	At September 30, 2014
Materials and supplies inventory	\$635	\$616
Fuel inventory	520	473
Emission allowance inventory	16	13
Allowance for inventory obsolescence	(36	) (46
Inventories, net	\$1,135	\$1,056

15

---

Table of Contents

## 6. 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, 2015	At September 30, 2014
EnergyRight® receivables	\$125	\$123
Unamortized debt issue cost of power bonds and variable interest entities	78	68
Loans and other long-term receivables, net	116	87
Prepaid capacity payments	55	58
Restricted cash	3	64
Currency swap asset, net	24	—
Commodity contract derivative assets	1	—
Other	84	83
Other long-term assets	\$486	\$483

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. 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, 2015 and September 30, 2014, the carrying amount of the loans receivable, net of discount, reported in Accounts receivable, net was approximately \$32 million and \$33 million, respectively. See Note 10 for information regarding the associated financing obligation.

Table of Contents

## 7. 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, 2015	At September 30, 2014
Current regulatory assets		
Deferred nuclear generating units	\$237	\$237
Unrealized losses on commodity derivatives	213	134
Environmental agreements	63	54
Environmental cleanup costs - Kingston ash spill	45	47
Fuel cost adjustment receivable	70	9
Other current regulatory assets	1	—
Total current regulatory assets	629	481
Non-current regulatory assets		
Deferred pension costs and other post-retirement benefits costs	4,158	4,297
Deferred pension costs due to actions of regulator	114	—
Unrealized losses on interest rate derivatives	1,306	957
Nuclear decommissioning costs	882	931
Environmental cleanup costs - Kingston ash spill	365	421
Non-nuclear decommissioning costs	654	645
Deferred nuclear generating units	1,153	1,255
Environmental agreements	79	108
Unrealized losses on commodity derivatives	109	72
Other non-current regulatory assets	293	308
Total non-current regulatory assets	9,113	8,994
Total regulatory assets	\$9,742	\$9,475
Current regulatory liabilities		
Fuel cost adjustment tax equivalents	\$170	\$182
Unrealized gains on commodity derivatives	4	2
Total current regulatory liabilities	174	184
Non-current regulatory liabilities		
Unrealized gains on commodity derivatives	1	—
Total non-current regulatory liabilities	1	—
Total regulatory liabilities	\$175	\$184

Deferred Pension Costs Due to Actions of Regulator. In 2015, TVA began including its cash contributions to the pension plan in the rate-making formula; accordingly, on October 1, 2014, TVA began recognizing 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.

## 8. 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. The analysis to determine whether an entity is a VIE considers factors such as contracts with an entity, credit support for an entity, the adequacy of the equity investment of an entity, the extent of an entity's activities that either involve or are conducted on behalf of an investor with disproportionate voting rights, and the relationship of voting power to the amount of equity invested in an entity. A VIE is consolidated by its primary beneficiary. The primary beneficiary has both (i) the power to direct the activities that most significantly impact the entity's economic performance and (ii) the obligation to absorb losses or the right to receive benefits from the entity that could potentially be significant to the VIE. The determination of the primary beneficiary requires continual reassessment.

Table of Contents

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.

Southaven

On August 9, 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 scheduled amortizing, semi-annual payments due each August 15 and February 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. The sale of the SCCG notes, the membership interests in SCCG, and the SHLLC notes all closed on August 9, 2013. 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 scheduled pre-determined payments to be made to Seven States Southaven, LLC on each lease payment date by SHLLC as agreed in SHLLC's formation documents (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.

TVA participated in the design, business conduct, and financial support of SCCG and has determined that it has a direct variable interest in SCCG resulting from risk associated with the value of the Southaven CCF at the end of the lease term. Based on its analysis, TVA has determined that it is the primary beneficiary of SCCG and, as such, is required to account for the VIE on a consolidated basis.

John Sevier

On January 17, 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 of Holdco are 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 on January 15, 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 all closed on January 17, 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.

Due to its participation in the design, business conduct, and credit and financial support of JSCCG and Holdco, TVA has determined that it has a variable interest in both of these entities. Based on its analysis, TVA has concluded that it is the primary beneficiary of JSCCG and Holdco and, as such, is required to account for the VIEs on a consolidated basis. Holdco's membership interests in JSCCG are eliminated in consolidation.

Table of Contents

## Impact on Consolidated Balance Sheets

The financial statement items attributable to carrying amounts and classifications of JSCCG, Holdco, and SCCG as of March 31, 2015 and September 30, 2014, as reflected in the consolidated balance sheets are as follows:

## Summary of Impact of VIEs on Consolidated Balance Sheets

	At March 31, 2015	At September 30, 2014
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	33	32
Total current liabilities of VIE	46	46
Other liabilities of VIE		
Membership interests of VIE subject to mandatory redemption	36	37
Long-term debt of VIE, net		
Long-term debt of VIE	1,263	1,279
Total liabilities of VIE	\$ 1,345	\$ 1,362

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.

## 9. Kingston Fossil Plant Ash Spill

## The Event

In December 2008, one of the dredge cells at the Kingston Fossil Plant ("Kingston") failed, and over five million cubic yards of water and coal fly ash flowed out of the cell. TVA is continuing cleanup and recovery efforts in conjunction with federal and state agencies. TVA completed the removal of time-critical ash from the river during the third quarter of 2010. In November 2012, the Environmental Protection Agency ("EPA") and the Tennessee Department of Environment and Conservation ("TDEC") approved a plan to allow the Emory River's natural processes to remediate the remaining ash in the river, and to conduct a long-term monitoring program. TVA estimates that the physical cleanup work (final cleanup work and closure) will be completed in the spring of 2015. A Final Completion Report is expected to be submitted to the EPA and the State of Tennessee in the third quarter of 2015 for review and approval.

## Claims and Litigation

See Note 18 — Legal Proceedings — Legal Proceedings Related to the Kingston Ash Spill and Civil Penalty and Natural Resource Damages for the Kingston Ash Spill.

## Financial Impact

TVA recorded an estimate of \$1.1 billion for the cost of cleanup related to this event. In August 2009, TVA began using regulatory accounting treatment to defer all actual costs already incurred and expected future costs related to the ash spill. The cost is being charged to expense as it is collected in rates over 15 years, beginning October 1, 2009.



## Edgar Filing: Tennessee Valley Authority - Form 10-Q

Amounts spent since the event through March 31, 2015, totaled \$1.1 billion. The remaining estimated liability at March 31, 2015, was \$23 million and is included in Accounts payable and accrued liabilities and Other long-term liabilities.

TVA has not included the following categories of costs in the above estimate since it has been determined that these costs are currently either not probable or not reasonably estimable: penalties (other than the penalties set out in a June 2010 TDEC order), regulatory directives, natural resources damages (other than payments required under a memorandum of agreement with TDEC and the U.S. Fish and Wildlife Service establishing a process and a method for resolving the natural resource damages claim), future lawsuits, future claims, long-term environmental impact costs, final long-term disposition of the ash processing area, and costs associated with new laws and regulations. There are certain other costs that will be incurred that have not been included in the estimate as they are appropriately accounted for in other areas of the consolidated financial statements. Associated capital asset purchases are recorded in property, plant, and equipment. Ash handling and disposition costs from current plant operations are recorded in operating expenses. A portion of the dredge cell closure costs are also excluded from the estimate, as they are included in the non-nuclear ARO liability.

Table of Contents

## Insurance

TVA had property and excess liability insurance programs in place at the time of the Kingston ash spill. TVA pursued claims under both the property and excess liability programs and has settled all of its property insurance claims and some of its excess liability insurance claims. In April 2012, TVA initiated arbitration proceedings against the remaining excess liability insurance companies in accordance with the policies' dispute resolution provisions. TVA is seeking recovery of certain costs incurred in the cleanup project, including the costs of removing ash from property or waters owned by the State of Tennessee, and related expenses. TVA has received insurance proceeds of \$317 million, of which \$50 million was received on December 11, 2014. The insurance proceeds are being recorded as reductions to the regulatory asset and will reduce costs collected in future rates.

## 10. 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 18 — Legal Proceedings — Environmental Agreements). The table below summarizes the types and amounts of Other long-term liabilities:

## Other Long-Term Liabilities

	At March 31, 2015	At September 30, 2014
Interest rate swap liabilities	\$1,697	\$1,348
Environmental Agreements liability	79	108
EnergyRight® financing obligation	151	152
Membership interests of VIE subject to mandatory redemption	36	37
Commodity contract derivative liabilities	41	17
Commodity swap derivative liabilities	14	14
Currency swap liabilities	52	15
Other	277	271
Total other long-term liabilities	\$2,347	\$1,962

**EnergyRight® Financing Obligation.** TVA purchases certain loans receivable from its LPCs in association with the EnergyRight® Solutions program. 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 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, 2015 and September 30, 2014, the carrying amount of the financing obligation reported in Accounts payable and accrued liabilities was approximately \$38 million. See Note 6 for information regarding the associated loans receivable.

**Membership Interests of VIE Subject to Mandatory Redemption.** On August 9, 2013, SCCG issued 100 percent of its membership interests to SHLLC for a total of \$40 million. The membership interests in SCCG are mandatorily redeemable pursuant to a schedule of payments that indicates the amount of each payment and the corresponding dates on which each payment is due. The schedule requires SCCG to make semi-annual payments to SHLLC sufficient to provide returns on, as well as returns of, capital until the investment has been repaid in full, including a \$4 million balloon payment as part of the final disbursement which is due on August 15, 2033. The return on capital includes the Seven States Return. These payments provide a return on investment to SHLLC of 7.0 percent, which is reflected as interest expense in the consolidated statements of operations. As of March 31, 2015 and September 30, 2014, the carrying amount of the membership interests of VIE subject to mandatory redemption were \$38 million and \$39 million, respectively. As of March 31, 2015 and September 30, 2014, \$2 million of this was current and included in Accounts payable and accrued liabilities.

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.

#### 11. Asset Retirement Obligations

During the six months ended March 31, 2015, TVA's total ARO liability increased \$54 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

Table of Contents

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. Decommissioning cost studies will be updated for each of TVA's nuclear units at least every five years.

Both the nuclear and non-nuclear liabilities were increased by periodic accretion. This was partially offset by ash area settlement projects that were conducted during the six months ended March 31, 2015. The nuclear and non-nuclear accretion were deferred as regulatory assets, and \$22 million of the related regulatory assets was amortized into expense as this amount was collected in rates.

## Asset Retirement Obligation Activity

	Nuclear	Non-Nuclear	Total	
Balance at September 30, 2014	\$2,052	\$1,117	\$3,169	
Settlements (ash storage areas)	—	(21	) (21	)
Accretion (recorded as regulatory asset)	49	26	75	
Balance at March 31, 2015	\$2,101	\$1,122	\$3,223	(1 )

## Note

(1) The current portion of ARO in the amount of \$115 million is included in Accounts payable and accrued liabilities at March 31, 2015.

## 12. Debt and Other Obligations

## Debt Outstanding

Total debt outstanding at March 31, 2015, and September 30, 2014, consisted of the following:

Debt Outstanding	At March 31, 2015	At September 30, 2014	
Short-term debt			
Short-term debt, net	\$939	\$596	
Current maturities of long-term debt of variable interest entities	33	32	
Current maturities of power bonds	1,086	1,032	
Total current debt outstanding, net	2,058	1,660	
Long-term debt			
Long-term debt of variable interest entities	1,263	1,279	
Long-term power bonds <sup>(1)</sup>	21,853	22,037	
Unamortized discounts, premiums, and other	(85	) (89	)
Total long-term debt, net	23,031	23,227	
Total outstanding debt	\$25,089	\$24,887	

## Note

(1) Includes net exchange gains (losses) from currency transactions of \$39 million at March 31, 2015 and \$(44) million at September 30, 2014.

Table of Contents

## Debt Securities Activity

The table below summarizes the long-term debt securities activity for the period from October 1, 2014, to March 31, 2015:

## Debt Securities Activity

	Date	Amount	Interest Rate	
Redemptions/Maturities				
electronotes®	First Quarter 2015	\$1	2.65	%
electronotes®	Second Quarter 2015	42	4.20	%
2009 Series A	November 2014	2	2.25	%
2009 Series B	December 2014	1	3.77	%
Total redemptions/maturities of power bonds		46		
Variable interest entities	Second Quarter 2015	15	4.29	%
Total redemptions/maturities of debt		\$61		
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 2015 with a maturity date of September 30, 2015. 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 plans to use the U.S. Treasury credit facility as a secondary source of liquidity. The interest rate on any borrowing under this facility is based on the average rate on outstanding marketable obligations of the United States with maturities from date of issue of one year or less. There were no outstanding borrowings under the facility at March 31, 2015. 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. One \$1.0 billion credit facility matures on June 25, 2017, another \$1.0 billion credit facility matures on December 13, 2017, and the \$500 million credit facility matures on April 5, 2018. 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, 2015, and September 30, 2014, there were approximately \$1.2 billion and \$1.0 billion, respectively, of letters of credit outstanding under the facilities, and there were no borrowings outstanding. See Note 14 — Other Derivative Instruments — Collateral.

## 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 March 31, 2015, and September 30, 2014, the outstanding lease/leaseback obligations were \$637 million and \$691 million, respectively.

