KPMG

BIG RIVERS ELECTRIC CORPORATION

Financial Statements

December 31, 2017 and 2016

(With Independent Auditors' Report Thereon)

KPMG LLP
Suite 2600
400 West Market Street
Louisville, KY 40202

Independent Auditors' Report

The Board of Directors and Members
Big Rivers Electric Corporation:

Report on the Financial Statements

We have audited the accompanying financial statements of Big Rivers Electric Corporation, which comprise the balance sheets as of December 31, 2017 and 2016, and the related statements of operations, comprehensive income, equities, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and in accordance with the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United Statements. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers Electric Corporation as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2017 in accordance with U.S. generally accepted accounting principles.

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Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued a report dated April 19, 2018, on our consideration of Big Rivers Electric Corporation's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. The report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Big Rivers Electric Corporation's internal control over financial reporting and compliance.

KPMG LLP

Louisville, Kentucky
April 19, 2018

BIG RIVERS ELECTRIC CORPORATION

Balance Sheets

December 31, 2017 and 2016

(Dollars in thousands)

Assets		**2017**	**2016**
Utility plant – net	$	1,041,766	1,051,970
Restricted investments – Member rate mitigation		391	312
Restricted investments – NRUCFC Capital Term Certificates		35,164	36,859
Other deposits and investments – at cost		19,278	15,467
Current assets:			
Cash and cash equivalents		55,861	48,584
Short-term investments		9,223	5,913
Accounts receivable		46,397	38,277
Fuel inventory		39,155	56,600
Nonfuel inventory		24,922	24,514
Prepaid expenses and other assets		5,339	6,955
Total current assets		180,897	180,843
Deferred charges and other assets:			
Regulatory assets		117,108	86,468
Federal tax receivable		2,202	—
Other		2,942	5,670
Total deferred charges and other assets		122,252	92,138
Total	$	1,399,748	1,377,589
Equities and Liabilities			
Capitalization:			
Equities	$	490,887	478,152
Long-term debt		776,174	791,253
Total capitalization		1,267,061	1,269,405
Current liabilities:			
Current maturities of long-term obligations		24,988	22,576
Line of credit		20,000	26,000
Purchased power payable		2,531	866
Accounts payable		19,922	17,624
Accrued expenses		8,621	9,190
Accrued interest		4,192	4,555
Total current liabilities		80,254	80,811
Deferred credits and other:			
Regulatory liabilities – member rate mitigation		403	327
Asset retirement obligations		28,347	7,279
Deferred credits and other		23,683	19,767
Total deferred credits and other		52,433	27,373
Commitments and contingencies (note 13)			
Total	$	1,399,748	1,377,589

See accompanying notes to financial statements.

BIG RIVERS ELECTRIC CORPORATION

Statements of Operations

Years ended December 31, 2017, 2016, and 2015

(Dollars in thousands)

	2017	2016	2015
Operating revenue	$ 407,229	402,590	403,549
Total operating revenue	407,229	402,590	403,549
Operating expenses:			
Operations:			
Fuel for electric generation	126,644	144,148	146,179
Power purchased and interchanged	100,045	80,341	74,136
Production, excluding fuel	42,790	43,730	39,502
Transmission and other	30,763	38,085	38,030
Maintenance	37,053	33,791	39,851
Depreciation and amortization	20,301	19,523	18,636
Total operating expenses	357,596	359,618	356,334
Electric operating margin	49,633	42,972	47,215
Interest expense and other:			
Interest	40,654	40,711	40,205
Income tax expense/(benefit)	7	(6,748)	(77)
Other – net	744	846	464
Total interest expense and other	41,405	34,809	40,592
Operating margin	8,228	8,163	6,623
Nonoperating margin:			
Interest income and other	4,770	4,742	4,593
Total nonoperating margin	4,770	4,742	4,593
Net margin	$ 12,998	12,905	11,216

See accompanying notes to financial statements.

BIG RIVERS ELECTRIC CORPORATION

Statements of Comprehensive Income

Years ended December 31, 2017, 2016, and 2015

(Dollars in thousands)

	2017	2016	2015
Net margin	$ 12,998	12,905	11,216
Other comprehensive income:			
Defined-benefit plans:			
Prior service cost	(1,077)	1,198	—
Actuarial gain (loss)	1,938	(2,591)	306
Amortization of loss	376	328	750
Defined-benefit plans	1,237	(1,065)	1,056
Postretirement benefits other than pensions:			
Prior service cost	(138)	(138)	(138)
Actuarial gain (loss)	(1,192)	2,021	611
Amortization of (gain)	(170)	(232)	—
Postretirement benefits other than pensions	(1,500)	1,651	473
Other comprehensive income (loss)	(263)	586	1,529
Comprehensive income	$ 12,735	13,491	12,745

See accompanying notes to financial statements.

BIG RIVERS ELECTRIC CORPORATION

Statements of Equities

Years ended December 31, 2017, 2016, and 2015

(Dollars in thousands)

			Other equities		
	Total equities	Retained margin	Donated capital and memberships	Consumers' contributions to debt service	Accumulated other comprehensive income/(loss)
Balance – December 31, 2014	$ 451,916	449,681	764	3,681	(2,210)
Net margin	11,216	11,216	—	—	—
Pension and postretirement benefit plans	1,529	—	—	—	1,529
Balance – December 31, 2015	464,661	460,897	764	3,681	(681)
Net margin	12,905	12,905	—	—	—
Pension and postretirement benefit plans	586	—	—	—	586
Balance – December 31, 2016	478,152	473,802	764	3,681	(95)
Net margin	12,998	12,998	—	—	—
Pension and postretirement benefit plans	(263)	—	—	—	(263)
Balance – December 31, 2017	$ 490,887	486,800	764	3,681	(358)

See accompanying notes to financial statements.

BIG RIVERS ELECTRIC CORPORATION

Statements of Cash Flows

Years ended December 31, 2017, 2016, and 2015

(Dollars in thousands)

		2017	2016	2015
Cash flows from operating activities:				
Net margin	$	12,998	12,905	11,216
Adjustments to reconcile net margin to net cash provided by operating activities:				
Depreciation and amortization		24,394	24,497	23,822
Interest compounded – RUS Series A Note		56	53	50
Interest compounded – RUS Series B Note		9,724	9,180	8,667
Noncash member rate mitigation revenue		(4,292)	(25,116)	(54,062)
Provision for deferred income tax benefit		—	6,509	—
Changes in certain assets and liabilities:				
Accounts receivable		(8,120)	(6,626)	2,183
Inventories		17,036	22,012	(34,035)
Prepaid expenses and other		1,616	(6,705)	27
Deferred charges		1,006	(7,026)	(2,912)
Purchased power payable		1,665	(224)	(2,889)
Accounts payable		2,964	(5,015)	(4,709)
Accrued expenses		(930)	683	(3,182)
Federal tax receivable		(1,847)	—	—
Other – net		10,842	(844)	11,731
Net cash provided by (used in) operating activities		67,112	24,283	(44,093)
Cash flows from investing activities:				
Capital expenditures		(22,936)	(22,812)	(46,436)
Proceeds from restricted investments and deposits		—	23,872	57,330
Purchases of restricted investments and other deposits and investments		(5,017)	—	—
Proceeds of short-term investments (maturities greater than 90 days)		2,252	7,883	—
Purchases of short-term investments (maturities greater than 90 days)		(5,562)	(5,913)	(7,883)
Net cash provided by (used in) investing activities		(31,263)	3,030	3,011
Cash flows from financing activities:				
Principal payments on long-term obligations		(37,572)	(21,717)	(20,903)
Proceeds from long-term obligations		15,000	—	—
Payments on line of credit		(26,000)	(26,000)	—
Borrowing on line of credit		20,000	26,000	26,000
Net cash provided by (used in) financing activities		(28,572)	(21,717)	5,097
Net increase/(decrease) in cash and cash equivalents		7,277	5,596	(35,985)
Cash and cash equivalents – beginning of year		48,584	42,988	78,973
Cash and cash equivalents – end of year	$	55,861	48,584	42,988
Supplemental cash flow information:				
Cash paid for interest	$	31,380	32,072	32,647
Cash paid for income taxes		1	1	1
Supplemental schedule of non-cash activities:				
Change in regulatory assets associated with asset retirement obligations	$	23,408	1,088	7,494
Change in regulatory assets associated with utility plant		26,336	26,310	26,150

See accompanying notes to financial statements.

