BIG RIVERS ELECTRIC CORPORATION

Financial Statements

December 31, 2023 and 2022

(With Independent Auditors' Report Thereon)

KPMG LLP
Suite 2400
400 West Market Street
Louisville, KY 40202

Independent Auditors' Report

The Board of Directors and Members
Big Rivers Electric Corporation:

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Big Rivers Electric Corporation, which comprise the balance sheets as of December 31, 2023 and 2022, and related statements of operations, comprehensive income (loss), equities, and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes to the financial statements.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers Electric Corporation, as of December 31, 2023 and 2022, and the results of operations, and cash flows thereof for each of the years in the three-year period ended December 31, 2023 in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Big Rivers Electric Corporation, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Big Rivers Electric Corporation's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 Big Rivers Electric Corporation's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Big Rivers Electric Corporation's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated March 22, 2024 on our consideration of Big Rivers Electric Corporation's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely 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 effectiveness of Big Rivers Electric Corporation's internal control over financial reporting or on compliance. That 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
March 22, 2024

BIG RIVERS ELECTRIC CORPORATION

Balance Sheets

December 31, 2023 and 2022

(Dollars in thousands)

Assets	**2023**	**2022**
Utility plant – net	$ 995,018	944,112
Intangible plant	22,743	21,756
Other deposits and investments	28,619	20,217
Current assets:		
Cash and cash equivalents	23,541	50,027
Short-term investments	78,061	5,420
Accounts receivable	46,661	52,861
Fuel inventory	41,508	39,149
Nonfuel inventory	16,080	14,983
Prepaid expenses and other assets	3,381	1,650
Total current assets	209,232	164,090
Deferred charges and other assets:		
Regulatory assets	384,177	420,978
Long-term accounts receivable	2,994	4,486
Deferred charges and other	6,247	14,088
Total deferred charges and other assets	393,418	439,552
Total	$ 1,649,030	1,589,727
Equities and Liabilities		
Capitalization:		
Equities	$ 485,381	475,667
Long-term debt	964,203	744,841
Total capitalization	1,449,584	1,220,508
Current liabilities:		
Current maturities of long-term obligations	50,125	149,308
Line of credit	—	25,000
Purchased power payable	7,265	8,121
Accounts payable	33,825	54,442
Accrued expenses	9,930	10,940
Accrued interest	2,844	651
Regulatory liabilities – member rate mitigation	9,479	10,735
Total current liabilities	113,468	259,197
Deferred credits and other:		
Regulatory liabilities – member rate mitigation	862	976
Regulatory liabilities – TIER credit	26,811	26,566
Asset retirement obligations	43,520	69,267
Deferred credits and other	14,785	13,213
Total deferred credits and other	85,978	110,022
Commitments and contingencies (note 12)	—	—
Total	$ 1,649,030	1,589,727

See accompanying notes to financial statements.

BIG RIVERS ELECTRIC CORPORATION

Statements of Operations

Years ended December 31, 2023, 2022, and 2021

(Dollars in thousands)

		2023	2022	2021
Operating revenue	$	395,200	490,348	393,144
Total operating revenue		395,200	490,348	393,144
Operating expenses:				
Operations:				
Fuel for electric generation		75,899	125,354	130,019
Power purchased and interchanged		84,132	131,733	37,436
Production, excluding fuel		30,640	38,228	46,945
Transmission and other		40,182	35,991	34,735
Maintenance		35,173	34,401	32,082
Depreciation and amortization		87,142	72,465	172,136
Total operating expenses		353,168	438,172	453,353
Electric operating margin (loss)		42,032	52,176	(60,209)
Interest expense and other:				
Interest		36,289	41,267	28,575
Income tax benefit		—	—	—
Other – net		644	592	684
Total interest expense and other		36,933	41,859	29,259
Operating margin (loss)		5,099	10,317	(89,468)
Nonoperating margin:				
Interest income and other		6,793	3,710	14,072
Total nonoperating margin		6,793	3,710	14,072
Net margin (loss)	$	11,892	14,027	(75,396)

See accompanying notes to financial statements.