13. 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 and six months ended March 31, 2015, TVA reclassified \$46 million and \$84 million of losses, respectively, related to its cash flow hedges from AOCI to Interest expense. During the three and six months ended March 31, 2014, TVA reclassified \$7 million and \$29 million of gains, respectively, related to its cash flow hedges from AOCI to Interest expense. See Note 14.

Table of Contents

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 7, Note 14 — Overview of Accounting Treatment, Note 15 — Fair Value Measurements, and Note 17.

## 14. 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 plans to continue to manage fuel price volatility through various methods, but is currently evaluating the 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).

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

Derivatives in Cash Flow Hedging Relationship	Objective of Hedge Transaction	Accounting for Derivative Hedging Instrument 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	Three Months Ended March 31		Six Months Ended March 31	
			2015	2014	2015	2014
Currency swaps	To protect against changes in cash flows caused by changes in foreign currency exchange rates (exchange rate risk)		\$(59	) \$2	\$(74	) \$22

## Summary of Derivative Instruments That Receive Hedge Accounting Treatment (part 2)

## Amount of Gain (Loss) Reclassified from OCI to Interest Expense

Derivatives in Cash Flow Hedging Relationship	Three Months Ended March 31		Six Months Ended March 31	
	2015	2014	2015	2014
Currency swaps	\$(46	) \$7	\$(84	) \$29

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 \$49 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.

23

---



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

Derivative Type	Objective of Derivative	Accounting for Derivative Instrument	Three Months Ended March 31 <sup>(1)</sup>		Six Months Ended March 31 <sup>(1)</sup>	
			2015	2014	2015	2014
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 until settlement, at which time the gains/losses are recognized in gain/loss on derivative contracts. <sup>(2)</sup>	\$—	\$—	\$—	\$—
Commodity contract derivatives	To protect against fluctuations in market prices of purchased coal or natural gas (price risk)	Mark-to-market gains and losses are recorded as regulatory assets or liabilities. Realized gains and losses due to contract settlements 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.	(26	) (4	) (39	) (24

## 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 and six months ended March 31, 2015 and 2014.

(2) Generally, TVA maintains a level of outstanding discount notes equal to or greater than the notional amount of the interest rate swaps. However, in September 2014, TVA issued long-term Bonds in anticipation of the maturity of other long-term debt, and used the proceeds to pay down discount notes, which caused the balance of discount notes outstanding at March 31, 2015, to fall below the notional amount of the interest rate swaps. There is no impact on the consolidated statements of operations due to the use of regulatory accounting for these items.

Table of Contents

## Fair Values of TVA Derivatives

	At March 31, 2015		At September 30, 2014	
Derivatives that Receive Hedge Accounting Treatment	Balance	Balance Sheet Presentation	Balance	Balance Sheet Presentation
Currency swaps				
£200 million Sterling	\$(43	) Other long-term liabilities	\$(15	) Other long-term liabilities
£250 million Sterling	27	Other long-term assets	56	Other long-term assets
£150 million Sterling	(9	) Other long-term liabilities	8	Other long-term assets
Derivatives that Do Not Receive Hedge Accounting Treatment				
	Balance	Balance Sheet Presentation	Balance	Balance Sheet Presentation
Interest rate swaps				
\$1.0 billion notional	(1,225	) Other long-term liabilities	(987	) Other long-term liabilities
\$476 million notional	(460	) Other long-term liabilities	(349	) Other long-term liabilities
\$42 million notional	(12	) Other long-term liabilities	(12	) Other long-term liabilities
		Other current assets \$4;		Other current assets \$1;
		Other long-term assets \$1;		Other long-term liabilities
Commodity contract derivatives	(149	) Other long-term liabilities	(96	) \$(17); Accounts payable and accrued liabilities
		\$(41); Accounts payable and accrued liabilities		\$(80)
		\$(113)		
FTP		Other current assets		Other current assets \$(69);
		\$(112); Other long-term		Other long-term liabilities
Derivatives under FTP <sup>(1)</sup>	(157	) liabilities \$(14); Accounts payable and accrued liabilities	(103	) \$(14); Accounts payable and accrued liabilities
		\$(31)		\$(20)

## Note

(1) Fair values of certain derivatives under the FTP that were in net liability positions totaling \$112 million and \$69 million at March 31, 2015 and September 30, 2014, 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, 2015:

## Currency Swaps Outstanding

At March 31, 2015

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 transaction gain on the Bond liability is offset by a currency exchange loss on the swap contract. Conversely, when the dollar weakens against the British pound sterling, the transaction 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.

Table of Contents

## 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, 2015 and 2014, the changes in fair market value of the interest rate swaps resulted in deferred unrealized losses of \$165 million and \$163 million, respectively. For the six months ended March 31, 2015 and 2014, the changes in fair market value of the interest rate swaps resulted in deferred unrealized losses of \$349 million and \$25 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, 2015, TVA's coal and natural gas contract derivatives had terms of up to two years and up to three years, respectively.

## Commodity Contract Derivatives

	At March 31, 2015			At September 30, 2014		
	Number of Contracts	Notional Amount	Fair Value (MtM)	Number of Contracts	Notional Amount	Fair Value (MtM)
Coal contract derivatives	18	27 million tons	\$(154 )	24	31 million tons	\$(86 )
Natural gas contract derivatives	33	114 million mmBtu	\$5	46	62 million mmBtu	\$(10 )

**Derivatives Under FTP.** While TVA is currently evaluating the use of financial instruments for price hedging, certain natural gas swaps remain as part of the suspended FTP. Under the FTP, TVA may purchase and sell futures, swaps, options, and combinations of these instruments (as long as they are standard in the industry) to hedge TVA's exposure to (1) the price of natural gas, fuel oil, electricity, coal, emission allowances, nuclear fuel, and other commodities included in TVA's fuel cost adjustment calculation, (2) the price of construction materials, and (3) contracts for goods priced in or indexed to foreign currencies. The combined transaction limit for the fuel cost adjustment and construction material transactions is \$130 million (based on one-day value at risk). In addition, the maximum hedge volume for the construction material transactions is 75 percent of the underlying net notional volume of the material that TVA anticipates using in approved TVA projects, and the market value of all outstanding hedging transactions involving construction materials is limited to \$100 million at the execution of any new transaction. The portfolio value at risk limit for the foreign currency transactions is \$5 million and is separate and distinct from the \$130 million transaction limit discussed above. TVA's policy prohibits trading financial instruments under the FTP for speculative purposes.

At March 31, 2015 and September 30, 2014, the risks hedged under the FTP were the economic risks associated with the prices of natural gas, fuel oil, and crude oil. At March 31, 2015 and September 30, 2014, TVA had no outstanding coal contract derivatives under the FTP. There were no futures contracts or options contracts outstanding under the FTP at March 31, 2015, and swap contracts under the FTP had remaining terms of three years or less.

## Derivatives Under Financial Trading Program

At March 31, 2015

At September 30, 2014

Edgar Filing: Tennessee Valley Authority - Form 10-Q

	Notional Amount	Fair Value (MtM) (in millions)	Notional Amount	Fair Value (MtM) (in millions)
Natural gas (in mmBtu)				
Swap contracts	76,175,000	\$(157 )	102,227,500	\$(103 )

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.

Table of Contents

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 \$(10) million at March 31, 2015, and \$(5) million at September 30, 2014. 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, 2015		At September 30, 2014	
FTP unrealized gains (losses) deferred as regulatory liabilities (assets)				
Natural gas	\$ (157	)	\$ (103	)

## Financial Trading Program Realized Gains (Losses)

	For the Three Months Ended March 31		For the Six Months Ended March 31	
	2015	2014	2015	2014
Decrease (increase) in fuel expense				
Natural gas	\$ (21	) \$ (3	) \$ (32	) \$ (18
Fuel oil/crude oil	—	—	1	1

## Financial Trading Program Realized Gains (Losses)

	For the Three Months Ended March 31		For the Six Months Ended March 31	
	2015	2014	2015	2014
Decrease (increase) in purchased power expense				
Natural gas	\$ (5	) \$ (1	) \$ (8	) \$ (7

Table of Contents

## Offsetting of Derivative Assets and Liabilities

The amounts of TVA's derivative instruments as reported in the Consolidated Balance Sheets as of March 31, 2015, and September 30, 2014, are shown in the table below:

	As of March 31, 2015		
	Gross Amounts of Recognized Assets/Liabilities	Gross Amounts Offset in the Balance Sheet <sup>(1)</sup>	Net Amounts of Assets/Liabilities Presented in the Balance Sheet <sup>(2)</sup>
<b>Assets</b>			
Currency swap <sup>(3)</sup>	\$27	\$(3	) \$24
Commodity derivatives under FTP	72	(72	) —
Total derivatives subject to master netting or similar arrangement	99	(75	) 24
Total derivatives not subject to master netting or similar arrangement	5	—	5
<b>Total</b>	<b>\$104</b>	<b>\$(75</b>	<b>) \$29</b>
<b>Liabilities</b>			
Currency swaps <sup>(4)</sup>	\$52	\$—	\$52
Interest rate swaps <sup>(4)</sup>	1,697	—	1,697
Commodity derivatives under FTP	230	(184	) 46
Total derivatives subject to master netting or similar arrangement	1,979	(184	) 1,795
Total derivatives not subject to master netting or similar arrangement	154	—	154
<b>Total</b>	<b>\$2,133</b>	<b>\$(184</b>	<b>) \$1,949</b>
	As of September 30, 2014		
	Gross Amounts of Recognized Assets/Liabilities	Gross Amounts Offset in the Balance Sheet <sup>(1)</sup>	Net Amounts of Assets/Liabilities Presented in the Balance Sheet <sup>(2)</sup>
<b>Assets</b>			
Currency swaps	\$64	\$(64	) \$—
Commodity derivatives under FTP	51	(51	) —
Total derivatives subject to master netting or similar arrangement	115	(115	) —
Total derivatives not subject to master netting or similar arrangement	1	—	1
<b>Total</b>	<b>\$116</b>	<b>\$(115</b>	<b>) \$1</b>
<b>Liabilities</b>			
Currency swap <sup>(4)</sup>	\$15	\$—	\$15
Interest rate swaps <sup>(4)</sup>	1,348	—	1,348



Edgar Filing: Tennessee Valley Authority - Form 10-Q

Commodity derivatives under FTP	154	(120	) 34
Total derivatives subject to master netting or similar arrangement	1,517	(120	) 1,397
Total derivatives not subject to master netting or similar arrangement	97	—	97
Total	\$1,614	\$(120	) \$1,494

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 Consolidated Balance Sheets.

(3) At March 31, 2015, securities of approximately \$14 million were posted by a counterparty on TVA's behalf to partially secure the asset position of one of the currency swaps in accordance with the collateral requirements for these derivatives.

(4) Letters of credit of approximately \$1.2 billion and \$1.0 billion were posted as collateral at March 31, 2015 and September 30, 2014, 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, 2015 and September 30, 2014, TVA also held \$17 million and \$19 million, respectively, of cash collateral in excess of collateral requirements, that was classified in Restricted cash and investments with a corresponding obligation recorded in Accounts payable and accrued liabilities in the same amount.

## Table of Contents

### Other Derivative Instruments

**Investment Fund Derivatives.** Investment funds consist primarily of funds held in the Nuclear Decommissioning Trust ("NDT"), the Asset Retirement Trust ("ART"), and a Rabbi Trust. The funds in the Rabbi Trust are held for the Supplemental Executive Retirement Plan ("SERP"), the Long-Term Deferred Compensation Plan ("LTDCP"), and the TVA Deferred Compensation Plan ("DCP"). All securities in the trusts are classified as trading. See Note 15 — Investments 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 March 31, 2015, and September 30, 2014, the fair value of 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, 2015, the aggregate fair value of all derivative instruments with credit-risk related contingent features that were in a liability position was \$1.7 billion. TVA's collateral obligations at March 31, 2015, under these arrangements were approximately \$1.2 billion, for which TVA had posted approximately \$1.2 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 concentrations of accounts receivable from three LPCs that represented 24 percent and 27 percent of total outstanding accounts receivable at March 31, 2015 and September 30, 2014, respectively.

**Credit of Derivative Counterparties.** TVA has entered into derivative contracts for hedging purposes, and TVA's NDT fund and 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, 2015, all of TVA's currency swaps, interest rate swaps, and commodity derivatives under the FTP were with counterparties whose Moody's credit rating was Baa2 or higher. At March 31, 2015, all of TVA's coal contract derivatives were with counterparties whose Moody's credit rating, or TVA's internal analysis when such information was unavailable, was Caa3 or higher. See Derivatives Not Receiving Hedge Accounting Treatment.

TVA currently utilizes two active 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.

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. To help ensure a reliable supply of coal, TVA had coal contracts with multiple suppliers at March 31,

Table of Contents

2015. The contracted supply of coal is sourced from multiple geographic regions of the United States and is to be delivered via various transportation methods (for example, barge, rail, and truck). TVA purchases the majority of its natural gas requirements from a variety of suppliers under short-term contracts.

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

15. 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.

#### Investments

At March 31, 2015, 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, the ART, and a Rabbi Trust. The funds in the Rabbi Trust are held for the SERP, LTDCP, and DCP. 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. 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. TVA established the DCP to provide participants with deferrals of compensation as a supplement to retirement benefits. The NDT and SERP are invested in a mix of investments generally designed to achieve a return in line with overall equity market performance, and the ART and LTDCP are invested in a mix of investments generally designed to achieve a return in line with equity and fixed-income market performance.