(1) Organization and Summary of Significant Accounting Policies

(a) General Information

Big Rivers Electric Corporation ("Big Rivers" or the "Company"), an electric generation and transmission cooperative, supplies wholesale power to its three member distribution cooperatives (Jackson Purchase Energy Corporation, Kenergy Corp., and Meade County Rural Electric Cooperative Corporation) under all requirements contracts. Big Rivers also markets power to nonmember utilities, power marketers, and the Midcontinent Independent System Operator (MISO). The members provide electric power and energy to industrial, residential, and commercial customers located in portions of 22 western Kentucky counties. The wholesale power contracts with the members remain in effect until December 31, 2043. Rates to Big Rivers' members are established by the Kentucky Public Service Commission (KPSC) and are subject to approval by the Rural Utilities Service (RUS). The financial statements of Big Rivers include the provisions of the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 980, *Regulated Operations*, and give recognition to the ratemaking and accounting practices of the KPSC and RUS.

(b) Estimates

The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and disclosure of contingent assets and liabilities. The estimates and assumptions used in the accompanying financial statements are based upon management's evaluation of the relevant facts and circumstances as of the date of the financial statements. Actual results may differ from those estimates.

(c) System of Accounts

Big Rivers maintains its accounting records in accordance with the Uniform System of Accounts as prescribed by the RUS Bulletin 1767B-1, as adopted by the KPSC. These regulatory agencies retain authority and periodically issue orders on various accounting and ratemaking matters. Adjustments to RUS accounting have been made to make the financial statements consistent with generally accepted accounting principles in the United States of America.

(d) Revenue Recognition

Revenues generated from the Company's wholesale power sales are based on month-end meter readings and are recognized as earned when electricity is delivered. Capacity revenues are recognized in the period in which the Company provides capacity to a counterparty.

(e) Utility Plant and Depreciation

Utility plant is recorded at original cost, which includes the cost of contracted services, materials, labor, overhead, and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of $250 or more before consideration of such allowance. The interest capitalized is determined by applying the effective rate of Big Rivers' weighted average debt to the accumulated expenditures for qualifying projects included in construction in progress.

(Dollars in thousands)

Depreciation of utility plant in service is recorded using the straight-line method over the estimated remaining service lives, as approved by the RUS and KPSC. During 2012, a depreciation study was completed to evaluate the remaining economic lives of the Company's assets and establish new depreciation rates. The study was approved by the RUS in 2012 and by the KPSC in 2014, with the rates becoming effective February 1, 2014. The annual composite depreciation rates used to compute depreciation expense were as follows:

Electric plant	0.35%–25.38%
Transmission plant	1.36%–2.29%
General plant	3.76%–9.88%

For 2017, 2016, and 2015, the average composite depreciation rates were 2.45%, 2.39%, and 2.39%, respectively. At the time plant is disposed of, the original cost plus cost of removal less salvage value of such plant is charged to accumulated depreciation, as required by the RUS.

(f) Impairment Review of Long-Lived Assets

Long-lived assets are reviewed as facts and circumstances indicate that the carrying amount may be impaired. FASB ASC 360, *Property, Plant, and Equipment*, requires the evaluation of impairment by comparing an asset's carrying value to the estimated future cash flows the asset is expected to generate over its remaining life. If this evaluation were to conclude that the future cash flows were not sufficient to recover the carrying value of the asset, an impairment charge would be recorded based on the difference between the asset's carrying amount and its fair value (less costs to sell for assets to be disposed of by sale) as a charge to net margin.

(g) Asset Retirement Obligations

ASC Topic 410-20, *Asset Retirement and Environmental Obligations – Asset Retirement Obligations*, requires legal obligations associated with the retirement of long-lived assets to be recognized at fair value when incurred and capitalized as part of the related long-lived asset. ASC Topic 410-20 clarifies the term conditional asset retirement obligation where an obligation exists even though the method or timing of settlement may be conditional. The liability is accreted to its present value each period, and the capitalized cost is depreciated over the useful life of the related asset. When the asset is retired, the entity settles the obligation for its recorded amount or incurs a gain or loss.

Big Rivers has recorded liabilities in its financial statements for asset retirement obligations (AROs) related to the requirements of the U.S. Environmental Protection Agency's (EPA) Disposal of Coal Combustion Residuals from Electric Utilities Rule ("CCR Final Rule" and Effluent Limitations Guidelines Rule ("ELG Final Rule") for the coal ash ponds located at its Green Station and the City of Henderson's Station Two ("Station Two") generating units. The CCR Final Rule was published in the Federal Register on April 17, 2015 and provides a comprehensive set of requirements for the safe disposal of CCRs, commonly known as coal ash, from coal-fired power plants. The ELG Final Rule was published in the Federal Register on November 3, 2015, and sets limits on the levels of toxic metals in wastewater that can be discharged from power plants. See Note 3 for further discussion of the Company's AROs.

(h) Inventory

Inventories are carried at average cost and include coal, petroleum coke, lime, limestone, oil and gas used for electric generation, and materials and supplies used for utility operations. Purchased emission allowances are recorded in inventory at actual cost by each vintage year. Allowances issued by the EPA are recorded at zero cost by each vintage year. Total purchased and EPA issued allowances are carried in inventory at a weighted average cost by each vintage year. Issuances of allowances are accounted for on a vintage basis using a monthly weighted average cost.

(i) Restricted Investments

Certain investments are restricted under KPSC order to establish certain reserve funds for Member rate mitigation. These investments are classified as held-to-maturity and are carried at amortized cost. Additionally, Big Rivers was required to purchase investments in National Rural Utilities Cooperative Finance Corporation's (CFC) Capital Term Certificates (CTCs) in connection with a 2012 secured term loan agreement with CFC (Note 8), which are also classified as held-to-maturity.

(j) Cash and Cash Equivalents

Big Rivers considers all short-term, highly liquid investments with original maturities of three months or less to be cash equivalents.

(k) Short-Term Investments

Short-term investments include certificates of deposits (CDs) held for investment and investments in debt securities with original maturities greater than three months and less than one year.

(l) Regulatory Assets and Liabilities

ASC Topic 980-10 applies to regulated entities for which rates are designed to recover the costs of providing service. In accordance with this topic, certain items that would normally be reflected in the statement of operations are deferred on the balance sheet. Regulatory assets represent probable future revenues associated with certain incurred costs, which will be recovered from customers through the rate-making process. Regulatory assets are reduced during the period(s) in which the related costs are recovered through rates or when future recovery is no longer probable. Conversely, regulatory liabilities represent future reductions in revenues associated with amounts that are to be credited, or refunded, to members through the regulated rate-making process. Regulatory liabilities are reduced during the period(s) in which the related amounts are refunded to members through rates or when future refunding of the amounts is no longer probable.

(m) Other Deposits and Investments

Other deposits and investments consists primarily of patronage capital, cash collateral/margin call deposits, investments in associated organizations and deferred compensation.

(n) Income Taxes

Big Rivers was formed as a tax-exempt cooperative organization as described in Internal Revenue Code Section 501(c)(12). To retain tax-exempt status under this section, at least 85% of Big Rivers' annual income must be generated from transactions with the Company's members. In 1983, sales to nonmembers resulted in Big Rivers failing to meet the 85% requirement. Until Big Rivers can meet the 85% member income requirement, the Company will not be eligible for tax-exempt status and will be treated as a taxable cooperative.

As a taxable cooperative, Big Rivers is entitled to exclude the amount of patronage allocations to members from taxable income. Income and expenses related to nonpatronage-sourced operations are taxable to Big Rivers. Big Rivers files a federal income tax return and certain state income tax returns.