BIG RIVERS ELECTRIC CORPORATION

Statements of Comprehensive Income (Loss)

Years ended December 31, 2023, 2022, and 2021

(Dollars in thousands)

		2023	2022	2021
Net margin (loss)	$	11,892	14,027	(75,396)
Other comprehensive income (loss):				
Defined-benefit plans:				
Actuarial gain (loss)		(218)	(2,833)	3,066
Amortization of (gain) loss		410	1,727	(1,289)
Defined-benefit plans		192	(1,106)	1,777
Postretirement benefits other than pensions:				
Prior service cost		(1,559)	(238)	(112)
Actuarial (gain) loss		(385)	3,162	2,418
Amortization of gain		(426)	(404)	—
Postretirement benefits other than pensions		(2,370)	2,520	2,306
Other comprehensive income (loss)		(2,178)	1,414	4,083
Comprehensive income (loss)	$	9,714	15,441	(71,313)

See accompanying notes to financial statements.

BIG RIVERS ELECTRIC CORPORATION

Statements of Equities

Years ended December 31, 2023, 2022, and 2021

(Dollars in thousands)

	Retained margin	Other equities: Donated capital and memberships	Other equities: Consumers' contributions to debt service	Accumulated other comprehensive income/(loss)	Total equities
Balance – December 31, 2020	528,940	764	3,681	(1,846)	531,539
Net margin (loss)	(75,396)	—	—	—	(75,396)
Pension and postretirement benefit plans	—	—	—	4,083	4,083
Balance – December 31, 2021	$ 453,544	764	3,681	2,237	460,226
Net margin (loss)	14,027	—	—	—	14,027
Pension and postretirement benefit plans	—	—	—	1,414	1,414
Balance – December 31, 2022	467,571	764	3,681	3,651	475,667
Net margin (loss)	11,892	—	—	—	11,892
Pension and postretirement benefit plans	—	—	—	(2,178)	(2,178)
Balance – December 31, 2023	$ 479,463	764	3,681	1,473	485,381

See accompanying notes to financial statements.

BIG RIVERS ELECTRIC CORPORATION

Statements of Cash Flows

Years ended December 31, 2023, 2022, and 2021

(Dollars in thousands)

		2023	2022	2021
Cash flows from operating activities:				
Net margin (loss)	$	11,892	14,027	(75,396)
Adjustments to reconcile net margin (loss) to net cash provided by operating activities:				
Depreciation and amortization		85,595	70,420	172,641
Interest compounded – RUS Series B Note		6,874	19,830	12,242
Interest income compounded – RUS Cushion of Credit (advance payments unapplied)		(171)	(41)	(111)
Forgiveness from long-term obligations		—	—	(9,941)
Changes in certain assets and liabilities:				
Accounts receivable		7,691	(1,133)	(15,477)
Fuel and nonfuel inventory		(3,456)	(18,604)	2,321
Prepaid expenses and other		(1,731)	3,599	(121)
Deferred charges		15,364	10,824	(4,650)
Purchased power payable		(856)	3,034	1,374
Accounts payable		(3,284)	(1,189)	7,620
Accrued expenses		1,182	(8,110)	9,454
ARO obligations settled		(34,253)	(7,046)	(255)
Other – net		13,052	(19,470)	(11,263)
Net cash provided by operating activities		97,899	66,141	88,438
Cash flows from investing activities:				
Capital expenditures		(136,855)	(180,040)	(149,396)
Proceeds from restricted investments and deposits		4,015	5,930	8,322
Purchases of restricted investments and other deposits and investments		(7,089)	(8,776)	(2,320)
Proceeds of short-term investments		5,475	51,919	6,994
Purchases of short-term investments		(78,116)	(56,988)	(744)
Net cash used in investing activities		(212,570)	(187,955)	(137,144)
Cash flows from financing activities:				
Principal payments on long-term obligations		(157,026)	(153,275)	(26,314)
Proceeds from long-term obligations		270,917	330,265	24,542
Proceeds from line of credit		25,000	45,000	75,000
Payments on line of credit		(50,000)	(80,000)	(15,000)
Payments of debt issuance costs		(706)	(62)	(362)
Net cash provided by (used in) financing activities		88,185	141,928	57,866
Net increase (decrease) in cash and cash equivalents		(26,486)	20,114	9,160
Cash and cash equivalents – beginning of year		50,027	29,913	20,753
Cash and cash equivalents – end of year	$	23,541	50,027	29,913
Supplemental cash flow information:				
Cash paid for interest	$	30,570	27,411	19,358
Cash paid for income taxes		—	—	1
Supplemental schedule of non-cash financing and investing activities:				
Change in regulatory assets associated with asset retirement obligations	$	(2,269)	14,792	22,319
Change in regulatory assets associated with utility plant		(32,422)	32,962	(99,315)
Change in deferred charges associated with asset retirement obligations		—	(3,378)	3,378
Purchases of utility plant in accounts payable		17,375	(10,508)	8,675