Table of Contents

The NDT, ART, SERP, LTDCP, and DCP 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 \$103 million at March 31, 2015. 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 Level 3 within the fair value hierarchy.

Commingled funds represent investment funds comprising multiple individual financial instruments. The commingled funds held by the NDT, ART, SERP, LTDCP, and DCP consist of 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 (Level 1) or measured using observable inputs for similar instruments (Level 2). 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 Level 2 valuations.

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:

Financial Statement Presentation		For the Three Months Ended		For the Six Months Ended	
		March 31 2015	2014	March 31 2015	2014
SERP	Other income (expense)	\$1	\$—	\$—	\$1
LTDCP	Other income (expense)	—	—	(1	) —
NDT	Regulatory asset	11	6	34	36
ART	Regulatory asset	9	2	15	18

#### Currency and Interest Rate Swaps

See Note 14 — 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. Coal and natural gas commodity contracts are classified as Level 3 and Level 2 valuations respectively, and are valued based on income approaches. TVA develops an overall price forecast using widely used short-term and mid-range market data from an external pricing specialist. In addition, coal commodity contracts include adjustments for long-term internal estimates. To value the volume option component of applicable coal contracts, TVA uses a Black-Scholes pricing model which includes inputs from the overall coal price forecast, contract-specific terms, and other market inputs.

Commodity Derivatives Under FTP. These contracts are valued based on market approaches which utilize Chicago Mercantile Exchange ("CME") quoted prices and other observable inputs. Futures and options contracts settled on the CME are classified as Level 1 valuations. Swap contracts are valued using a pricing model based on CME inputs and are subject to nonperformance risk outside of the exit price. These contracts are classified as Level 2 valuations.

Table of Contents

See Note 14 — 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 2014) 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 less than a \$1 million decrease in the fair value of assets and a \$2 million decrease in the fair value of liabilities at March 31, 2015.



Table of Contents

## 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, 2015, and September 30, 2014. 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, 2015

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
<b>Assets</b>				
<b>Investments</b>				
Equity securities	\$ 189	\$—	\$—	\$ 189
Debt securities				
U.S. government corporations and agencies	79	9	—	88
Corporate debt securities	—	291	—	291
Residential mortgage-backed securities	—	14	—	14
Commercial mortgage-backed securities	—	6	—	6
Collateralized debt obligations	—	30	—	30
Private partnerships	—	—	223	223
Commingled funds <sup>(1)</sup>				
Equity security commingled funds	44	944	—	988
Debt security commingled funds	44	198	—	242
Total investments	356	1,492	223	2,071
Currency swaps <sup>(2)</sup>	—	24	—	24
Commodity contract derivatives	—	—	5	5
Commodity derivatives under FTP <sup>(2)</sup>				
Swap contracts	—	—	—	—
<b>Total</b>	<b>\$356</b>	<b>\$1,516</b>	<b>\$228</b>	<b>\$2,100</b>
	Quoted Prices in Active Markets for Identical Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
<b>Liabilities</b>				
Currency swaps <sup>(2)</sup>	\$—	\$52	\$—	\$52
Interest rate swaps	—	1,697	—	1,697
Commodity contract derivatives	—	—	154	154
Commodity derivatives under FTP <sup>(2)</sup>				
Swap contracts	—	46	—	46

Edgar Filing: Tennessee Valley Authority - Form 10-Q

Total	\$—	\$1,795	\$154	\$1,949
-------	-----	---------	-------	---------

Notes

(1) Commingled funds represent investment funds comprising multiple individual financial instruments and are classified in the table based on their existing investment portfolio as of the measurement date. Commingled funds primarily composed of one class of security are classified in that category.

(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 14 — Offsetting of Derivative Assets and Liabilities.

Table of Contents

## Fair Value Measurements

At September 30, 2014

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
<b>Assets</b>				
<b>Investments</b>				
Equity securities	\$ 162	\$—	\$—	\$ 162
<b>Debt securities</b>				
U.S. government corporations and agencies	46	39	—	85
Corporate debt securities	—	290	—	290
Residential mortgage-backed securities	—	14	—	14
Commercial mortgage-backed securities	—	7	—	7
Collateralized debt obligations	—	29	—	29
Private partnerships	—	—	214	214
<b>Commingled funds<sup>(1)</sup></b>				
Equity security commingled funds	40	903	—	943
Debt security commingled funds	61	176	—	237
Total investments	309	1,458	214	1,981
Currency swaps <sup>(2)</sup>	—	—	—	—
Commodity contract derivatives	—	—	1	1
Commodity derivatives under FTP <sup>(2)</sup>	—	—	—	—
Swap contracts	—	—	—	—
<b>Total</b>	<b>\$ 309</b>	<b>\$ 1,458</b>	<b>\$ 215</b>	<b>\$ 1,982</b>
	Quoted Prices in Active Markets for Identical Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
<b>Liabilities</b>				
Currency swaps <sup>(2)</sup>	\$—	\$ 15	\$—	\$ 15
Interest rate swaps	—	1,348	—	1,348
Commodity contract derivatives	—	—	97	97
Commodity derivatives under FTP <sup>(2)</sup>	—	—	—	—
Swap contracts	—	34	—	34
<b>Total</b>	<b>\$—</b>	<b>\$ 1,397</b>	<b>\$ 97</b>	<b>\$ 1,494</b>

## Notes

(1) Commingled funds represent investment funds comprising multiple individual financial instruments and are classified in the table based on their existing investment portfolio as of the measurement date. Commingled funds primarily composed of one class of security are classified in that category.

(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. See Note 14 — Offsetting of Derivative Assets and Liabilities.

Table of Contents

TVA uses internal and external valuation specialists for the calculation of its 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 assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3):

## Fair Value Measurements Using Significant Unobservable Inputs

	For the Three Months Ended March 31		For the Six Months Ended March 31	
	Private Partnerships	Commodity Contract Derivatives	Private Partnerships	Commodity Contract Derivatives
Balance at beginning of period	\$169	\$(145 )	\$159	\$(140 )
Purchases	6	—	14	—
Issuances	—	—	—	—
Sales	(2 )	—	(5 )	—
Settlements	—	—	—	—
Net unrealized gains (losses) deferred as regulatory assets and liabilities	7	14	12	9
Balance at March 31, 2014	\$180	\$(131 )	\$180	\$(131 )
Balance at beginning of period	\$220	\$(133 )	\$214	\$(96 )
Purchases	4	—	10	—
Issuances	—	—	—	—
Sales	(3 )	—	(7 )	—
Settlements	—	—	—	—
Net unrealized gains (losses) deferred as regulatory assets and liabilities	2	(16 )	6	(53 )
Balance at March 31, 2015	\$223	\$(149 )	\$223	\$(149 )

There were no realized gains or losses related to the instruments measured at fair value using significant unobservable inputs that affected net income during the three and six months ended March 31, 2015. All unrealized gains and losses related to these instruments have been reflected as increases or decreases in regulatory assets and liabilities. See Note 7.

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 2015	Valuation Technique(s)	Unobservable Inputs	Range	
Assets					
Commodity contract derivatives	\$5	Discounted cash flow	Credit risk	0.25	% <sup>(1)</sup>
		Pricing model			

Edgar Filing: Tennessee Valley Authority - Form 10-Q

			Coal supply and demand	0.8 - 1.0 billion tons/year
			Long-term market prices	\$10.74 - \$103.41/ton
Liabilities				
Commodity contract derivatives	\$154	Pricing model	Coal supply and demand	0.8 - 1.0 billion tons/year
			Long-term market prices	\$10.74 - \$103.41/ton

Note

(1) Applies to only one contract.

Table of Contents

## Quantitative Information about Level 3 Fair Value Measurements

	Fair Value at September 30 2014	Valuation Technique(s)	Unobservable Inputs	Range	
<b>Assets</b>					
Commodity contract derivatives	\$1	Discounted cash flow	Credit risk	2 - 5 %	(1)
		Pricing model	Coal supply and demand Long-term market prices	1.0 - 1.1 billion tons/year \$11.24 - \$67.07/ton	
<b>Liabilities</b>					
Commodity contract derivatives	\$97	Pricing model	Coal supply and demand Long-term market prices	1.0 - 1.1 billion tons/year \$11.24 - \$67.07/ton	

## Note

(1) Applies to two contracts.

## 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, 2015, and September 30, 2014, 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, 2015, and September 30, 2014, were as follows:

## Estimated Values of Financial Instruments Not Recorded at Fair Value

	Valuation Classification	At March 31, 2015		At September 30, 2014	
		Carrying Amount	Fair Value	Carrying Amount	Fair Value
EnergyRight® receivables (including current portion)	Level 2	\$157	\$165	\$156	\$166
Loans and other long-term receivables, net (including current portion)	Level 2	\$121	\$110	\$92	\$81
EnergyRight® financing obligation (including current portion)	Level 2	\$189	\$213	\$190	\$215
Unfunded loan commitments	Level 2	\$—	\$—	\$—	\$18
Membership interest of variable interest entity subject to mandatory redemption (including current portion)	Level 2	\$38	\$50	\$39	\$50
	Level 2	\$22,854	\$27,697	\$22,980	\$26,889

Edgar Filing: Tennessee Valley Authority - Form 10-Q

Long-term outstanding power bonds (including current maturities), net

Long-term debt of variable interest entities (including current maturities)	Level 2	\$1,296	\$1,490	\$1,311	\$1,425
---	---------	---------	---------	---------	---------

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 values of the EnergyRight® Solutions receivables, loans and other long-term receivables, and unfunded loan commitments are estimated by determining the present values of future cash flows using discount rates equal to lending rates for similar loans made to borrowers with similar credit ratings and similar remaining maturities, where applicable.

The fair value of the 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 values of the EnergyRight® Solutions financing obligation and



Table of Contents

membership interests and long-term debt of VIEs are 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.

## 16. Other Income (Expense), Net

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

## Other Income (Expense), Net

	For the Three Months Ended March 31		For the Six Months Ended March 31	
	2015	2014	2015	2014
External services	\$3	\$6	\$6	\$11
Interest income	6	6	12	12
Gains (losses) on investments	2	1	3	3
Miscellaneous	(3	) —	(4	) 1
Total other income (expense), net	\$8	\$13	\$17	\$27

## 17. 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, 2015, and 2014, 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	
	2015	2014	2015	2014	2015	2014	2015	2014
Service cost	\$31	\$30	\$3	\$4	\$65	\$65	\$8	\$9
Interest cost	137	140	7	6	270	279	15	15
Expected return on plan assets	(109	) (109	) —	—	(218	) (217	) —	—
Amortization of prior service credit	(6	) (6	) (1	) (1	) (11	) (11	) (3	) (3
Recognized net actuarial loss	81	73	2	2	150	142	4	5
Total net periodic benefit cost as actuarially determined	134	128	11	11	256	258	24	26
Amount capitalized due to actions of regulator	(63	) —	—	—	(114	) —	—	—
Total net periodic benefit cost	\$71	\$128	\$11	\$11	\$142	\$258	\$24	\$26

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 expects to contribute \$275 million to the Plan in 2015. As of March 31, 2015, TVA had contributed \$138 million to the Plan and expects to contribute the remaining \$137 million by September 30, 2015. TVA contributed \$250 million to the Plan in 2014. 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, 2015, TVA provided approximately \$21 million, net of rebates and subsidies, to other

post-retirement benefit plans and approximately \$7 million to the SERP. For the six months ended March 31, 2014, TVA provided approximately \$24 million, net of rebates and subsidies, to other post-retirement benefit plans and approximately \$6 million to the SERP.

Table of Contents

18. 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 from the licensees of each of the 104 NRC licensed reactors in the United States. The assessment for any nuclear accident would be limited to \$19 million per year per unit. American Nuclear Insurers, under a contract with the NRC, administers the Secondary Financial Program. With its six licensed units, TVA could be required to pay a maximum of \$764 million per nuclear incident, but it would have to pay no more than \$114 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 \$120 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 \$35 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.

Nuclear. 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, 2015, the present value of the estimated future decommissioning cost of \$2.1 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. 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 nuclear power units are currently authorized to operate until 2020-2036, depending on the unit. It may be possible to extend the operating life of some of the units with approval from the NRC. See Note 7 and Note 11.

Non-Nuclear Decommissioning. The present value of the estimated future non-nuclear decommissioning ARO was \$1.1 billion at March 31, 2015. This decommissioning cost estimate involves estimating the amount and timing of future expenditures and making judgments concerning whether or not such costs are considered a legal obligation. Estimating the amount and timing of future expenditures includes, among other things, making projections of the timing and duration of the asset retirement process and how costs will escalate with inflation. 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 non-nuclear power assets. 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. See Note 7 and Note 11.

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.

## Table of Contents

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.

TVA estimates that compliance with future Clean Air Act ("CAA") requirements (excluding greenhouse gas ("GHG") requirements) could lead to additional costs of \$800 million from 2015 to 2025 for additional clean air controls. There could be additional material costs if reductions of GHGs, including carbon dioxide, 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 oil spills and other contamination that TVA is addressing. At March 31, 2015, TVA's estimated liability for cleanup and similar environmental work for those sites for which sufficient information is available to develop a cost estimate (primarily the TVA sites) was approximately \$12 million on a non-discounted basis, and was included in Accounts payable and accrued liabilities and Other long-term liabilities on the consolidated balance sheet.