Under the provisions of FASB ASC 740, *Income Taxes*, Big Rivers is required to record deferred tax assets and liabilities for temporary differences between amounts reported for financial reporting purposes and amounts reported for income tax purposes. Deferred tax assets and liabilities are determined based upon these temporary differences using enacted tax rates for the year in which these differences are expected to reverse. Deferred income tax expense or benefit is based on the change in assets and liabilities from period to period, subject to an ongoing assessment of realization. Tax benefits associated with income tax positions taken, or expected to be taken, in a tax return are recorded only when the more-likely-than-not recognition threshold is satisfied and measured at the largest amount of benefit that is greater than 50% likely of being realized upon settlement.

(o) Patronage Capital

As provided in the Company's bylaws, Big Rivers accounts for each year's patronage-sourced income, both operating and nonoperating, on a patronage basis. Notwithstanding any other provision of the bylaws, the amount to be allocated as patronage capital for a given year shall not be less than the greater of regular taxable patronage-sourced income or alternative minimum taxable patronage-sourced income.

(p) Derivatives

Management has reviewed the requirements of FASB ASC 815, *Derivatives and Hedging*, and has determined that certain contracts the Company is party to may meet the definition of a derivative under FASB ASC 815. The Company has elected the Normal Purchase and Normal Sale exception for these contracts, and therefore, the contracts are not required to be recognized at fair value in the financial statements.

(q) Fair Value Measurements

FASB ASC 820, *Fair Value Measurement*, defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal, or most advantageous, market for the asset or liability in an orderly transaction between market participants at the measurement date. FASB ASC 820 establishes a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy requires entities to maximize the use of observable inputs when possible. The three levels of inputs used to measure fair value are as follows:

- Level 1 – quoted prices in active markets for identical assets or liabilities;
- Level 2 – observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data; and
- Level 3 – unobservable inputs that are supported by little or no market activity and that are significant to the fair values of the assets or liabilities, including certain pricing models, discounted cash flow methodologies, and similar techniques that use significant unobservable inputs.

(r) Deferred Loan Costs

The Company capitalizes costs incurred in connection with long-term debt. These costs are amortized on various bases over the term of the respective debt financing agreements.

The Company adopted Accounting Standards Update (ASU) 2015-03, Interest – Imputation of Interest (Subtopic 835-30); Simplifying the Presentation of Debt Issuance Costs, for the fiscal year beginning January 1, 2016. The update requires deferred loan costs related to a recognized debt liability to be presented on the balance sheet as a direct deduction from the carrying amount of the related debt liability instead of being presented as an asset.

(s) Deferred Credits and Other

Deferred credits and other includes amounts billed but not yet earned related to capacity revenue sales. This revenue will be recognized within the next year and amount to $5,341 and $2,648 at December 31, 2017 and 2016, respectively.

(t) New Accounting Pronouncement - Going Concern

In August 2014, the FASB issued ASU 2014-15, Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern (ASU 2014-15). ASU 2014-15 explicitly requires management to assess an entity’s ability to continue as a going concern, and to provide related footnote disclosure in certain circumstances. ASU 2014-15 was effective for the Company for annual reporting periods ending after December 15, 2016. The adoption of this standard did not have a material impact on the Company’s financial statements.

(Dollars in thousands)

(2) Utility Plant

At December 31, 2017 and 2016, utility plant is summarized as follows:

		2017	2016
Classified plant in service:			
Production plant	$	1,818,203	1,793,786
Transmission plant		287,098	274,681
General plant		51,419	49,044
Other		292	292
		2,157,012	2,117,803
Less accumulated depreciation		1,138,133	1,094,235
		1,018,879	1,023,568
Construction in progress		22,887	28,402
Utility plant – net	$	1,041,766	1,051,970

Big Rivers' secured long-term debt obligations and 2015 Syndicated Senior Secured Credit Agreement, as amended September 19, 2017, are secured under Big Rivers' Indenture dated as of July 1, 2009, as supplemented and amended (the "Mortgage Indenture"), between Big Rivers and U.S. Bank National Association, as trustee (the "Mortgage Indenture Trustee"). Obligations are secured under the Mortgage Indenture by a mortgage lien on substantially all of Big Rivers' owned tangible, and certain intangible, properties including Big Rivers' production, transmission, general, and other Utility Plant. See Note 4 for further discussion of Big Rivers' Debt and Other Long-Term Obligations secured under its Mortgage Indenture.

Interest capitalized for the years ended December 31, 2017 and 2016, was $143 and $519, respectively.

The Company has identified certain legal obligations, as defined in FASB ASC 410, *Asset Retirement and Environmental Obligations*, associated with the retirement of long-lived assets that require the recognition of a liability. See Note 3 for further discussion of the Company's asset retirement obligations.

As of December 31, 2017 and 2016, the Company had an estimated $57,301 and $53,474, respectively, related to nonlegal removal costs included in accumulated depreciation as required by the RUS.

(Dollars in thousands)

(3) Asset Retirement Obligations

The Company has asset retirement obligations (AROs) arising from legal obligations associated with the retirements of certain long-lived assets. The liabilities were initially measured at fair value and subsequently adjusted for accretion expense and changes in estimated future cash flows. The corresponding asset retirement costs are capitalized as a part of the carrying amount of the related long-lived assets and depreciated over their remaining useful lives. The following table presents the activity for the ARO liabilities for the years ended December 31, 2017 and 2016:

		2017		2016
ARO Balance at beginning of year	$	7,279		6,973
Changes in estimated timing or cost		20,235	(a)	—
Accretion expense		833	(b)	306
ARO Balance at end of year	$	28,347		7,279

(a) Separate studies, completed by independent engineering firms during 2017, provided updated cost estimates for the eventual closures of the ash ponds located at Big Rivers' Green Station and the City of Henderson's Station Two, for compliance with recent federal regulations, including the EPA's CCR Final Rule and ELG Final Rule, for which Big Rivers initially recognized ARO liabilities in 2015. The present value of the updated cost estimates, per the 2017 studies, was $20,110 higher for the Green Station and $125 higher for Station Two than the previous cost estimates used to recognize the initial ARO liability in 2015. Accordingly, during 2017, Big Rivers recorded adjustments to its ARO liabilities associated with the closure of its Green Station and Station Two ash ponds.

(b) The 2017 and 2016 annual ARO accretion expense of $833 and $306, respectively, was deferred and included in the Regulatory Assets amount reported on the Company's Balance Sheet as of December 31, 2017. These amounts will be amortized and recognized as expense during the period(s) in which they are recovered through rates.

(Dollars in thousands)

(4) Debt and Other Long-Term Obligations

A detail of long-term debt at December 31, 2017 and 2016 is as follows:

	2017	2016
CFC Refinance Promissory Note, Series 2012 B, serial note pricing, effective interest rate of 4.30%, final maturity date of May 2032	$ 240,013	252,055
CoBank Promissory Note, Series 2012A, stated interest rate of 4.30%, final maturity date of June 2032	190,647	199,591
RUS Series B Promissory Note, stated amount of $245,530, no stated interest rate, with interest imputed at 5.80%, maturing December 2023	173,816	164,093
County of Ohio, Kentucky, promissory note, fixed interest rate of 6.00%, maturing in July 2031	83,300	83,300
RUS Series A Promissory Note, stated amount of $80,456, stated interest rate of 5.75%, with an imputed interest rate of 5.84% maturing July 2021	65,274	80,213
CFC Equity Note, Series 2012B, stated interest rate of 5.35%, final maturity date of May 2032	35,675	37,265
CFC Refinance Promissory Note, Series 2017B, fixed interest rate of 3.69%, final maturity date of Ocober 2020	15,000	—
Total long-term debt	803,725	816,517
Less current maturities	24,988	22,576
Less unamortized deferred debt issuance costs	2,563	2,688
Total long-term debt – net of current maturities and deferred debt issuance costs	$ 776,174	791,253

The following are scheduled maturities of long-term debt at December 31:

	Amount
Year:	
2018	$ 24,988
2019	25,964
2020	68,506
2021	60,881
2022	27,796
Thereafter	595,590
Total	$ 803,725

(a) National Rural Utilities Cooperative Finance Corporation (CFC) Refinance and Equity Promissory Notes, 2012B

In July 2012, Big Rivers issued new debt with CFC in the form of a secured term loan in the amount of $302,000 (the “Refinance Note”) and a CFC Equity Note in the amount of $43,156. The Refinance Note is secured under Big Rivers’ Indenture, dated July 1, 2009 between the Company and U.S. Bank National Association, and consists of 20 individual notes with different fixed interest rates ranging from 3.05% to 5.35%. The Refinance Note has an effective interest rate of 4.30% and a final maturity date of May 2032.