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. ("Kenergy"), and Meade County Rural Electric Cooperative Corporation ("Meade County RECC")) 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. Significant items subject to such estimates and assumptions include intangible asset recoverability, asset retirement obligations, pension and postretirement obligations, and other contingencies. 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 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. MISO sales revenue is recognized based upon the megawatt-hours delivered in each hour at the market price.

(Dollars in thousands)

(e) Utility Plant and Depreciation

Utility plant is recorded at original cost, which includes the cost of contracted services, materials, labor, and overhead. In accordance with FASB ASC 835-20, *Interest – Capitalization of Interest*, the Company also includes capitalized interest on projects with an estimated total cost of $250 or more before consideration of capitalized interest. 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. Replacements of depreciable property units, except minor replacements, are charged to utility plant.

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 are as follows:

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

For 2023, 2022, and 2021, the average composite depreciation rates were 2.44%, 2.85%, and 3.09%, respectively. At the time utility plant is disposed of, the original cost plus cost of removal less salvage value of such utility plant is charged to accumulated depreciation, as required by the RUS. For 2023, 2022 and 2021, Big Rivers TIER credit was charged to depreciation and amortization as discussed in Note 5.

(f) Intangible Plant

Indefinite-lived intangible assets are tested for impairment annually, and more frequently when there is a triggering event. Annually, or when there is a triggering event, the Company first performs a qualitative assessment by evaluating all relevant events and circumstances to determine if it is more likely than not that the indefinite-lived intangible assets are impaired. Intangible plant was recorded as a result of the resolution from a certified dispute amongst Big Rivers, Meade County RECC, and Louisville Gas and Electric ("LG&E") in KPSC Case No. 2019-00370. During 2020, $15,000 was paid for the certified territorial rights which do not expire. An additional $1,000 was paid in 2023 related to the same certified territorial rights. The territorial rights of the intangible plant have an indefinite life and are not subject to amortization. During 2023 and 2022, the Company completed reliability projects in the amount of $268 and $6,756, respectively, which were transferred to LG&E in accordance with the resolution. Amortization expense of $165 and $116 was recorded in 2023 and 2022, respectively, for the reliability projects using an amortization period of 43.67 years. Intangible plant is subject to impairment testing and if impaired, the carrying value is accordingly reduced. There was no impairment recorded in 2023 or 2022.

(g) Impairment Review of Long-Lived Assets

Long-lived assets and intangible assets subject to amortization 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 useful 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.

(h) Asset Retirement Obligations

FASB ASC 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. The liability is accreted each period based on the credit-adjusted risk-free rate of return that existed when the liability, or portion thereof, was initially measured. The period accretion is recognized as an increase in the carrying amount of the liability, 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 and landfills. The related coal ash ponds to be closed are located at its Green Station and the City of Henderson's Station Two ("Station Two") generating units. The related landfills to be closed are located at its Green Station and Wilson Station (Phase Two). 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 EPA subsequently published an update to the CCR Final Rule, effective on September 28, 2020, allowing facilities to submit a demonstration for an extension to the deadline for unlined CCR surface impoundments to stop receiving waste. The Company submitted the demonstration in November 2020 requesting approval to operate its Green Station ash pond until June 2022, with closure commencing at that time. 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.

(i) Inventory

Inventories are carried at average cost and include coal, 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.