## 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, 2015, TVA had accrued approximately \$151 million of probable losses with respect to Legal Proceedings and estimated the range of these losses to be from \$151 million to \$153 million. Of the accrued amount, \$79 million is included in Other long-term liabilities and \$72 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<sub>2</sub>") and nitrogen oxide ("NO<sub>x</sub>"), (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.

Table of Contents

Legal Proceedings Related to the Kingston Ash Spill. Seventy-eight lawsuits based on the Kingston ash spill were filed in the United States District Court for the Eastern District of Tennessee. Fifteen of these lawsuits were dismissed. On August 4, 2014, the court issued an agreed order that implements a mediated global resolution of pending claims. Under the order, the 63 pending cases were dismissed with prejudice, and TVA deposited \$28 million with the court, which is responsible for disbursing the funds. The order anticipates that further legal proceedings will be required to resolve the claims of nine of the plaintiffs, and a portion of the \$28 million was set aside under the order to cover the anticipated costs of resolving these claims. Claims of seven of the nine plaintiffs have been resolved. In April 2015, the court dismissed the claims of the remaining two plaintiffs.

Civil Penalty and Natural Resource Damages for the Kingston Ash Spill. In June 2010, TDEC issued a civil penalty order of approximately \$12 million to TVA for the Kingston ash spill, citing violations of the Tennessee Solid Waste Disposal Act and the Tennessee Water Quality Control Act. Of the \$12 million, TVA initially paid \$10 million, and agreed to undertake environmental projects valued at \$2 million as a credit against the remaining penalty amount. TVA completed several of those projects and paid TDEC the small remaining difference rather than do more projects. In addition, TVA paid \$750 thousand over three years into the Natural Resource Restoration Fund to support the assessment of natural resource damages associated with the Kingston spill.

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 against the six then-current members of the TVARS Board. The lawsuit challenged the TVARS Board's decision to suspend the TVA contribution requirements for 2010 through 2013, and to amend the TVARS Rules and Regulations to (1) reduce the calculation for COLA benefits for CY 2010 through CY 2013, (2) reduce the interest crediting rate for the fixed fund accounts, and (3) increase the eligibility age to receive COLAs from age 55 to 60. In September 2010, the district court dismissed this action, allowing the plaintiffs to file an amended complaint within 14 days against TVARS and TVA but not the individual directors, which the plaintiffs did shortly thereafter. The plaintiffs allege, among other things, violations of their constitutional rights (due process, equal protection, and property rights), violations of the Administrative Procedure Act, and breach of statutory duties owed to the plaintiffs. They seek a declaratory judgment and appropriate relief for the alleged statutory and constitutional violations and breaches of duty. TVA filed its answer to the amended complaint in December 2010. In May 2012, the court granted the parties' joint motion to administratively close the case subject to reopening to allow the parties the opportunity to engage in mediation. In July 2013, the court granted the plaintiffs' motion to reopen the lawsuit. In November 2013, TVA filed a motion for summary judgment, and the plaintiffs filed a motion for summary judgment on February 8, 2015. The motions are pending before the court.

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 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 April 2015, TSRA and TCWN filed a 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.

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 the NRC licensing

activities since 1984. The most recent update provided that a permanent repository would be available when necessary and that spent fuel could be safely stored for 60 years after a plant's operating license was terminated. The D.C. Circuit vacated this update on the grounds that, among other things, the NRC failed to support these findings with an adequate National Environmental Policy Act ("NEPA") review and the NRC did not evaluate environmental impacts if the repository was never built.

In June 2012, multiple intervenor groups submitted a petition to the NRC to (1) hold in abeyance all pending reactor licensing decisions that would depend upon the WCD and (2) establish a process for ensuring that the remanded proceeding complies with the public participation requirements of Section 189a of the Atomic Energy Act. In August 2012, the NRC issued an order (the "August 2012 NRC Order") preventing the issuance of a final licensing decision in all proceedings affected by the petition, including the proceedings involving Watts Bar Nuclear Plant ("Watts Bar") Unit 2, Sequoyah Nuclear Plant ("Sequoyah"), and Bellefonte Nuclear Plant ("Bellefonte") Units 3 and 4.

In August 2014, the NRC issued its final rule on continued storage of spent nuclear fuel ("Continued Storage Rule"), which replaced the WCD, and terminated its suspension of final licensing decisions, dismissed contentions related to the WCD pending before the NRC, and directed Atomic Safety and Licensing Boards ("ASLBs") to dismiss contentions related to the WCD that were being held in abeyance.

In September 2014, multiple intervenor groups submitted a petition to the NRC in multiple reactor licensing proceedings to suspend the issuance of final decisions in those proceedings until the NRC generically makes additional findings related to



Table of Contents

spent fuel disposal or those findings are made in individual licensing proceedings. The NRC rejected this petition in February 2015. In addition, several petitions for review have been filed in the D.C. Circuit challenging the Continued Storage Rule.

In January 2015, multiple intervenor groups submitted a petition to the NRC in multiple reactor licensing proceedings, asking the NRC to direct its staff to supplement environmental impact statements to incorporate by reference the generic environmental impact statement released in connection with 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 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.

**Administrative Proceedings Regarding Bellefonte Units 3 and 4.** TVA submitted its combined construction and operating license application ("CCOLA") for two Advanced Passive 1000 reactors at 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 CCOLA 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 CCOLA. In April 2012, the ASLB issued an order maintaining the proceeding in "active" status, but amending the disclosure schedule.

In July 2012, BREDL petitioned for the admission of another new, late-filed contention stemming from the D.C. Circuit's order vacating the WCD. In September 2014, the ASLB denied BREDL's request to file the new contention. 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 Bellefonte Units 3 and 4 proceeding and a motion with the ASLB seeking leave to file a new, late-filed contention stemming from 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.

**Administrative Proceedings Regarding Watts Bar Unit 2.** In July 2009, SACE, the Tennessee Environmental Council, the Sierra Club, We the People, and BREDL filed a request for a hearing and petition to intervene in the NRC administrative process reviewing TVA's application for an operating license for Watts Bar Unit 2. In November 2009, the ASLB granted SACE's request for hearing, admitted two of SACE's seven contentions for hearing, and denied the

request for hearing submitted on behalf of the other four petitioners. The ASLB subsequently dismissed one contention, leaving one aquatic impact contention. In July 2013, SACE filed a motion to withdraw its remaining aquatic impact contention. The ASLB granted this motion later that same month.

In July 2012, SACE petitioned for the admission of another new, late-filed contention, similar to the one filed in the Bellefonte Units 3 and 4 proceeding, stemming from the D.C. Circuit's order vacating the WCD. In September 2014, the ASLB denied SACE's request to file the contention related to the WCD and terminated the proceeding. Following the publication of the Continued Storage Rule, SACE filed a petition with the NRC seeking suspension of the issuance of a final decision in the Watts Bar Unit 2 proceeding and motions with the ASLB to reopen the record and for leave to file a new, late-filed contention stemming from 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. In addition, in February 2015, SACE filed motions with the NRC to reopen the record and to admit a new contention relating to the expedited seismic evaluation process report for Watts Bar that TVA filed with the NRC in December 2014 as part of the Fukushima lessons-learned review process. These motions were denied in April 2015. In April 2015, SACE also filed motions with the NRC to reopen the record and to admit a new contention arguing that the environmental impact statement for Watts Bar Unit 2 must incorporate by reference the generic environmental impact statement released in connection with the Continued Storage Rule.

John Sevier Fossil Plant Clean Air Act Permit. In September 2010, the Environmental Integrity Project, the Southern Environmental Law Center, and the Tennessee Environmental Council filed a petition with the EPA, requesting that the EPA

Table of Contents

Administrators object to the CAA permit issued to TVA for operation of John Sevier. Among other things, the petitioners allege that repair, maintenance, or replacement activities undertaken at John Sevier Unit 3 in 1986 triggered the Prevention of Significant Deterioration ("PSD") requirements for SO<sub>2</sub> and NO<sub>x</sub>. The CAA permit, issued by TDEC, remains in effect pending the disposition of the petition. TVA has now retired all four John Sevier coal-fired units, and this challenge likely will not proceed.

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 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 demand that TVA prepare an Environmental Impact Statement, and are asking 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 United States Court of Appeal for the Sixth Circuit.

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 pond 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. At the request of the parties, the Administrative Law Judge ("ALJ") assigned to the matter has stayed the case until October 15, 2015.

Bull Run Fossil Plant NPDES Permit Administrative Appeal. SACE and the Tennessee Clean Water Network ("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.

Johnsonville Fossil Plant NPDES Permit Administrative Appeal. SACE and TCWN filed a challenge to the NPDES permit for the Johnsonville Fossil Plant in March 2011. TDEC is the defendant in the challenge. TVA's motion to intervene was granted in August 2011. The plaintiffs voluntarily dismissed this case in February 2015.

John Sevier Fossil Plant NPDES Permit Administrative Appeal. SACE and TCWN filed a challenge to the NPDES permit for John Sevier in May 2011. TDEC is the defendant in the challenge. TVA's motion to intervene was granted in August 2011. The plaintiffs voluntarily dismissed this case in February 2015.

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 ALJ assigned to the matter granted TVA's motion and dismissed the case. On November 7, 2014, SACE, TCWN, 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.

Petitions Resulting from Japanese Nuclear Events. As a result of events that occurred at the Fukushima Daiichi Nuclear Power Plant in March 2011, petitions have been filed with the NRC which could impact TVA's nuclear program. While some petitions have been dismissed after review, petitions that remain open include the following:

**Petition to Immediately Suspend the Operating Licenses of GE BWR Mark I Units Pending the Full NRC Review With Independent Expert and Public Participation From Affected Emergency Planning Zone Communities**

Beyond Nuclear filed a petition in April 2011, requesting that the NRC take emergency enforcement action against all nuclear reactor licensees that operate units that use the General Electric Mark I BWR design. TVA uses this design at Browns Ferry Units 1, 2, and 3. The petition requests the NRC to take several actions, including the suspension of the operating licenses at the affected nuclear units, including Browns Ferry, until several milestones have been met. In December 2011, the NRC provided its initial response to the petition. The NRC accepted five specific requests that would apply directly or indirectly to Browns Ferry, including issues relating to spent fuel pool use and location, Mark I containment hardened vent systems and design, and backup electrical power. Each of these items was accepted for further investigation, but the requests for immediate action were rejected. The NRC ultimately denied the petition.

Table of Contents

Petition Pursuant to 10 CFR 2.206 - Demand For Information Regarding Compliance with 10 CFR 50, Appendix A, General Design Criterion 44, Cooling Water, and 10 CFR 50.49, Environmental Qualification of Electric Equipment Important to Safety for Nuclear Power Plants

A petition was filed by the Union of Concerned Scientists in July 2011, requesting that a demand for information be issued for affected licensees, including TVA with regards to Browns Ferry, describing how the facilities comply with General Design Criterion 44, Cooling Water, within Appendix A to 10 CFR Part 50, and with 10 CFR 50.49, Environmental Qualification of Electric Equipment Important to Safety for Nuclear Power Plants, for all applicable design and licensing bases events. The NRC has not yet rendered a decision regarding the petition.

19. Subsequent Events

On April 14, 2015, TVA acquired a 700-megawatt combined cycle gas plant located in Ackerman, Mississippi, from Quantum Choctaw Power, an affiliate of Quantum Utility Generation. TVA has purchased the electricity generated by the plant since 2008. TVA acquired the plant for total cash consideration of \$342 million. The fair value of the assets acquired was primarily allocated to Property, plant, and equipment. The acquisition did not include contingent consideration. Transaction costs were expensed as incurred and were not material.

The EPA published a final rule related to coal combustion residuals on April 17, 2015, which will regulate landfill and impoundment location, design and operations; require pond closures, structural integrity, and groundwater monitoring; and describe beneficial reuse. The rule will become effective on October 14, 2015, although certain provisions have later effective dates. TVA is in the process of evaluating the impact of the new rule on the projected schedules and costs related to its fossil operations, including related asset retirement obligations.

TVA announced on April 29, 2015 that the coupon rate on the TVA 1998 Series D bonds (CUSIP number 880591300) will be reset from the current rate of 3.83 percent to the new rate of 3.55 percent on June 1, 2015. Beneficial owners of the bonds have the option of requesting repayment at par value in conjunction with the rate reset. As a result, TVA could be required to repurchase up to \$324 million of bonds on June 1, 2015.

Table of Contents

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, 2014 (the "Annual Report").

Executive Overview

TVA had net income for the three months and six months ended March 31, 2015, of \$496 million and \$577 million, respectively, as compared with net income of \$295 million and \$228 million for the same periods of 2014.

Sales were approximately two percent lower for the three and six months ended March 31, 2015, as compared to the same periods of 2014. These results were primarily driven by weather patterns which, although colder-than-normal during 2015, were warmer than the same periods of 2014, resulting in lower sales to local power company customers of TVA ("LPCs").

TVA continues to make improvements in its operating performance and is on track to meet its target to reduce operating and maintenance expenses by \$500 million by the end of 2015 from its 2013 budget. Operating expenses decreased for the three months and six months ended March 31, 2015, with expenses of \$2.1 billion and \$4.1 billion, respectively, as compared with expenses of \$2.4 billion and \$4.5 billion for the same periods of 2014. Cost saving initiatives, fewer outages, and the timing of certain projects and pension costs contributed to the lower operating and maintenance expenses.