The Equity Note has a fixed interest rate of 5.35% and a final maturity date of May 2032. The proceeds of the CFC Equity Note were used to purchase interest-bearing CTCs, as required in connection with the Refinance Note (Note 8).

(b) CoBank, ACB (CoBank) Promissory Note, Series 2012A

In July 2012, Big Rivers issued new debt with CoBank in the form of a secured term loan in the amount of $235,000, which is secured under Big Rivers’ Indenture. The loan has a fixed interest rate of 4.30% and a final maturity date of June 2032.

(c) RUS Notes

On July 15, 2009, Big Rivers’ previous RUS debt was replaced with the RUS 2009 Promissory Note Series A (the “RUS Series A Note”) and the RUS 2009 Promissory Note Series B (the “RUS Series B Note”). The RUS Series A Note has a stated interest rate of 5.75% and is recorded at an imputed interest rate of 5.84%. The RUS Series B Note has no stated interest rate and is recorded at an imputed interest rate of 5.80%. The RUS Notes are secured under Big Rivers’ Indenture.

(d) Pollution Control Bonds

In June 2010, the County of Ohio, Kentucky, issued $83,300 of Pollution Control Refunding Revenue Bonds, Series 2010A (“Series 2010A Bonds”), the proceeds of which are supported by a promissory note from Big Rivers, which bears the same interest rate as the bonds and is secured under Big Rivers’ Indenture. These bonds bear interest at a fixed rate of 6.00% and mature in July 2031.

(e) CFC Refinance Promissory Note, Series 2017B

In October 2017, Big Rivers borrowed $15,000 from CFC at a fixed interest rate of 3.69%, the proceeds of which were used to prepay a portion of the RUS Series A Note. The note has a final maturity of October 2020.

(f) Line of Credit

On March 5, 2015, Big Rivers entered into a new $130,000 Syndicated Senior Secured Credit Agreement (the “2015 Agreement”) with CFC, CoBank, Fifth Third Bank, KeyBank National Association and Regions Bank. In conjunction with the closing of the 2015 Agreement, Big Rivers’ 2013 Agreement with CFC was terminated and Big Rivers issued secured promissory notes (the “Series 2015A Notes”), equal to each lender’s commitment, which are secured under Big Rivers’ Indenture.

A portion ($25,630) of the 2015 Agreement was reserved for interim financing of capital expenditures associated with Big Rivers' 2012 Environmental Compliance Plan (2012 ECP). Once long-term financing of the 2012 ECP had been secured, Big Rivers would be required to repay any outstanding draws on the 2015 Agreement which were used to fund 2012 ECP expenditures and the total amount available under the 2015 Agreement would be reduced by $25,630. As of December 31, 2017, no amounts have been borrowed under the 2015 Agreement for interim financing of the 2012 ECP.

On September 19, 2017, the 2015 Agreement was amended to eliminate reference to the 2012 ECP, reduce the total amount available under the facility from $130,000 to $100,000, and extend the maturity date to September 18, 2020.

As of December 31, 2017, Big Rivers had $20,000 in outstanding borrowings under the 2015 Agreement and $7,729 in issued letters of credit outstanding, which together reduced its borrowing capacity under the 2015 Agreement by $27,729.

As of December 31, 2016, Big Rivers had $26,000 in outstanding borrowings under the 2015 Agreement and $7,779 in issued letters of credit outstanding, which together reduced its borrowing capacity under the 2015 Agreement by $33,779.

(g) Covenants

Big Rivers is in compliance with all debt covenants associated with both its long-term and short-term debt obligations. The Company's Indenture and other debt agreements require that a Margins for Interest Ratio (MFIR) of at least 1.10 be maintained for each fiscal year. The 2015 Agreement requires that Big Rivers, throughout the duration of the agreement, maintain a minimum Members' Equities balance at each fiscal quarter-end and year-end of $375,000 plus 50% of the Company's cumulative positive net margins for each of the preceding fiscal years, beginning with the fiscal year ended December 31, 2015. Big Rivers' MFIR for the fiscal year ended December 31, 2017 was 1.32, and it's Members' Equities balance was $490,887.

An MFIR of less than 1.10, per the Indenture and other debt agreements, may result in the following actions, restrictions, or consequences: Big Rivers may not secure additional debt under the Indenture; the Company must seek rates that are reasonably expected to yield a 1.10 MFIR; the Company must provide a written plan satisfactory to the RUS setting forth actions to be taken to achieve the specified MFIR on a timely basis; an event of default may occur; interest rates may increase; and its line of credit may be terminated with an acceleration of any outstanding amounts under the line of credit.

In accordance with the Amended and Consolidated Loan Contract between Big Rivers and the United States of America (acting by and through the RUS Administrator), Big Rivers provided notification to the RUS Administrator via letter dated February 7, 2013 of a failure to maintain two Credit Ratings of Investment Grade. In order to remain compliant under the Amended and Consolidated Loan Contract, in March 2013, the Company, prepared and presented to the RUS, its Corrective Action Plan setting forth the actions being taken by management that are reasonably expected to achieve two Credit Ratings of Investment Grade. The Company regularly updates the RUS on actions taken to date related to its Corrective Action Plan.

(Continued)

(h) RUS Loan Approvals

In September 2016, Big Rivers received approvals from the RUS for two loan guarantee commitments. Under the commitments, the RUS will guarantee two separate loans from the Federal Financing Bank (FFB) totaling $46,141.

The proceeds of the first guaranteed loan, in the amount of $25,630, are to be used by Big Rivers for long-term financing of the capital projects included in its 2012 ECP. The proceeds of the second guaranteed loan, in the amount of $20,511, are to be used by Big Rivers for long-term financing of capital projects included in its 2013-2015 Transmission Construction Work Plan (CWP). Big Rivers' 2012 ECP capital projects were completed in 2016 and funded with Big Rivers' general funds. Additionally, the majority of the capital projects in the 2013-2015 Transmission CWP have been completed, and Big Rivers estimates that 100% of the costs will have been funded on an interim basis with Big Rivers' general funds prior to the RUS guaranteed loan being finalized. Accordingly, Big Rivers plans to use the proceeds of the two RUS guaranteed FFB loans to replenish its general funds.

Big Rivers is currently working with the RUS to finalize the loan agreements, some of which also required KPSC approval. Big Rivers plans to finalize both RUS guaranteed FFB loan agreements during the first quarter of 2018.

(5) Rate Matters

The rates charged to Big Rivers' members consist of a demand charge per kilowatt (kW) and an energy charge per kilowatt-hour (kWh) consumed as approved by the KPSC. The rates include specific demand and energy charges for its members' two classes of customers, the large industrial customers and the rural customers, under its jurisdiction. For the large industrial customers, the demand charge is generally based on each customer's maximum demand during the current month. For the rural customers, per KPSC approval, the demand charge is based on Maximum Adjusted Net Local Load (as defined in Big Rivers' tariff).

The Company has certain KPSC approved tariff riders; including a fuel adjustment clause and an environmental surcharge The net effect of these tariffs is recognized as revenue on a monthly basis with a partial offset to the regulatory liability – member rate mitigation described below.

The net impact of the tariff riders to members' rates is currently mitigated by a Member Rate Stability Mechanism (MRSM) that is held by Big Rivers as restricted investments. An offsetting regulatory liability – member rate mitigation reflects the obligation associated with the funding of these reserve accounts.

Big Rivers as wholesale power supplier, and Kenergy Corp. ("Kenergy") as retail power supplier, served two aluminum smelters, Century Aluminum Company ("Century") and Alcan Primary Products Corporation ("Alcan") under their respective Retail Service Agreements with Kenergy. On August 20, 2012, Big Rivers and Kenergy received a letter from Century serving Notice of Termination of its Retail Service Agreement with Kenergy. As a result of Century's notification of termination, the Company filed an application with KPSC, on January 15, 2013, requesting authority to adjust its rates for wholesale electric service (Case No. 2012-00535). The KPSC entered an order on October 29, 2013, granting Big Rivers an annual revenue increase of $54,227, effective August 20, 2013. In its order, the KPSC excluded the Coleman plant depreciation from rate recovery at this time. The KPSC directed the Company to defer this depreciation expense and record the deferred amounts in a regulatory asset account. The KPSC's order indicated this action was being taken due to the planned temporary idling of Coleman, the length of time the plant will be idled, and the impact of the rate increase on customers. As of December 31, 2017, cumulative depreciation expense of $25,554 was deferred for the Coleman plant, which management believes is probable of recovery in future rates.

The wholesale rate increase granted by the KPSC in Case No. 2012-00535 resulted in a base wholesale rate increase of approximately: 21.9% for rural customers; 11.8% for large industrial customers; and 11.2% for the remaining aluminum smelter (Century Aluminum Sebree LLC, formerly Alcan Primary Products Corporation).

On January 30, 2013, Alcan provided a Notice of Termination of its Kenergy Retail Service Agreement to Big Rivers and Kenergy. As a result of Alcan's notification of termination, the Company filed an application with KPSC, on June 28, 2013, requesting authority to adjust its rates for wholesale electric service in the amount of $70,397 (Case No. 2013-00199). This requested amount was later revised to $71,223 in the Company's rebuttal testimony filed December 17, 2013. The Company proposed to temporarily offset this rate increase by utilization of the MRSM. The Company also proposed to use transmission revenues from both smelters to replenish the Economic Reserve Fund. An evidentiary hearing was held by the KPSC in January 2014. The KPSC entered an order on April 25, 2014, granting Big Rivers an annual revenue increase of $36,160, effective February 1, 2014. In its order, the KPSC approved Big Rivers' 2012 Depreciation Study, but excluded Wilson plant depreciation from rate recovery at this time. The KPSC directed the Company to defer the Wilson depreciation expense and record in a regulatory asset account, similar to the Coleman depreciation expense deferral per the KPSC's order in Case No. 2012-00535. As of December 31, 2017, cumulative depreciation expense of $79,395 was deferred for the Wilson plant, which management believes is probable of recovery in future rates. The KPSC also approved Big Rivers' proposal to temporarily offset the rate increase by utilization of the MRSM. The KPSC further granted Big Rivers' proposed accounting treatment for transmission revenues related to the Hawesville smelter but included the test year transmission revenues related to the Sebree smelter in the determination of Big Rivers' revenue requirement. The net effect of this accounting treatment was the recognition of revenue on a monthly basis with an offset to the applicable regulatory liability accounts as the reserve funds were used to offset the impact of the base rate increase on the members' monthly bills. The wholesale rate increase granted by the KPSC in Case No. 2013-00199 resulted in a base wholesale rate increase of approximately 16.3% for rural customers and 13.7% for large industrial customers.

On February 5, 2015, the KPSC ordered a review of Big Rivers' fuel adjustment clause (FAC) for the two-year period ending October 31, 2014 (Case No. 2014-00455). On February 19, 2015, the KPSC entered an order consolidating the instant case with the open six-month FAC review case (Case No. 2014-00230), making all parties to that case parties of the instant case. On May 26, 2015, Big Rivers entered into a Stipulation and Recommendation Agreement with the intervenors in the case whereby Big Rivers would credit $311 each month through its FAC to its Members for a period of up to fifteen months. Big Rivers filed the Stipulation and Recommendation Agreement with the KPSC on May 29, 2015. On July 27, 2015, the KPSC approved the Stipulation and Recommendation Agreement. On October 23, 2015, the RUS accepted Big Rivers' proposed monthly credit of $311 to the Members for a period of up to fifteen months. Big Rivers began including the credit in the FAC filing for the October 2015 expense month, which was applied to members' bills for service delivered during November 2015. The final credit was for the December 2016 expense month, which was applied to members' bills for service delivered during January 2017.

Effective July 17, 2009, the KPSC approved the implementation of the Non-Fuel Adjustment Clause-Purchased Power Adjustment (Non-FAC PPA) which is a rate mechanism allowing Big Rivers to recover certain costs of purchased power that are not recoverable through its FAC. An accrual is recorded monthly to a regulatory asset or liability account based on the difference between the actual purchased power costs recoverable through the Non-FAC PPA and the purchased power base cost included in base rates. The balance in the regulatory asset or liability account as of June 30 each year is billed or refunded to members during the following twelve-month period beginning September 1 through August 31 of the following year.

The CCR Final Rule requires Big Rivers to address the eventual permanent closures of its coal ash ponds. Big Rivers believes it will face significant liabilities with respect to the treatment of the ash ponds at its Green Station and the City of Henderson's Station Two generating stations upon those stations' retirements from service or closures of the ash ponds. In accordance with ASC Topic 410-20, *Asset Retirement and Environmental Obligations – Asset Retirement Obligations* and under the RUS Uniform System of Accounts, Big Rivers initially recognized its coal ash pond Asset Retirement Obligations (AROs) at fair value and subsequently adjusted for accretion expense as of December 31, 2017 (Note 3).

On October 6, 2015, Big Rivers filed an application with the KPSC (Case No. 2015-00333), requesting authority to establish regulatory assets for the deferral of certain expenses it would incur for compliance with the CCR Final Rule, including accretion and depreciation expense related to the AROs and other incremental expenses. Big Rivers management believes it is probable that the regulatory assets will be recoverable through appropriate rate mechanisms in the future. The KPSC issued an order in Case No. 2015-00333 on January 5, 2016, approving the accounting treatment requested by Big Rivers to establish regulatory assets for 2016 and subsequent years. As of December 31, 2017, the total amount of CCR-related expenses deferred and included in Regulatory assets on the Company's balance sheet was $5,517.

(Continued)

(Dollars in thousands)

In connection with the rate matters discussed above, the following tables provide a summary of Regulatory Assets and Liabilities reflected in the Balance Sheet as of December 31, 2017 and 2016:

		Regulatory assets	
		2017	**2016**
Coleman plant deferred depreciation	$	25,554	19,623
Wilson plant deferred depreciation		79,395	58,991
Rate case expense and other		677	713
Non-FAC PPA		5,965	4,878
Asset retirement obligations		4,979	1,805
Environmental costs (CCR)		538	458
Total regulatory assets	$	117,108	86,468

		Regulatory liabilities	
		2017	**2016**
Economic reserve-member rate mitigation	$	403	327
Total regulatory liabilities	$	403	327

(6) Income Taxes

At December 31, 2017, Big Rivers had a Non-Patron Net Operating Loss (NOL) Carryforward of approximately $17,209 expiring at various times between 2029 and 2037. The NOL Carryforward was entirely offset by a full valuation allowance.

At December 31, 2016, Big Rivers had an Alternative Minimum Tax Credit (AMT) Carryforward of approximately $3,617. In 2016, Big Rivers claimed an accelerated AMT credit in lieu of bonus depreciation under Internal Revenue Code (IRC) Sec. 168(k)(4). The accelerated AMT credit for 2017 is $1,404. The 2016 valuation allowance associated with the AMT credit carryforward was released because it was more-likely-than-not that IRC section 168(k)(4) would provide an avenue to recover the unused credits as a refund through its 2018 federal income tax return.On December 22, 2017, the U.S. government enacted comprehensive Federal tax legislation commonly referred to as the Tax Cuts and Jobs Act of 2017 (the “Tax Act”). The Tax Act significantly modifies the U.S. corporate income tax system by, among other things, reducing the corporate income tax rate from 35% to 21% for tax years beginning after December 31, 2017. The income tax effects of changes in tax laws are recognized in the period when enacted. In addition to the reduction to the corporate tax rate, the Tax Act also repealed AMT as well as IRC section 168(k)(4). For tax years beginning in 2018, 2019, and 2020, to the extent that AMT credit carryovers exceed regular tax liability (as reduced by certain other credits), 50% of the excess AMT credit carryovers are refundable. Any remaining AMT credits will be fully refundable in 2021. The Tax Act also requires deferred AMT refunds previously reported on the Balance Sheet in Other deferred charges to be reported as a long-term receivable. For 2017, Big Rivers has reported $2,202 as Federal tax receivable.