Dam safety issues identified at Pickwick Landing Dam and Boone Dam and modifications to a lock at Wilson Dam continue to be evaluated, and remediation plans are being formulated. TVA is also continuing to collaborate with its customers on the development of a long-term strategic plan for pricing products and programs and in January 2015 issued a notification to LPCs of its intent to modify its rate structure. See Results of Operations and Key Initiatives and Challenges below.

TVA released a draft Integrated Resource Plan ("IRP") for public review on March 9, 2015. The draft includes evaluation of options to meet an expected need for additional resources over the next 20 years affected by changes in the utility industry which include abundant, low-cost natural gas, decreased cost of renewable generation, and increased focus on energy conservation efforts. A final version of the IRP, which includes insight into strategies TVA could use to meet future customer needs, is expected to be presented to the TVA Board this summer with TVA Board action expected by or at its August 2015 meeting.

The TVA Board met on February 12, 2015, and approved resolutions authorizing the establishment of a power purchase agreement for electricity from a planned 80-megawatt ("MW") solar farm in Alabama and the acquisition of a 700 MW combined-cycle natural gas plant in Mississippi. TVA purchased the natural gas-fired plant on April 14, 2015. See Note 19.

Results of Operations

Sales of Electricity

Edgar Filing: Tennessee Valley Authority - Form 10-Q

The following table compares TVA's energy sales for the three and six months ended March 31, 2015, and 2014:  
 Sales of Electricity  
 (millions of kWh)

	Three Months Ended March 31				Six Months Ended March 31			
	2015	2014	Change	Percent Change	2015	2014	Change	Percent Change
Local power companies	36,468	36,862	(394)	(1.1)%	68,714	69,543	(829)	(1.2)%
Industries directly served	4,155	4,309	(154)	(3.6)%	8,499	8,576	(77)	(0.9)%
Federal agencies and other	669	750	(81)	(10.8)%	1,254	1,580	(326)	(20.6)%
Total sales of electricity	41,292	41,921	(629)	(1.5)%	78,467	79,699	(1,232)	(1.5)%

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.

Table of Contents

## Degree Days

	2015 Actual	Normal <sup>(1)</sup>	Percent Variation		2014 Actual	Normal <sup>(1)</sup>	Percent Variation	2015 Actual	2014 Actual	Percent Change
Heating Degree Days										
Three Months Ended March 31	2,066	1,812	14.0 %		2,144	1,812	18.3 %	2,066	2,144	(3.6 )%
Six Months Ended March 31	3,430	3,115	10.1 %		3,498	3,115	12.3 %	3,430	3,498	(1.9 )%
Cooling Degree Days										
Three Months Ended March 31	3	12	(75.0 )%		1	12	(91.7 )%	3	1	200.0 %
Six Months Ended March 31	82	79	3.8 %		92	79	16.5 %	82	92	(10.9 )%

## Note

(1) This calculation is updated every five years in order to incorporate the then most recent 30 years. It was last updated in 2011.

Sales of electricity decreased 629 million kilowatt hours ("kWh") for the three months ended March 31, 2015, compared to the three months ended March 31, 2014. The decrease was primarily related to decreased sales volume for LPCs in part due to a four percent decrease in heating degree days. In addition, sales to industries directly served decreased as a result of the changing economic conditions, and sales to federal agencies and other decreased from a reduction in off-system sales as TVA had less excess generating capacity.

Sales of electricity decreased 1.2 billion kWh for the six months ended March 31, 2015, compared to the six months ended March 31, 2014. The decrease was primarily related to decreased sales volume for LPCs in part due to a two percent decrease in heating degree days. In addition, sales to industries directly served decreased as a result of the changing economic conditions, and sales to federal agencies and other decreased from a reduction in off-system sales as TVA had less excess generating capacity.

## Financial Results

The following table compares operating results for the three and six months ended March 31, 2015, and 2014: Summary Consolidated Statements of Operations

	Three Months Ended March 31			Six Months Ended March 31		
	2015	2014	Percent Change	2015	2014	Percent Change
Operating revenues	\$2,863	\$2,938	(2.6 )%	\$5,274	\$5,320	(0.9 )%
Operating expenses	2,087	2,362	(11.6 )%	4,134	4,526	(8.7 )%
Operating income	776	576	34.7 %	1,140	794	43.6 %
Other income, net	8	13	(38.5 )%	17	27	(37.0 )%
Interest expense, net	288	294	(2.0 )%	580	593	(2.2 )%
Net income (loss)	\$496	\$295	68.1 %	\$577	\$228	153.1 %



Table of Contents

Operating Revenues. Operating revenues for the three and six months ended March 31, 2015, and 2014, consisted of the following:

## Operating Revenues

	Three Months Ended March 31			Six Months Ended March 31		
	2015	2014	Percent Change	2015	2014	Percent Change
Revenue from sales of electricity						
Local power companies	\$2,627	\$2,668	(1.5 )%	\$4,817	\$4,834	(0.4 )%
Industries directly served	163	193	(15.5 )%	318	342	(7.0 )%
Federal agencies and other	35	40	(12.5 )%	65	75	(13.3 )%
Revenue from sales of electricity	2,825	2,901	(2.6 )%	5,200	5,251	(1.0 )%
Other revenue	38	37	2.7 %	74	69	7.2 %
Total operating revenues	\$2,863	\$2,938	(2.6 )%	\$5,274	\$5,320	(0.9 )%

TVA's wholesale rate structure provides price signals intended to encourage LPCs and end-use customers to shift energy usage from high-cost generation periods to less expensive generation periods. Under the revised wholesale structure, weather can positively or negatively impact both volume and effective rates, while only volume was impacted under the former wholesale structure. This is because the wholesale structure includes two components: a demand charge and an energy charge. The demand charge is based on the customer's peak monthly usage and increases as the peak increases. The energy charge is based on the kWhs used by the customer. The rate structure also establishes 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 \$75 million and \$46 million for the three and six months ended March 31, 2015, respectively, compared to the three and six months ended March 31, 2014, due to the following:

	Three Month Change	Six Month Change
Fuel cost recovery	\$(135 )	\$(133 )
Base revenue	64	93
Off-system sales	(5 )	(11 )
Other revenue	1	5
Total	\$(75 )	\$(46 )

Operating revenues decreased \$75 million for the three months ended March 31, 2015, compared to the three months ended March 31, 2014, primarily due to a \$135 million decrease in fuel cost recovery which was partially offset by a \$64 million increase in base revenue. The \$135 million decrease in fuel cost recovery was primarily attributable to lower fuel rates. The increase in base revenue was predominantly attributable to an increase in demand revenue of \$62 million and an increase in energy revenue of \$12 million due primarily to the non-fuel base rate increase that became effective October 1, 2014.

Operating revenues decreased \$46 million for the six months ended March 31, 2015, compared to the six months ended March 31, 2014, primarily due to a \$133 million decrease in fuel cost recovery which was partially offset by a \$93 million increase in base revenue. The \$133 million decrease in fuel cost recovery was primarily attributable to lower fuel rates. The increase in base revenue was predominantly attributable to an increase in demand revenue of \$73 million and an increase in energy revenue of \$21 million due primarily to the non-fuel base rate increase that became effective October 1, 2014.

Table of Contents

Operating Expenses. Operating expenses for the three and six months ended March 31, 2015, and 2014, consisted of the following:

## Operating Expenses

	Three Months Ended March 31			Six Months Ended March 31		
	2015	2014	Percent Change	2015	2014	Percent Change
Fuel	\$586	\$663	(11.6)%	\$1,136	\$1,206	(5.8)%
Purchased power	259	313	(17.3)%	492	564	(12.8)%
Operating and maintenance	657	793	(17.2)%	1,345	1,600	(15.9)%
Depreciation and amortization	454	453	0.2%	906	894	1.3%
Tax equivalents	131	140	(6.4)%	255	262	(2.7)%
Total operating expenses	\$2,087	\$2,362	(11.6)%	\$4,134	\$4,526	(8.7)%

The following table summarizes TVA's net generation and purchased power in millions of kWh by generating source and the percentage of all electric power generated and purchased for the periods indicated:

## Power Supply from TVA-Operated Generation Facilities and Purchased Power

	Three Months Ended March 31				Six Months Ended March 31			
	2015		2014		2015		2014	
	kWh (in millions)	Percent of Total Power Supply	kWh (in millions)	Percent of Total Power Supply	kWh (in millions)	Percent of Total Power Supply	kWh (in millions)	Percent of Total Power Supply
Coal-fired	14,309	34%	16,936	40%	26,686	34%	29,292	36%
Nuclear	13,537	32%	13,576	32%	27,809	35%	27,217	33%
Hydroelectric	4,197	10%	4,304	10%	8,339	10%	8,741	11%
Natural gas and/or oil-fired	4,484	11%	2,765	6%	7,274	9%	5,763	7%
Renewable resources (non-hydro)	—	—%	0	—%	0	—%	2	—%
Total TVA-operated generation facilities	36,527	87%	37,581	88%	70,108	88%	71,015	87%
Purchased power	5,487	13%	5,144	12%	9,759	12%	10,190	13%
Total power supply	42,014	100%	42,725	100%	79,867	100%	81,205	100%

Fuel expense decreased \$77 million for the three months ended March 31, 2015, as compared to the same period of the prior year, primarily due to a decrease of approximately \$86 million due to lower prices for natural gas. As an indication of general market direction, the average Henry Hub natural gas spot price for the three months ended March 31, 2015, was 43 percent lower as compared to the same period of the prior year. Additionally, a decrease of two percent in sales of electricity contributed to a \$21 million decrease in fuel expense. Offsetting these decreases in fuel expense was an increase in fuel expense driven by more timely collections of fluctuations in fuel costs which accounted for a \$34 million increase.

Purchased power expense decreased \$54 million for the three months ended March 31, 2015, as compared to the same period of the prior year, primarily due to lower market prices for natural gas, as TVA's primary source of purchased power is natural gas-fired generation. The lower prices contributed to a \$94 million decrease in purchased power expense. Offsetting the decrease in purchased power expense was an increase of seven percent in the volume of power purchased which resulted in an increase in purchased power expense of \$23 million. Also offsetting the decrease in purchased power expense was a \$17 million increase in purchased power expense driven by more timely collections of fluctuations in fuel costs.

Operating and maintenance expense decreased \$136 million for the three months ended March 31, 2015, compared to the same period of the prior year. This decrease was primarily driven by a \$57 million decrease in pension and post-retirement costs due mainly to regulatory accounting actions taken by the TVA Board. Beginning October 1, 2014, TVA began deferring pension costs as regulatory assets to the extent that the amount calculated under accounting principles generally accepted in the United States of America ("GAAP") as pension expense differs from the amount TVA contributes to the pension plan. The ongoing cost savings initiatives undertaken by management (see Key Initiatives and Challenges — Cost Reduction Initiatives) contributed approximately \$23 million to the decrease in operating and maintenance expense, with approximately \$15 million attributable to labor savings. Additionally, there was a \$12 million decrease in projects expense due to the timing of nuclear and information technology projects and a \$37 million decrease in planned nuclear outage expense, primarily from fewer nuclear outages completed in the three months ended March 31, 2015, as compared to the same period of the prior year.

Table of Contents

Tax equivalents expense decreased \$9 million for the three months ended March 31, 2015, 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 the fuel cost adjustment mechanism revenues and decreased for the three months ended March 31, 2015, as compared to the same period of the prior year.

Fuel expense decreased \$70 million for the six months ended March 31, 2015, as compared to the same period of the prior year, primarily due to a decrease of approximately \$104 million in fuel expense driven by lower overall fossil and natural gas fuel rates. Also, nuclear fuel expense decreased by \$26 million for the six months ended March 31, 2015, as a result of the discontinuance of payments to the Department of Energy ("DOE") for spent fuel disposal in May 2014. Additionally, a decrease of two percent in sales of electricity contributed to a \$17 million decrease in fuel expense. Offsetting these decreases in fuel expense was an increase in fuel expense driven by more timely collections of fluctuations in fuel costs which accounted for a \$69 million increase.

Purchased power expense decreased \$72 million for the six months ended March 31, 2015, as compared to the same period of the prior year, primarily due to lower market prices for natural gas, as TVA's primary source of purchased power is natural gas-fired generation. The average Henry Hub natural gas spot prices for the six months ended March 31, 2015, was approximately 25 percent lower than the same period of the prior year. The lower prices contributed to a \$75 million decrease in purchased power expense. Additionally, a decrease of four percent in the volume of power purchased resulted in a decrease in purchased power expense of \$26 million. Offsetting the decrease in purchased power expense was a \$29 million increase in purchased power expense driven by more timely collections of fluctuations in fuel costs.

Operating and maintenance expense decreased \$255 million for the six months ended March 31, 2015, compared to the same period of the prior year. This decrease was primarily driven by a \$118 million decrease in pension and post-retirement costs due to deferring pension costs as regulatory assets, subsequent to October 1, 2014, to the extent that GAAP pension expense differs from the amount TVA contributes to the pension plan. The ongoing cost savings initiatives undertaken by management (see Key Initiatives and Challenges — Cost Reduction Initiatives) contributed approximately \$56 million to the decrease in operating and maintenance expense, with approximately \$41 million attributable to labor savings. Additionally, there was a \$33 million decrease in projects expense due to the timing of nuclear and information technology projects and a \$45 million decrease in planned nuclear outage expense, primarily from fewer nuclear outages completed in the six months ended March 31, 2015, as compared to the same period of the prior year.