(Dollars in thousands)

Due to the full valuation allowance against the remaining net deferred tax assets, the Tax Act had no impact on Big Rivers' 2017 tax expense.

The components of the net deferred tax assets as of December 31, 2017 and 2016 were as follows:

		2017	2016
Deferred tax assets:			
Net operating loss carryforward	$	4,383	5,939
Alternative minimum tax credit carryforwards		—	3,491
Fixed asset basis difference		3,495	1,238
Total deferred tax assets		7,878	10,668
Deferred tax liabilities:			
RUS Series B Note		(3,449)	(5,212)
Bond refunding costs		(75)	(122)
Total deferred tax liabilities		(3,524)	(5,334)
Net deferred tax asset (prevaluation allowance)		4,354	5,334
Valuation allowance		(4,354)	(2,080)
Net deferred tax asset	$	—	3,254

A reconciliation of the Company's effective tax rate for 2017, 2016, and 2015 is as follows:

	2017	2016	2015
Federal rate	35.0%	35.0%	35.0%
State rate – net of federal benefit	4.7	3.9	3.9
Permanent differences	0.4	1.0	0.5
Patronage allocation to members	(40.2)	(39.9)	(39.5)
Tax benefit of operating loss carryforwards and other	—	—	0.1
Alternative minimum tax credit recovery	—	(109.6)	—
Effective tax rate	(0.1)%	(109.6)%	—%

The Company files a federal income tax return, as well as certain state income tax returns. The years currently open for federal income tax examination are 2014 through 2016. The major state tax jurisdiction currently open for income tax examination is Kentucky for years 2013 through 2016. The Company has not recorded any unrecognized tax benefits or liabilities related to federal or state income taxes.

The Company classifies interest and penalties as an operating expense on the statement of operations and accrued expenses on the balance sheet. No material interest or penalties have been recorded during 2017, 2016, or 2015.

(7) Pension Plans

(a) Defined-Benefit Plans

Big Rivers has a noncontributory defined-benefit pension plan covering substantially all employees who meet minimum age and service requirements and who were employed by the Company prior to the plan closure dates cited below. The plan provides benefits based on the participants' years of service and the five highest consecutive years' compensation during the last ten years of employment. Big Rivers' policy is to fund such plan in accordance with the requirements of the Employee Retirement Income Security Act of 1974.

Prior to January 1, 2014, Big Rivers had two separate defined-benefit pension plans. The salaried employees' defined-benefit plan was closed to new entrants effective January 1, 2008, and the bargaining employees' defined-benefit plan was closed to new hires effective November 1, 2008. The Company simultaneously established base contribution accounts in the defined-contribution thrift and 401(k) savings plans, which were renamed as the retirement savings plans. The base contribution account for an eligible employee, which is one who meets the minimum age and service requirements, but for whom membership in the defined-benefit plan is closed, is funded by employer contributions based on graduated percentages of the employee's pay, depending on his or her age.

In order to meet minimum participation requirements, Big Rivers' salaried employees defined benefit plan was merged into the bargaining employees defined benefit plan. The merger was effective January 1, 2014 for purposes of Internal Revenue Code and effective December 31, 2014 for all other purposes. Effective January 1, 2017, participation was frozen in the merged plan for highly compensated employees in order to comply with IRS code section 401(a)(26).

The Company has adopted FASB ASC 715, *Compensation – Retirement Benefits*, including the requirement to recognize the funded status of its pension plan and other postretirement plans (Note 11 – Postretirement Benefits Other than Pensions). FASB ASC 715 defines the funded status of a defined-benefit pension plan as the fair value of its assets less its projected benefit obligation, which includes projected salary increases and defines the funded status of any other postretirement plan as the fair value of its assets less its accumulated postretirement benefit obligation.

FASB ASC 715 also requires an employer to measure the funded status of a plan as of the date of its year-end balance sheet and requires disclosure in the notes to the financial statements certain additional information related to net periodic benefit costs for the next fiscal year. The Company's pension and other postretirement benefit plans are measured as of December 31, 2017 and 2016.

The following provides an overview of the Company's noncontributory defined-benefit pension plan.

(Dollars in thousands)

A reconciliation of the Company's benefit obligations of its noncontributory defined-benefit pension plan at December 31, 2017 and 2016 is as follows:

		2017	2016
Benefit obligation – beginning of period	$	21,282	19,097
Service cost – benefits earned during the period		798	907
Interest cost on projected benefit obligation		801	816
Plan amendment		1,077	(1,198)
Benefits paid		(1,451)	(1,126)
Actuarial loss (gain)		(331)	2,786
Benefit obligation – end of period	$	22,176	21,282

Big Rivers' defined-benefit pension plan provides retirees and terminated employees with a lump-sum payment option. Benefits paid in 2017 include lump-sum payments in the amounts of $1,407 – the result of one Qualified Domestic Relations Order and four retirees or terminated employees electing the lump-sum payment option. Benefits paid in 2016 include lump-sum payments in the amounts of $1,096 – the result of two retirees or terminated employees electing the lump-sum payment option.

The accumulated benefit obligation for the defined-benefit pension plan was $17,743 and $17,183 at December 31, 2017 and 2016, respectively.

A reconciliation of the Company's pension plan assets at December 31, 2017 and 2016 is as follows:

		2017	2016
Fair value of plan assets – beginning of period	$	18,434	18,077
Actual return on plan assets		2,868	1,483
Benefits paid		(1,451)	(1,126)
Fair value of plan assets – end of period	$	19,851	18,434

The funded status of the Company's pension plan at December 31, 2017 and 2016 is as follows:

		2017	2016
Benefit obligation – end of period	$	(22,176)	(21,282)
Fair value of plan assets – end of period		19,851	18,434
Funded status	$	(2,325)	(2,848)

(Continued)

(Dollars in thousands)

Components of net periodic pension costs for the years ended December 31, 2017, 2016, and 2015 were as follows:

		2017	2016	2015
Service cost	$	798	907	918
Interest cost		801	816	756
Expected return on plan assets		(1,262)	(1,289)	(1,414)
Amortization of prior service cost		(33)	—	1
Amortization of actuarial loss		409	328	285
Settlement loss		—	—	465
Net periodic benefit cost	$	713	762	1,011

A reconciliation of the pension plan amounts in accumulated other comprehensive income at December 31, 2017 and 2016 is as follows:

		2017	2016
Prior service cost	$	88	1,198
Unamortized actuarial loss		(4,203)	(6,549)
Accumulated other comprehensive income	$	(4,115)	(5,351)

In 2018, $33 of prior service credit and $246 of actuarial loss is expected to be amortized to periodic pension benefit cost.

The recognized adjustments to other comprehensive income at December 31, 2017 and 2016 are as follows:

		2017	2016
Prior service cost	$	1,077	(1,198)
Unamortized actuarial gain/(loss)		(2,314)	2,263
Other comprehensive (income)/loss	$	(1,237)	1,065

At December 31, 2017 and 2016, amounts recognized in the balance sheets were as follows:

		2017	2016
Deferred credits and other	$	(2,325)	(2,848)

(Continued)

(Dollars in thousands)

Assumptions used to develop the projected benefit obligation and determine the net periodic benefit cost were as follows:

	2017	2016	2015
Discount rate – projected benefit obligation	3.44%	3.80%	4.19%
Discount rate – net periodic benefit cost	3.80	4.19	3.76
Rates of increase in compensation levels	4.00	4.00	4.00
Expected long-term rate of return on assets	7.00	7.25	7.25

The expected long-term rate of return on plan assets for determining net periodic pension cost for each fiscal year is chosen by the Company from a best estimate range determined by applying anticipated long-term returns and long-term volatility for various asset categories to the target asset allocation of the plan. The expected long-term rate of return on assets is based on the median expected rate of return for a passively-managed portfolio plus the incremental return from active management.