Depreciation and amortization expense increased \$12 million for the six months ended March 31, 2015, compared to the same period of the prior year, primarily due to increased nuclear, substation, and information technology asset depreciation. Nuclear depreciation increased due to normal additions, substation depreciation increased from 500 KV substation additions in December 2014 and March of 2015, and information technology depreciation increased from a large investment in software placed in service in December 2013.

Tax equivalents expense decreased \$7 million for the six months ended March 31, 2015, 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, 2015, as compared to the same period of the prior year. This decrease was partially offset by an increase in tax equivalent payments, due to an increase in gross revenue from power sales during 2014 as compared to 2013.



Table of Contents

Interest Expense. Interest expense and interest rates for the three and six months ended March 31, 2015, and 2014, were as follows:

## Interest Expense

	Three Months Ended March 31			Six Months Ended March 31		
	2015	2014	Percent Change	2015	2014	Percent Change
Interest Expense <sup>(1)</sup>						
Interest expense	\$341	\$336	1.5 %	\$683	\$675	1.2 %
Allowance for funds used during construction	(53 )	(42 )	26.2 %	(103 )	(82 )	25.6 %
Net interest expense	\$288	\$294	(2.0 )%	\$580	\$593	(2.2 )%
	2015	2014	Percent Change	2015	2014	Percent Change
Interest Rates (average)						
Long-term outstanding power bonds <sup>(2)</sup>	5.492 %	5.603 %	(2.0 )%	5.490 %	5.590 %	(1.8 )%
Long-term debt of variable interest entities	4.608 %	4.604 %	0.1 %	4.607 %	4.601 %	0.1 %
Membership interests subject to mandatory redemption	7.000 %	7.180 %	(2.5 )%	7.000 %	7.033 %	(0.5 )%
Discount notes	0.046 %	0.036 %	27.8 %	0.046 %	0.050 %	(8.0 )%
Blended	5.244 %	5.166 %	1.5 %	5.260 %	5.121 %	2.7 %

## Notes

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

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

Net interest expense decreased \$6 million for the three months ended March 31, 2015, as compared to the same period of the prior year. This was primarily attributable to an increase of \$11 million in allowance for funds used during construction ("AFUDC") as a result of ongoing construction activities at Watts Bar Nuclear Plant ("Watts Bar") Unit 2, which was partially offset by an increase in long-term interest expense of \$5 million due to a higher average balance of long-term debt.

Net interest expense decreased \$13 million for the six months ended March 31, 2015, as compared to the same period of the prior year. This was primarily attributable to an increase of \$21 million in AFUDC as a result of ongoing construction activities at Watts Bar Unit 2, which was partially offset by an increase in long-term interest expense of \$8 million due to a higher average balance of 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 any other financing arrangements such as lease financings, call monetization transactions, sales of assets, and sales of receivables and loans. TVA expects these sources, certain of which are described below, to provide adequate liquidity to TVA for the foreseeable future.

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, 2015, TVA had \$23.9 billion of Bonds outstanding (not including noncash items of foreign currency exchange gain of \$39 million and net discount on sale of Bonds of \$85 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 8), could provide supplementary funding if needed. Also, the impact of energy efficiency and demand response initiatives may reduce generation requirements and thereby reduce capital investment needs. Currently, TVA believes that it has adequate capability to fund its ongoing operational

Table of Contents

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.

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, 2015, the long-term debt of three variable interest entities. See Lease Financings below, Note 8, and Note 12 — Debt Securities Activity for additional information.

The following table provides additional information regarding TVA's short-term borrowings.  
Short-Term Borrowing Table

	At March 31 2015	Three Months Ended March 31 2015	Six Months Ended March 31 2015	At March 31 2014	Three Months Ended March 31 2014	Six Months Ended March 31 2014
Amount Outstanding (at End of Period) or Average Amount Outstanding (During Period)						
Discount Notes	\$939	\$941	\$859	\$1,691	\$1,718	\$1,924
Weighted Average Interest Rate						
Discount Notes	0.036	% 0.046	% 0.046	% 0.054	% 0.036	% 0.050
Maximum Month-End Amount Outstanding (During Period)						
Discount Notes	N/A	\$1,155	\$1,155	N/A	\$1,950	\$2,442

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 2015 and has a maturity date of September 30, 2015. 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 plans to use the U.S. Treasury credit facility as a secondary source of liquidity. The interest rate on any borrowing under this facility is based on the average rate on outstanding marketable obligations of the United States with maturities from date of issue of one year or less. There were no outstanding borrowings under the facility at March 31, 2015. The availability of this credit facility may be impacted by how the U.S. government addresses the situation of approaching its debt limit.

The following table provides additional information regarding TVA's funding available in the form of three long-term revolving credit facilities. The credit facilities accommodate the issuance of letters of credit. 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. See Note 12 — Credit Facility Agreements and Note 14 — Other Derivative Instruments — Collateral.

Summary of Long-Term Credit Facilities  
At March 31, 2015



Edgar Filing: Tennessee Valley Authority - Form 10-Q

(in billions)

Maturity Date	Facility Limit	Letters of Credit Outstanding	Cash Borrowings	Availability
June 2017	\$1.0	\$0.4	\$—	\$0.6
December 2017	1.0	0.3	—	0.7
April 2018	0.5	0.5	—	—
Total	\$2.5	\$1.2	\$—	\$1.3

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

Table of Contents

## Summary Cash Flows

A major source of TVA's liquidity is operating cash flows resulting from the generation and sales of electricity. A summary of cash flow components for the six months ended March 31, 2015, and 2014, follows:

## Summary Cash Flows

	Six Months Ended March 31	
	2015	2014
Cash provided by (used in):		
Operating activities	\$1,412	\$1,426
Investing activities	(1,644)	(1,374)
Financing activities	234	(1,148)
Net increase (decrease) in cash and cash equivalents	\$2	\$(1,096)

## Operating Activities

Net cash flows provided by operating activities decreased \$14 million during the six months ended March 31, 2015, as compared to the same period during the prior year. This decrease was due to a reduction in recoveries of insurance proceeds related to the Kingston ash spill, increases in TVA's margin requirements due to lower natural gas prices, and increases in cash used due to the timing of payments. These changes were partially offset by the increase in cash provided from higher collections of revenue and a decrease in cash used in operations due to cost reduction initiatives, fewer outages, timing of expenditures for projects, and decreases in fuel expense and purchased power expense attributable to lower overall natural gas and fossil fuel rates.

## Investing Activities

The majority of TVA's investing cash outflows are investments in property, plant, and equipment for work on existing facilities, environmental projects, transmission upgrades necessary to maintain reliability, and capacity expansion. Net cash flows used in investing activities increased \$270 million during the six months ended March 31, 2015, as compared to the same period during the prior year. This increase was primarily driven by an increase in capacity expansion spending for nuclear capacity expansion projects and the natural gas-fired generation facilities at Paradise Fossil Plant ("Paradise") and Allen Fossil Plant ("Allen").

## Financing Activities

Net cash flows provided by financing activities were \$234 million during the six months ended March 31, 2015, as compared to cash used by financing activities of \$1.1 billion during the same period of the prior year. The increase in cash flows provided by financing activities was primarily driven by net issuance of short-term debt of \$343 million during the current year, as compared to net redemptions of short-term debt of \$741 million during the same period of the prior year. The net issuance of short-term debt for the first two quarters of 2015 was used to fund net redemptions of long-term debt and other obligations while maintaining a steady cash level whereas the net redemptions of short-term debt for the first two quarters of 2014 was the result of the strategic decision to use cash on hand during 2014 to meet some of TVA's near-term capital funding needs rather than issuing additional debt.

Table of Contents

## 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, 2015.

## Commitments and Contingencies

## Payments due in the year ending September 30

	2015 <sup>(1)</sup>	2016	2017	2018	2019	Thereafter	Total
Debt <sup>(2)</sup>	\$2,021	\$32	\$1,555	\$1,682	\$1,032	\$17,595	\$23,917
Interest payments relating to debt	626	1,171	1,157	1,067	992	17,072	22,085
Debt of VIEs	16	33	35	36	38	1,138	1,296
Interest payments relating to debt of VIEs	29	58	58	56	54	693	948
Lease obligations							
Capital	7	13	13	13	12	168	226
Non-cancelable operating	22	41	38	28	25	63	217
Purchase obligations							
Power	123	224	234	237	243	3,401	4,462
Fuel	753	1,062	548	568	511	1,580	5,022
Other	228	220	197	196	192	1,639	2,672
Plant acquisition	342	—	—	—	—	—	342
Environmental Agreements	33	51	42	16	—	—	142
Membership interest of VIE subject to mandatory redemption	1	2	2	2	2	29	38
Interest payments related to membership interests of VIE subject to mandatory redemption	1	3	2	2	2	15	25
Flood response commitment to NRC	16	10	1	—	—	—	27
Litigation settlements	4	5	—	—	—	—	9
Environmental cleanup costs -Kingston ash spill	8	1	1	1	1	11	23
Payments on other financings	32	104	104	104	96	305	745
Payments to U.S. Treasury - Return on Power Program Appropriation Investment	5	8	8	8	8	85	122
Retirement plan <sup>(3)</sup>	78	209	—	—	—	—	287
Total	\$4,345	\$3,247	\$3,995	\$4,016	\$3,208	\$43,794	\$62,605

## Notes

(1) Period April 1 – September 30, 2015

(2) Does not include noncash items of foreign currency exchange gain of \$39 million and net discount on sale of Bonds of \$85 million.

(3) The Tennessee Valley Authority Retirement System calculates TVA's minimum required annual contribution to the pension plan prior to the beginning of each fiscal year based on pension plan rules. The amount listed for 2016 is the minimum required contribution, and the calculation has not yet been completed for any years beyond 2016. See Note 17.

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

	2015 <sup>(1)</sup>	2016	2017	2018	2019	Thereafter	Total
Energy Prepayment Obligations	\$50	\$100	\$100	\$100	\$10	\$—	\$360

Note

(1) Period April 1 – September 30, 2015

EnergyRight® Solutions Program. TVA purchases certain loans receivable from its LPCs in association with the EnergyRight® Solutions program. The loans receivable are then transferred to a third-party bank with which TVA has agreed to repay in full any loan receivable that has been in default for 180 days or more or that TVA has determined is uncollectible. As of March 31, 2015, the total carrying amount of the loans receivable, net of discount, was approximately \$157 million. Such amounts are not reflected in the Commitments and Contingencies table above. The total carrying amount of the financing obligation was approximately \$189 million at March 31, 2015. See Note 6 and Note 10 for additional information.

Table of Contents

Key Initiatives and Challenges

Generation Resources

**Nuclear Response Capability.** Since the events that occurred in 2011 at the Fukushima Daiichi Nuclear Power Plant ("Fukushima Daiichi"), 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 plants. As of March 31, 2015, TVA had spent \$210 million on modifications at all its plants including Watts Bar Unit 2, and expects to spend an additional \$69 million to complete these modifications.

**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.

Since 2009, TVA has performed further hydrology modeling of portions of the TVA watershed using updated modeling tools. TVA also completed a series of permanent modifications to the four dams initially addressed in 2009 as well as to several other dams identified through the more recent analytical work. The modifications addressed and rectified the potential for certain dams to be overtopped during a "probable maximum flood" event as well as the potential for certain other dams to become unstable under "probable maximum flood" conditions. These modifications were completed in the spring of 2015 with the exception of certain repairs at Fort Loudon Dam which are expected to be completed in 2017. As of March 31, 2015, TVA had spent \$132 million on these modifications, and expects to spend an additional \$28 million to complete the modifications.

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

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

**NRC Seismic Assessments.** On May 9, 2014, the NRC notified licensees of nuclear power reactors in the central and eastern United States of the results of seismic hazard screening and prioritization evaluations performed by unit owners and reviewed by the NRC staff. Because the seismic hazards for Bellefonte Nuclear Plant ("Bellefonte"), Browns Ferry, Sequoyah, and Watts Bar had increases in seismic parameters beyond the technical information available when the plants were designed and licensed, TVA must conduct seismic risk evaluations for these plants. TVA must complete the evaluation for Watts Bar by June 30, 2017, and the evaluations for Browns Ferry, Sequoyah, and Bellefonte by December 31, 2019. These evaluations could result in TVA having to make modifications to one or more of its nuclear plants. Cost estimates for any required modifications cannot be developed until after the evaluations are complete, but costs for modifications could be substantial.

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

Watts Bar Unit 2. TVA's Watts Bar Unit 2 construction project continues on track with an estimate to complete ranging from \$4.0 billion to \$4.5 billion and commercial operation between September 2015 and June 2016. This cost estimate and schedule is in accordance with expectations approved by the TVA Board in April 2012. Based on construction and testing progress to date, fuel load is currently forecast for the summer of 2015 with commercial operation by December 2015. Challenges that could potentially affect the forecast include completing complex work and required documentation; reverification of previously completed systems; addressing emergent work identified during testing; current and emergent licensing issues; and successfully transitioning the site into dual-unit operation. See Note 18 — Administrative Proceedings Regarding Watts Bar Unit 2.

The regulatory reviews associated with the issuance of an NRC operating license are continuing. The NRC issued an extension to the Watts Bar Unit 2 construction permit on November 21, 2013. The revised permit expires on September 30, 2016. The Advisory Committee on Reactor Safeguards ("ACRS") completed its review of the project and on February 12, 2015 recommended to the NRC that an operating license be granted once construction and testing are completed. The NRC reviews

Table of Contents

of TVA's actions associated with post-Fukushima requirements are underway, and it is anticipated they will be completed in time to support project forecasts for licensing and operations.