Big Rivers utilizes a third-party investment manager for the plan assets, and has communicated thereto the Company's Retirement Plan Investment Policy, including a target asset allocation mix of 50% U.S. equities (an acceptable range of 45%–55%), 15% international equities (an acceptable range of 10%–20%), and 35% fixed income (an acceptable range of 30%–40%). As of December 31, 2017 and 2016, the investment allocation was 55% and 54%, respectively, in U.S. equities, 11% and 10%, respectively, in international equities, and 34% and 36%, respectively, in fixed income. The objective of the investment program seeks to (a) maximize return on investment, (b) minimize volatility, (c) minimize Company contributions, and (d) provide the employee benefit in accordance with the plan. The portfolio is well diversified and of high quality. The average quality of the fixed income investments must be "A" or better. The equity portfolio must also be of investment grade quality. The performance of the investment manager is reviewed semiannually.

(Dollars in thousands)

At December 31, 2017 and 2016, the fair value of Big Rivers' defined-benefit pension plan assets by asset category are as follows:

	Level 1	Level 2	December 31, 2017
Cash and money market	$ 965		965
Equity securities:			
Common stock	8,610		8,610
Preferred stock	464		464
Mutual funds	4,498		4,498
Fixed:			
U.S. Government agency bonds		300	300
Tax exempt bonds and notes		2,649	2,649
Corporate bonds and notes		2,365	2,365
	$ 14,537	5,314	19,851

	Level 1	Level 2	December 31, 2016
Cash and money market	$ 425	—	425
Equity securities:			
Common stock	7,804	—	7,804
Preferred stock	431	—	431
Mutual funds	4,027	—	4,027
Fixed:			
U.S. Government agency bonds	—	354	354
Tax exempt bonds and notes	—	2,642	2,642
Corporate bonds and notes	—	2,750	2,750
	$ 12,687	5,746	18,433

(Continued)

(Dollars in thousands)

Expected retiree pension benefit payments projected to be required during the years following 2017 are as follows:

		Amount
Year ending December 31:		
2018	$	1,449
2019		1,209
2020		1,593
2021		2,286
2022		2,504
Thereafter		11,086
Total	$	20,127

(b) Defined-Contribution Plans

Big Rivers has two defined-contribution retirement plans covering substantially all employees who meet minimum age and service requirements. Each plan has a thrift and 401(k) savings section allowing employees to contribute up to 75% of pay on a pretax and/or after-tax basis, with employer matching contributions equal to 60% of the first 6% contributed by the employee on a pretax basis.

A base contribution retirement section was added and the plan name changed from thrift and 401(k) savings to retirement savings, effective January 1, 2008, for the salaried plan and November 1, 2008, for the bargaining plan. The base contribution account is funded by employer contributions based on graduated percentages of pay, depending on the employee’s age.

The Company’s expense under these plans was $5,087, $4,862, and $4,550 for the years ended December 31, 2017, 2016 and 2015 respectively.

(c) Deferred Compensation Plan

Big Rivers sponsors a nonqualified deferred compensation plan for its eligible employees who are members of a select group of management or highly compensated employees. The purpose of the plan is to allow participants to receive contributions or make deferrals that they could not receive or make under the salaried employees qualified defined-contribution retirement savings plan (formerly, the thrift and 401(k) savings plan) as a result of nondiscrimination rules and other limitations applicable to the qualified plan under the Internal Revenue Code. The nonqualified plan also allows a participant to defer a percentage of his or her pay on a pretax basis.

The nonqualified deferred compensation plan is unfunded, but the Company has chosen to finance its obligations under the plan, including any employee deferrals, through a rabbi trust. The trust assets remain a part of the Company’s general assets, subject to the claims of its creditors. The 2017 employer contribution was $103 and deferred compensation expense was $103. As of December 31, 2017, the trust asset was $464 and the deferred liability was $464.

(Dollars in thousands)

(8) Restricted Investments

The amortized costs and fair values (Level 1 measurement) of Big Rivers' restricted investments held for Member rate mitigation at December 31, 2017 and 2016 were as follows:

		2017		2016	
		Amortized costs	**Fair values**	**Amortized costs**	**Fair values**
Debt securities:					
U.S. Treasury - Money Market	$	391	391	312	312
Total	$	391	391	312	312

There were no gross unrealized gains and losses on restricted investments at December 31, 2017 and 2016.

		2017		2016	
		Gains	**Losses**	**Gains**	**Losses**
Debt securities:					
U.S. Treasury - Money Market	$	—	—	—	—
Total	$	—	—	—	—

Debt securities at December 31, 2017 and 2016 mature, according to their contractual terms, as follows (actual maturities may differ due to call or prepayment rights):

		2017		2016	
		Amortized costs	**Fair values**	**Amortized costs**	**Fair values**
In one year or less	$	391	391	312	312
After one year through five years		—	—	—	—
Total	$	391	391	312	312

(Dollars in thousands)

Gross unrealized losses on investments and the fair values of the related securities, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at December 31, 2017 and 2016 were as follows:

		2017		2016	
		Less than 12 months		Less than 12 months	
		Losses	Fair values	Losses	Fair values
Debt securities:					
U.S. Treasury - Money Market	$	—	391	—	312
Total	$	—	391	—	312

None of the Company's restricted investments held for Member rate mitigation were in an unrealized loss position as of December 31, 2017 or 2016.

In conjunction with the CFC $302,000 secured term loan (Note 4), Big Rivers was required to invest in CFC Capital Term Certificates (CTCs) equal to 14.29% of the Refinance Note. Proceeds of the Equity Note were used to purchase the investments in CTCs as required under the loan agreement. The interest rate on the CTCs is fixed at 4.28% and is equal to 80% of the Equity Note rate of 5.35%. The CTCs cannot be traded in the market, and therefore, a value other than their outstanding principal amount cannot be determined. The Company's investment in these CTCs at December 31, 2017 and 2016 was $35,164 and $36,859, respectively.

(9) Short-Term Investments

At December 31, 2017, the Company's short-term investments included $4,798 of investments in debt securities and $4,425 of investments in certificates of deposits (CDs), which are both included in the Company's balance sheet at amortized cost. At December 31, 2016, the Company's short-term investments included $3,858 of investments in debt securities and $2,055 of investments in CDs, which are both included in the Company's balance sheet at amortized cost. The investments in debt securities are classified as held-to-maturity, based on management's intent and ability to hold them to maturity. Both CDs and investments in debt securities are included in "Cash and cash equivalents" (if the orginal maturity date is less than or equal to three months) or "Short-term investments" (if the original maturity date is greater than 3 months but less than one year).

(Dollars in thousands)

The amortized costs and fair values (Level 1 measurement) of Big Rivers' short-term investments at December 31, 2017 and 2016, were as follows:

		2017		2016	
		Amortized costs	**Fair values**	**Amortized costs**	**Fair values**
Debt securities:					
Corporate notes	$	1,448	1,446	1,145	1,144
U.S. Treasuries		2,427	2,427	1,530	1,530
U.S. Government agency		923	923	1,183	1,182
Total Debt Securities	$	4,798	4,796	3,858	3,856
Other:					
Certificates of deposit	$	4,425	4,420	2,055	2,053
Total Short-Term Investments		9,223	9,216	5,913	5,909

Gross unrealized gains and losses on short-term investments at December 31, 2017 and 2016, were as follows:

		2017		2016	
		Gains	**Losses**	**Gains**	**Losses**
Debt securities:					
Corporate notes	$	—	(2)	—	(1)
U.S. Government agency		—	—	—	(1)
Total Debt Securities	$	—	(2)	—	(2)
Other:					
Certificates of deposit	$	—	(5)	—	(5)
Total Short-Term Investments		—	(7)	—	(7)

(10) Fair Value of Other Financial Instruments

FASB ASC 820 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measures. It applies under other accounting standards that require or permit fair value measurements and does not require any new fair value measurements.

(Dollars in thousands)

The carrying value of accounts receivable and accounts payable approximate fair value due to their short maturity. At December 31, 2017 and 2016, the Company's cash and cash equivalents included short-term investments in an institutional prime money market portfolio account classified as trading securities under ASC 320, *Investments – Debt and Equity Securities*, that were recorded at fair value which was determined using quoted market prices for identical assets without regard to valuation adjustment or block discount (a Level 1 measure), as follows:

		2017	2016
Institutional prime money market portfolio	$	52,283	44,319

It was not practical to estimate the fair value of patronage capital included within other deposits and investments due to these being untraded companies.

Big Rivers' long-term debt at December 31, 2017 consisted of CFC loans totaling $290,688, a CoBank loan in the amount of $190,647, RUS notes totaling $239,090, and fixed-rate pollution control bonds in the amount of $83,300 (Note 4). The RUS, CFC, and CoBank debt cannot be traded in the market, and therefore, a value other than their outstanding principal amount cannot be determined. At December 31, 2017, the fair value of Big Rivers' fixed-rate Series 2010A Bonds, was determined based on quoted prices available for the most recent trades of those bonds occurring in the dealer market on or near the balance sheet date (Level 1 measure) and totaled $84,550.

(11) Postretirement Benefits Other than Pensions

Big Rivers provides certain postretirement medical benefits for retired employees and their spouses. Generally, except for generation bargaining retirees, Big Rivers pays 85% of the premium cost for all retirees age 62 to 65. The Company pays 25% of the premium cost for spouses under age 62. Beginning at age 65, the Company pays 25% of the premium cost if the retiree is enrolled in Medicare Part B. For each generation bargaining retiree, Big Rivers establishes a retiree medical account at retirement equal to $1.20 per year of service up to 30 years ($1.25 per year for those retiring on or after January 1, 2012). The account balance is credited with interest based on the 10-year treasury rate subject to a minimum of 4% and a maximum of 7%. The account is to be used for the sole purpose of paying the premium cost for the retiree and spouse.

The discount rates used in computing the postretirement benefit obligation and net periodic benefit cost were as follows:

	2017	2016	2015
Discount rate – projected benefit obligation	3.66%	4.21%	4.35%
Discount rate – net periodic benefit cost	4.21	4.35	3.77

(Dollars in thousands)

The healthcare cost trend rate assumptions as of December 31, 2017 and 2016 were as follows:

	2017	2016
Initial trend rate	6.49%	6.74%
Ultimate trend rate	4.50	4.50
Year ultimate trend is reached	2038	2038

A one-percentage-point change in assumed healthcare cost trend rates would have the following effects:

		2017	2016
One-percentage-point decrease:			
Effect on total service and interest cost components	$	(119)	(112)
Effect on year-end benefit obligation		(1,394)	(1,193)
One-percentage-point increase:			
Effect on total service and interest cost components	$	153	143
Effect on year-end benefit obligation		1,734	1,467

A reconciliation of the Company’s benefit obligations of its postretirement plan at December 31, 2017 and 2016 is as follows:

		2017	2016
Benefit obligation – beginning of period	$	13,230	15,369
Service cost – benefits earned during the period		475	461
Interest cost on projected benefit obligation		551	552
Participant contributions		272	271
Benefits paid		(1,372)	(1,402)
Actuarial loss (gain)		1,192	(2,021)
Benefit obligation – end of period	$	14,348	13,230

(Dollars in thousands)

Big Rivers revised the eligibility requirements for postretirement medical with regard to age and service. Beginning January 1, 2013, eligibility for retirement is age 62 with 10 years of service. The service requirement is waived for active employees on December 31, 2012 who will not have 10 years of service at age 62. A reconciliation of the Company’s postretirement plan assets at December 31, 2017 and 2016 is as follows:

		2017	2016
Fair value of plan assets – beginning of period	$	—	—
Employer contributions		1,100	1,130
Participant contributions		272	272
Benefits paid		(1,372)	(1,402)
Fair value of plan assets – end of period	$	—	—

The funded status of the Company’s postretirement plan at December 31, 2017 and 2016 is as follows:

		2017	2016
Benefit obligation – end of period	$	(14,348)	(13,230)
Fair value of plan assets – end of period		—	—
Funded status	$	(14,348)	(13,230)

The components of net periodic postretirement benefit costs for the years ended December 31, 2017, 2016, and 2015 were as follows:

		2017	2016	2015
Service cost	$	475	461	563
Interest cost		551	552	603
Amortization of prior service cost		(138)	(138)	(138)
Amortization of gain		(170)	(232)	—
Net periodic benefit cost	$	718	643	1,028

(Dollars in thousands)

A reconciliation of the postretirement plan amounts in accumulated other comprehensive income at December 31, 2017 and 2016 is as follows:

		2017	2016
Prior service credit	$	1,156	1,294
Unamortized actuarial gain		2,599	3,962
Accumulated other comprehensive income	$	3,755	5,256

In 2018, $138 of prior service cost and $90 of actuarial gain is expected to be amortized to periodic benefit cost.

The recognized adjustments to other comprehensive loss at December 31, 2017 and 2016 are as follows:

		2017	2016
Prior service cost	$	(138)	(138)
Unamortized actuarial gain (loss)		(1,192)	2,021
Amortization of net gain		(170)	(232)
Other comprehensive income/(loss)	$	(1,500)	1,651

At December 31, 2017 and 2016, amounts recognized in the balance sheets were as follows:

		2017	2016
Accounts payable	$	(1,087)	(1,044)
Deferred credits and other		(13,261)	(12,186)
Net amount recognized	$	(14,348)	(13,230)

Expected retiree benefit payments projected to be required during the years following 2017 are as follows:

		Amount
Year:		
2018	$	1,087
2019		1,134
2020		1,053
2021		1,143
2022		1,155
Thereafter		4,783
Total	$	10,355

In addition to the postretirement plan discussed above, Big Rivers has another postretirement benefit plan, which vests a portion of accrued sick leave benefits to salaried employees upon retirement or death. To the extent an employee's sick leave hour balance exceeds 480 hours, such excess hours are paid at 20% of the employee's base hourly rate at the time of retirement or death. The accumulated obligation recorded for the postretirement sick leave benefit is $631 and $553 at December 31, 2017 and 2016, respectively. The postretirement expense recorded was $83, $93, and $59, for 2017, 2016, and 2015, respectively, and the benefits paid were $5, $0, and $7 for 2017, 2016, and 2015, respectively.

(12) Related Parties

For the years ended December 31, 2017, 2016, and 2015, Big Rivers had tariff sales to its members of $248,389, $250,045, and $251,325, respectively. In addition, for the years ended December 31, 2017, 2016, and 2015, Big Rivers had certain sales to Kenergy for the Domtar Paper Co. load of $2,336, $2,694, and $2,678, respectively.

At December 31, 2017 and 2016, Big Rivers had accounts receivable from its members of $23,639 and $23,834, respectively.

(13) Commitments and Contingencies

Big Rivers is involved in other litigation arising in the normal course of business. While the results of such litigation cannot be predicted with certainty, management, based upon advice of counsel, believes that the final outcome will not have a material adverse effect on the financial statements.

The Company is periodically a defendant in asbestos-related claims. All asbestos-related litigation in which the Company has been involved has been settled and the settlements finalized, except that documentation of the settlement in one case is still pending.

Big Rivers is involved in ongoing litigation with the City of Henderson Utility Commission doing business as Henderson Municipal Power and Light (HMP&L) related to the rights and duties of the parties under the relevant contracts regarding Excess Henderson Energy produced at HMP&L's Station Two generating station. The Company believes there will be no material adverse effect to its financial statements when this litigation is resolved. The damages claim action against Big Rivers by the City of Henderson, Kentucky and the City of Henderson Utility Commission has been settled and dismissed with prejudice. Big Rivers has releases from the City of Henderson, Kentucky and the City of Henderson Utility Commission, and has released Western Kentucky energy Corp. and LG&E and KU Energy LLC from their respective obligations to Big Rivers regarding the damages claim suit.

(14) Subsequent Events

In January 2018, the Company paid, in full, its outstanding $20,000 Line of Credit Notes Payable as discussed in Note 4(f).

As discussed in Note 4(h), the Company received the proceeds from the RUS loans in April 2018.

Management evaluated subsequent events up to and including April 19, 2018, the date the financial statements were available to be issued.