**Bellefonte Unit 1.** Although work on the Bellefonte Unit 1 site was slowed in 2014, TVA believes that the resulting budgeting and staffing levels should be sufficient to preserve Bellefonte for potential future development. TVA plans to utilize its integrated resource planning process to help determine how Bellefonte best supports TVA's overall efforts to continue to meet customer demand with low-cost, reliable power.

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

**Waste Confidence Rule.** On August 26, 2014, the NRC approved a final rule on the environmental effects of continued storage of spent nuclear fuel and terminated a two-year suspension of final licensing actions for nuclear power plants and renewals. The rule, renamed the "Continued Storage of Spent Nuclear Fuel Rule," adopts findings from a supporting generic environmental impact statement and concludes that spent nuclear fuel can be safely managed in dry casks indefinitely. Issuance of this rule helped mitigate a significant risk to the timely completion of Watts Bar Unit 2 and may alleviate some issues in the relicensing processes related to Sequoyah while helping ensure compliance with the requirement of the National Environmental Policy Act to disclose the environmental impacts of spent nuclear fuel storage. See Note 18 — Legal Proceedings — Administrative Proceedings Regarding Watts Bar Unit 2, — Administrative Proceeding Regarding Renewal of Operating License for Sequoyah Nuclear Plant, and — Case Involving the NRC Waste Confidence Decision on Spent Nuclear Fuel Storage for additional information.

**Coal-Fired Units.** The decision to idle or retire coal-fired units from TVA's generation fleet is being influenced by several factors including the Environmental Agreements, environmental legislation, the cost of adding emission control equipment and other environmental improvements, fuel prices, condition of plants, and demand for energy. Under the Environmental Agreements, TVA committed, among other things, to retire, on a phased schedule, 18 coal-fired units. As of March 31, 2015, TVA had retired 11 coal-fired units with a summer net capability of 1,494 megawatts ("MW"). The retirement of ten of these units, with a summer net capability of 1,370 MW, were carried out to comply with the Environmental Agreements. In addition, as of March 31, 2015, TVA had removed from service, mothballed, and/or idled an additional eight coal-fired units with a summer net capability of 1,715 MW. Thus, the total number of units that are no longer active is 19 with a summer net capability of 3,209 MW. TVA continues to assess its power generating facilities, including its aging coal-fired fleet.

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

During 2014, the TVA Board took several actions related to the retirement of certain coal-fired units. Upon the completion of natural gas-fired generation facilities at the Paradise site, coal-fired Units 1 and 2 at Paradise with a summer net capability of 1,230 MW will be retired, and upon the completion of a natural gas-fired generation facility at the Allen site, coal-fired Units 1-3 at Allen with a summer net capability of 741 MW will be retired. The TVA Board also approved the retirement of Colbert Fossil Plant ("Colbert") Unit 5 with a summer net capability of 472 MW no later than December 31, 2015, Colbert Units 1-4 with a summer net capability of 712 MW no later than June 30, 2016, and Widows Creek Fossil Plant Unit 8 with a summer net capability of 465 MW in the future. See Natural Gas-Fired Units.

Coal Combustion Residual Facilities. As a result of the December 2008 ash spill at Kingston, TVA retained an independent third-party engineering firm to perform a multi-phased evaluation of the overall stability and safety of all existing embankments associated with TVA's wet coal combustion residual ("CCR") facilities. The study showed the ongoing remediation work being done at the plants should bring all of them within industry standards in terms of stability upon completion. Implementation of recommended actions is ongoing, including risk mitigation steps such as performance monitoring, designing and completing repairs, developing planning documents, obtaining permits, and generally implementing the lessons learned from the Kingston ash spill at TVA's other CCR facilities.

TVA is converting its wet ash and gypsum facilities to dry storage collection facilities. The CCR conversion program runs through CY 2022, with the exception of the new landfill at Shawnee to accommodate the addition of air pollution controls.



Table of Contents

The expected cost of the CCR work is between \$1.5 billion and \$2.0 billion. As of March 31, 2015, \$680 million of costs had been incurred since the start of the work. Included in the program is the conversion of wet ash and gypsum facilities to dry storage collection. Conversion projects are currently planned at Kingston, Shawnee, Gallatin Fossil Plant, Cumberland Fossil Plant, and Paradise. TVA will continue to undertake CCR projects past 2022 in order to support long-term plant generation, including projects to build new landfills, expand landfills, and close landfills. The EPA published a final rule related to CCRs in April 2015 which will regulate landfill and impoundment location, design and operations; require pond closures, structural integrity, and groundwater monitoring; and describe beneficial reuse. Although the rule will become effective October 14, 2015, certain provisions have later effective dates. TVA is in the process of evaluating the impact of the new rules on the projected schedules and costs related to fossil unit operations and ash pond closures. See Environmental Matters — Coal Combustion Residuals below.

As part of TVA's overall commitment to convert from wet to dry storage at all its facilities that will continue to operate after 2017, TVA has proposed to build a bottom ash dewatering facility at Kingston. If the dewatering facility is built, it would convert Kingston's coal byproducts storage system to an onsite dry landfill. Because of the 2008 ash spill at Kingston, TVA feels it important to eliminate wet storage at Kingston as quickly as possible, and the dewatering facility is the final step in a permanent solution.

TVA is studying the adequacy of CCR storage capacity at its coal-fired plants that currently have dry storage collection facilities. If it is determined that the remaining capacity is not adequate, additional storage facilities will need to be permitted and built, or off-site disposal will need to be arranged. TVA is also responding to the EPA's questions on seismic and liquefaction qualification for its facilities. The analyses have been successfully completed and accepted by the EPA for eight of 11 active plant sites, and the studies are still underway at the three remaining sites. The expected completion for all three is by the end of CY 2015.

Natural Gas-Fired Units. At its November 14, 2013 meeting, the TVA Board approved the completion of a natural gas-fired generation facility with an expected generation capacity of approximately 1,000 MW at TVA's Paradise site at a cost not to exceed \$1.1 billion. A lawsuit has been filed challenging TVA's Paradise decision. See Note 18 — Legal Proceedings — National Environmental Policy Act Challenge at Paradise Fossil Plant. An injunction or court order that delays TVA's plans at Paradise could increase the project's cost. On August 21, 2014, the TVA Board approved the construction of a natural gas-fired generation facility also with an expected generation capacity of approximately 1,000 MW at the Allen site at a cost not to exceed \$975 million. 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.

On February 12, 2015, the TVA Board authorized the acquisition of the Choctaw combined-cycle natural gas plant near Ackerman, Mississippi. On April 14, 2015, TVA acquired the 700-megawatt combined-cycle gas plant and paid total cash consideration of \$342 million related to the transaction. TVA has purchased the electricity generated by the plant since 2008. Located in TVA's service area, it is already connected to TVA's transmission grid. The plant also will provide greater transmission flexibility and system reliability as TVA retires older, coal-burning units. The facility will be renamed Ackerman Combined Cycle Plant. See Note 19.

Status of Other Generation Units. Units 1-4 at Raccoon Mountain Pumped-Storage Plant ("Raccoon Mountain"), with a total net summer capability of 1,616 MW, were taken out of service for maintenance activities in 2012 after an inspection of the turbines in each unit identified cracking in the rotor poles and the rotor rims. Maintenance overhauls on all four units were subsequently completed to correct these cracking problems. However, an unrelated issue was identified in certain oil-filled power cables that convey power out of the facility, resulting in TVA limiting service to three units until resolved. As of March 31, 2015, three of the four Raccoon Mountain units were in service. The return to service date for the fourth unit is estimated to be in the third quarter of 2015.

Small Modular Reactors. TVA is preparing an early site permit application to the NRC to license small modular reactors ("SMRs") at TVA's Clinch River Site in Oak Ridge, Tennessee. TVA continues to interact through a partnership arrangement with DOE and industry partners.

TVA's site characterization work that will support an early site permit application for planned submittal to the NRC in early 2016 is progressing. Submittal of a subsequent construction and operating license application is subject to a future TVA decision to proceed and will follow submittal of one or more Design Certification Applications to the NRC by SMR vendors. The construction and operating license application is not expected to be submitted before 2017.

Distributed Generation. As technologies for producing energy on solar, small gas, and other types of sites are evolving, they are becoming cost competitive and more reliable, and consumers are having a greater desire to utilize these technologies for their own needs. Previously, the limited impact of electricity from the small numbers of these distributed generation sites was easily absorbed within the capacity of a system the size of TVA's. However, as the amount of distributed generation grows on the system, the ability of the system to cope with these generation sources becomes more challenging while at the same time reducing the need for TVA's generation resources. TVA, in conjunction with interested LPCs and other stakeholders, is investigating the value and challenges these resources provide to the grid in order to better understand their impact and determine how they can best be integrated into the TVA system. As distributed generation continues to expand across the

## Table of Contents

Tennessee Valley, TVA and LPCs will continue to focus significant attention on the safety of these resources as they are interconnected to the grid. Financial implications cannot be determined at this time.

### Dam Safety Assurance Initiatives

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

One aspect of the guidelines is that dam structures will be periodically reassessed to assure that TVA's dams meet current design criteria. These reassessments include material sampling of the dam and foundational structures and detailed engineering analysis. TVA is currently performing reassessments on its 49 dam projects. Twenty-eight reassessments have been completed, and the remaining 21 reassessments are scheduled to be completed by the fourth quarter of 2017. Ten assessments are scheduled to begin in 2015. To date, TVA has spent \$31 million on the dam safety assurance program, and TVA expects to spend an additional \$18 million in 2015.

It is expected that projects will be identified after these reassessments, and the work will be appropriately prioritized and completed within TVA's capital improvement process.

Pickwick Landing Dam. As part of the dam safety reassessments, initial data from a seismic stability assessment of Pickwick Landing Dam in western Tennessee showed the factor of safety during a large earthquake for the south embankment dam (earthen section south of the concrete section) was unacceptable based on current TVA and industry standards. Conditions at the dam have not changed; however, in the remote chance that a large seismic event occurs along the New Madrid Fault in western Tennessee, it may cause damage to the earthen embankment dam. In order to ensure public safety and to evaluate Pickwick Landing Dam further, TVA elected to draw down the Pickwick Landing Reservoir to winter pool level at an accelerated rate in September of 2014 and continues to analyze the data and develop a path forward to address the issue. At this point TVA has decided to implement risk reduction measures and returned the reservoir to normal operating levels in April 2015. A project is underway to further analyze the embankment, perform environmental reviews, and develop design remediation plans. The concrete portion of the dam will also be evaluated in 2015. Cost estimates for any required remediation cannot be developed until after the analyses are complete.

Boone Dam. In October 2014, a sink hole was discovered near the base of the earthen embankment at Boone Dam, and a small amount of water and sediment was found seeping from the river bank below the dam. The reservoir was drawn down below winter pool level in early 2015 and will remain at a lowered level as a precautionary measure to ensure the safety of the public while also allowing a more detailed investigation of the seepage. TVA began a project in 2015 related to site surveillance, implementation of immediate risk reduction measures, performance of investigations to further analyze the embankment, performance of environmental reviews, development of design remediation, and commencement of grouting operations. Cost estimates for final remediation cannot be developed until after the analyses are complete but are expected to be millions of dollars. TVA is working with affected stakeholders as remediation options are studied and finalized.

### Renewable Energy

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

### Continuous Improvement Initiatives

TVA is undertaking cost reduction initiatives with the goal of reducing operating and maintenance costs by \$500 million by the end of 2015 as compared to its 2013 budget. This objective is an effort to keep rates low, keep reliability high, and continue to fulfill TVA's broader mission of environmental stewardship and economic development. To position itself to achieve this goal, TVA, in conjunction with other actions, completed a high-level realignment of its strategic business units during 2013 and 2014. Business unit leaders will work to identify ways to further streamline their organizations to achieve 2015 operating and maintenance cost-reduction targets by eliminating unnecessary work; increasing productivity; minimizing overlaps, redundancies, and handoffs; and ensuring that accountability for compliance rests with its line organizations. At the end of 2014, TVA had exceeded its \$300 million target on operating and maintenance cost savings for the year and positioned itself to achieve its cost reduction goal of \$500 million by the end of 2015.

Given that approximately 80 percent of TVA's operating and maintenance costs are related to labor, staffing level reductions necessarily resulted from this process. Approximately 2,000 position reductions were achieved through attrition, elimination of vacant positions, and employees leaving TVA either voluntarily or involuntarily. Certain employees were eligible for severance payments as a result of these cost reduction initiatives. TVA recognized expense of \$65 million related to

## Table of Contents

restructuring costs during 2014. As of March 31, 2015, TVA's remaining liability related to these estimated future severance payments was \$1 million. See Note 3.

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

### 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 \$158 million in implementing energy efficiency, electric vehicle, and renewable energy projects. These expenditures on environmental mitigation projects are in addition to the decisions TVA made under the Environmental Agreements to control, convert, or retire additional coal-fired units. These decisions include installation of air pollution controls (i.e., SCRs and dry scrubbers) on the four coal-fired units at the Gallatin Fossil Plant and on Units 1 and 4 at Shawnee.

**Transmission Issues.** TVA anticipates expenditures to increase as a result of both new and evolving compliance regulations. On October 17, 2013, the North American Electric Reliability Corporation ("NERC") approved revisions to the Transmission Planning ("TPL") Reliability Standards. TVA began preliminary work on these standards in 2006. TVA anticipates spending \$77 million on existing transmission facilities between 2015 and 2017 to ensure compliance with the 2013 version of the TPL standards. TVA will continue to evaluate the impact of these standards on existing facilities, including the associated costs, beyond 2017. Costs beyond 2017 are expected to be significant.

On November 21, 2013, the Federal Energy Regulatory Commission ("FERC") approved NERC Critical Infrastructure Protection ("CIP") Version 5 Reliability Standards ("Version 5"). Version 5 does not add or remove any substantial physical security requirements; however, it does significantly increase the number of sites within the scope of these standards. TVA anticipates spending \$40 million on existing transmission facilities from 2015 through 2018 to ensure compliance with Version 5 standards. TVA will continue to evaluate the impact of these standards on existing facilities.

On March 7, 2014, FERC issued an order for the development of new physical security standards that will mandate the identification and protection of the nation's most critical transmission substations and their associated primary control centers. This new standard, NERC CIP-014-1 — Physical Security, was submitted to FERC for approval on May 23, 2014. On July 17, 2014, in a notice of proposed rulemaking, FERC requested revisions to the proposed standard that will require NERC to develop modifications that will delay the implementation beyond the originally projected enforcement date of April 2015. TVA continues to evaluate measures that may be required for compliance, but costs cannot be estimated at this time.

In May 2013, FERC issued Order No. 779 directing NERC to develop reliability standards addressing the potential impact of geomagnetic disturbances ("GMDs") in two stages. The Stage 1 standard, which requires GMD operating procedures, was approved by FERC on June 19, 2014, and TVA established the requisite GMD operating procedures during 2014. The Stage 2 standard, which will require entities to conduct assessments of the impacts of benchmark GMD events on their systems and to develop plans to mitigate the risk of instability, uncontrolled separation, and cascading, received voting approval on December 17, 2014, and has been submitted to FERC for approval. Following approval by FERC and the commencement of implementation, requirements will be phased in over five years. Costs for compliance are not known at this time.

### River Management

TVA is planning to perform structural modifications to the main lock at Wilson Dam to address undesirable movements in the wall monoliths that support the lower lock gates and to increase the structural stability of those monoliths in accordance with TVA's dam safety standards. A portion of the modifications is expected to be performed during the U.S. Army Corps of Engineers' regularly scheduled Wilson Main Lock dewatering in May 2015. This dewatering is expected to divert river traffic through the Wilson Auxiliary Lock over a four to six week period. In addition, the lock is expected to be closed for four to six weeks during a portion of these modifications, and barge traffic will be diverted to an auxiliary lock during this time. In addition, the lock is expected to experience sporadic closures of short duration, but these closures should not significantly disrupt barge traffic. The total cost of these modifications is estimated to be \$18 million. Most of the significant construction work is currently scheduled for late 2015 through 2016, with follow-up work scheduled for 2018.

#### Ratemaking

TVA is working closely with its customers on the development of a Strategic Pricing Plan. This plan is to be a collaborative effort to define the long-term direction for pricing which will allow TVA to best serve the Tennessee Valley by maintaining competitive and affordable rates. The process will look at rate structure, pricing products and programs, and TVA's competitive position across rate classes. A rate change letter was issued to the LPCs in January 2015 notifying TVA's customers of its intent to modify its rate structure in October 2015. An additional notification was sent to TVA's customers in April 2015 regarding intended changes to the fuel cost adjustment structure and pricing products.

#### Safeguarding Assets

## Table of Contents

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

Recent physical attacks on transmission facilities at other utilities across the country have heightened awareness. TVA is working with the Department of Homeland Security ("DHS"), FERC, Edison Electric Institute, Electric Power Research Institute, and other utilities to implement industry approved recommendations and standards. See Key Initiatives and Challenges — Regulatory Compliance — Transmission Issues.

**Nuclear Security.** Nuclear security is carried out in accordance with federal regulations as set forth by the NRC. These regulations are designed for the protection of TVA's nuclear power plants, the public, and employees from the threat of radiological sabotage and other nuclear-related terrorist threats. TVA has nuclear security forces to guard against such threats.

**Cyber Security.** Cyber security is a serious and ongoing challenge for the energy sector. TVA faces potential cyber attacks against its generation facilities, the transmission infrastructure used to transmit power, and its information technology systems and network infrastructure, which could negatively impact the ability of TVA to generate, transport, and deliver power, or otherwise operate its facilities in the most efficient manner. If TVA's technology systems were to fail or be breached and were not recovered in a timely manner, TVA might be unable to fulfill critical business functions, and sensitive and other data could be compromised. The theft, damage, or improper disclosure of sensitive electronic data may also subject TVA to penalties and claims from third parties.

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, as others, 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.

## 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<sub>x</sub>") have been reduced by 90 percent below peak 1995 levels and emissions of sulfur dioxide ("SO<sub>2</sub>") have been reduced by 94 percent below 1977 levels through CY 2014. For CY 2014, TVA's emission of carbon dioxide ("CO<sub>2</sub>") from its sources was 77 million tons, a 27 percent reduction from 2005 levels. This includes 1,718 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<sub>2</sub> emissions on a CY basis.

National Ambient Air Quality Standards. On November 25, 2014, the EPA signed a proposal to revise the ozone NAAQS to within a range of 65 to 70 parts per billion ("ppb") from the current standard of 75 ppb, and is seeking comment on retaining the current 75 ppb standard as well as setting the standard as low as 60 ppb. This proposal was published in the Federal Register on December 17, 2014, and the EPA's 90-day comment period ended on March 17, 2015. The impacts to TVA and the Tennessee Valley states are not possible to determine until the final standard is known. The level of the standard will be set in a final rule that is expected to be issued by the EPA in the fall of 2015. The EPA is expected to make final designations in 2017 based on three years of air quality data.

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

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



Table of Contents

New Source Performance Standards and Clean Power Plan. On January 7, 2015, the EPA delayed publications of the final versions of all three of its carbon dioxide rules to midsummer, representing at least a six-month delay for the new source rule and a delay of a month or more for the existing and modified plant rules. On January 7, 2015, the EPA also announced that it would start a rulemaking on a federal implementation plan for states that do not submit their own compliance plans under the existing plant rule. The impacts to TVA and the Tennessee Valley states are not possible to determine until the final rules are known.

Coal Combustion Residuals. The EPA published its final rule governing CCRs on April 17, 2015, and the rule will become effective October 14, 2015. The rule regulates CCRs as nonhazardous waste under Subtitle D of the Resource Conservation and Recovery Act. While TVA anticipates that states will adopt the rule's requirements into their regulatory programs, the rule does not require states to adopt the new rules. Although the rule will become effective October 14, 2015, certain provisions have later effective dates. TVA's review of the final rule indicates that the rule offers adequate flexibility for compliance. The ongoing TVA wet to dry conversion program includes budgeted projects to address the primary requirements of the CCR Rule. New requirements imposed by the final rule could result in increased costs due to additional projects and/or accelerated spending to meet more aggressive timelines to ensure compliance with the deadlines. 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.

## 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<sup>(1)</sup>

At March 31, 2015

(in millions)

	Estimated Timetable	Total Estimated Expenditures
Site environmental remediation costs <sup>(2)</sup>	2015+	\$ 12
Coal combustion residual conversion and remediation <sup>(3)</sup>	2015-2029	\$ 1,500
Proposed clean air projects <sup>(4)</sup>	2015-2025	\$ 800
Clean Water Act requirements <sup>(5)</sup>	2015-2022	\$ 300

## 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 closure of impoundments, construction of lined landfills, and construction of dewatering systems. In April 2015, the EPA finalized rules related to CCRs which, after additional analysis, could change the projected schedules and costs related to ash pond closures and fossil unit operations.

(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 \$151 million with respect to Legal Proceedings as of March 31, 2015. No assurance can be given that TVA will not be subject to significant additional claims and liabilities. If actual liabilities significantly exceed the estimates made, TVA's results of operations, liquidity, and financial condition could be materially adversely affected.

For a discussion of certain current material Legal Proceedings, see Note 18 — 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, 2015, TVA had no off-balance sheet arrangements.

## Table of Contents

### 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 is a wholly-owned government corporation and as such is included in the budget of the United States. The Administration's 2014 Budget Proposal directed the Office of Management and Budget to undertake a strategic review of options for addressing TVA's financial situation, including the possible divestiture of TVA in part or as a whole. Lazard Frères & Co. LLC ("Lazard"), an international financial advisory and asset management firm, was retained by TVA to assist in this review. The Lazard report recommended against divestiture. See the Current Report on Form 8-K filed by TVA with the SEC on June 4, 2014. TVA will continue to collaborate with the Administration while remaining focused on its mission of providing low-cost, reliable power, environmental stewardship, and economic development.

On February 2, 2015, the President of the United States ("President") submitted his Fiscal Year 2016 Budget Request of the U.S. Government (the "Budget") to the Congress. The Budget contains the following language regarding TVA:

Since its creation in the 1930s during the Great Depression, the Federally-owned and operated Tennessee Valley Authority (TVA) has been producing electricity and managing natural resources for a large portion of the Southeastern United States. TVA's power service territory includes most of Tennessee and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina and Virginia, covering 80,000 square miles and serving more than nine million people. TVA is a self-financing Government corporation, funding operations through electricity sales and bond financing. Since the Administration announced in the 2014 President's Budget its intentions to undertake a strategic review of options for addressing TVA's financial situation, the agency has taken significant steps to improve its operating and financial performance and has committed to resolve its capital financing constraints. The Administration supports TVA's ongoing initiatives and will continue to monitor TVA's performance, including the achievement of critical milestones contemplated in TVA's long-term financial plan and the pursuit of efforts to enhance governance and increase transparency of TVA's decision-making on important agency actions. While the strategic review of TVA has concluded, the Administration continues to believe that reducing or eliminating the Federal Government's role in programs such as TVA, which have achieved their original objectives, can help mitigate risk to taxpayers.

On December 18, 2014, the President signed into law H.R. 3044 authorizing the transfer, on behalf of the United States, of TVA's Yellow Creek Port properties to the State of Mississippi. The property consists of interests in a river

terminal, a railroad, and industrial sites on the Pickwick Reservoir in Tishomingo County, Mississippi. The law authorizes the transfer to be made under Section 4(k)(b) of the TVA Act, which allows TVA to dispose of land for the purpose of erecting docks and buildings for shipping purposes or the manufacture or storage of products for the purpose of trading or shipping. The book value of this property was approximately \$1 million at March 31, 2015.

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

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.

Table of Contents

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 14 for additional information regarding TVA's derivative transactions and risk management activities.

61

---

Table of Contents

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, 2015. 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, 2015, 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, 2015, 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.

Table of Contents

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 18 — 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.

Table of Contents

ITEM 6. EXHIBITS

Exhibit No.	Description
10.1	Long-Term Retention Incentive Plan Award Notice for John M. Thomas, III, for First Award Granted as of January 1, 2015 (Incorporated by reference to Exhibit 10.2 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
10.2	Long-Term Retention Incentive Plan Award Notice for John M. Thomas, III, for Second Award Granted as of January 1, 2015 (Incorporated by reference to Exhibit 10.3 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
10.3	Long-Term Retention Incentive Plan Award Notice for Charles G. Pardee for Award Granted as of January 1, 2015 (Incorporated by reference to Exhibit 10.4 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
10.4	Long-Term Retention Incentive Plan Award Notice for Joseph P. Grimes, Jr., for Award Granted as of January 1, 2015 (Incorporated by reference to Exhibit 10.5 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
10.5	Long-Term Retention Incentive Plan Award Notice for Michael D. Skaggs for Award Granted as of January 1, 2015 (Incorporated by reference to Exhibit 10.6 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
10.6	Retention Incentive Arrangement Between TVA and John M. Thomas, III, Dated as of January 1, 2015 (Incorporated by reference to Exhibit 10.7 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
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





Table of Contents

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: April 30, 2015

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)

Table of Contents

EXHIBIT INDEX

Exhibit No.	Description
10.1	Long-Term Retention Incentive Plan Award Notice for John M. Thomas, III, for First Award Granted as of January 1, 2015 (Incorporated by reference to Exhibit 10.2 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
10.2	Long-Term Retention Incentive Plan Award Notice for John M. Thomas, III, for Second Award Granted as of January 1, 2015 (Incorporated by reference to Exhibit 10.3 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
10.3	Long-Term Retention Incentive Plan Award Notice for Charles G. Pardee for Award Granted as of January 1, 2015 (Incorporated by reference to Exhibit 10.4 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
10.4	Long-Term Retention Incentive Plan Award Notice for Joseph P. Grimes, Jr., for Award Granted as of January 1, 2015 (Incorporated by reference to Exhibit 10.5 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
10.5	Long-Term Retention Incentive Plan Award Notice for Michael D. Skaggs for Award Granted as of January 1, 2015 (Incorporated by reference to Exhibit 10.6 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
10.6	Retention Incentive Arrangement Between TVA and John M. Thomas, III, Dated as of January 1, 2015 (Incorporated by reference to Exhibit 10.7 to TVA's Quarterly Report on Form 10-Q for the quarter ended December 31, 2014, File No. 000-52313)
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