(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 investments in debt securities. The aforementioned short-term investments have original maturities of less than one year.

(l) Regulatory Assets and Liabilities

FASB ASC 980 applies to regulated entities for which rates are designed to recover the costs of providing service. In accordance with this FASB 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 members through the regulated 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) Long-Term Accounts Receivable

During 2021, the Company amended a market-based rate partial and full requirements contract with an existing non-member customer. The amendment included deferral of charges incurred by the customer during 2021. As of December 31, 2023, the total due from the customer was $5,184, with $2,994 recorded as long-term accounts receivable and $2,190 recorded in accounts receivable. The customer began making monthly installment payments during 2021 and will continue these payments through May 2027. There is no allowance recorded at December 31, 2023 or 2022.

(n) Other Deposits and Investments

Other deposits and investments consist primarily of patronage capital, cash collateral/margin call deposits, investments in associated organizations, and investments held in trust for a deferred compensation plan. Investments held in trust consist primarily of equities and money market accounts and are carried at fair value. Remaining deposits are recorded at their original cost as their cost approximates fair value due to the nature of the deposit.

(o) 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 on the tax return. 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.

(p) Patronage Capital

As provided in the Company's bylaws, Big Rivers accounts for each year's patronage-sourced income, both operating and non-operating, 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.

(q) Derivatives

Management has reviewed the requirements of FASB ASC 815, *Derivatives and Hedging*, and has determined that certain contracts to which the Company is a party to 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.

(r) 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. 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.

(s) Deferred Loan Costs

The Company capitalizes costs incurred in connection with long-term debt. These costs are amortized using the effective interest method over the term of the respective debt financing agreements.

(t) Deferred Credits and Other

Deferred credits and other includes employee-related benefits and capacity revenue sales billed but not yet earned. Employee related benefits include, but are not limited to, pension and post-retirement benefit costs and amounted to $14,623 and $12,489 at December 31, 2023 and 2022, respectively. Deferred capacity revenue, which will be recognized within the next year, amounted to $162 and $724 at December 31, 2023 and 2022, respectively.

(u) New Accounting Guidance

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* (ASU 2016-02). The main principle of this ASU requires that lessees recognize all leases (other than leases with a term of twelve months or less) on the balance sheet as lease liabilities, based upon the present value of the lease payments, with corresponding right of use assets. ASU 2016-02 also makes targeted changes to other aspects of the current guidance, including the lease classification criteria and the lessor accounting model. In May 2020, the FASB delayed the required implementation date of ASU 2016-02 for private entities by one year. The amendments in ASU 2016-02 are effective for the Company for annual reporting periods beginning after December 15, 2021. The Company assessed the impact of adopting the guidance in 2022. The adoption did not have a material effect.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which allows a company to irrevocably elect the fair value option on certain financial instruments. Subsequently, the FASB issued ASU 2019-04, *Codification Improvements to Topic 326, Financial Instruments – Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments* and ASU 2019-05, *Financial Instruments – Credit Losses (Topic 326): Targeted Transition Relief* in May 2019; ASU 2019-11, *Codification Improvements to Topic 326, Financial Instruments – Credit Losses* in November 2019; and ASU 2020-03, *Codification Improvements to Financial Instruments*, in March 2020. The amendments are effective for the Company for annual reporting periods beginning after December 15, 2022. The Company assessed the impact of adopting the guidance in 2023. The adoption did not have a material effect.

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*. ASU 2023-09 is effective for the Company's annual reporting periods beginning after December 15, 2025. The ASU requires the annual financial statements to include consistent categories and greater disaggregation of information in the rate reconciliation, and income taxes paid disaggregated by jurisdiction. Adoption is either with a prospective method or a fully retrospective method of transition. The Company will evaluate the impact of adopting the guidance on its financial statements.

(Dollars in thousands)

(2) Utility Plant

The Company converted Green Station to a natural gas generating unit during 2022. Gross coal fired utility plant of $170,555 was retired after the conversion was complete. Additionally, the retirement of the coal fired assets resulted in a decrease of $103,732 to accumulated depreciation. The total coal fired utility plant, net, associated with this conversion in the amount of $66,823 was retired and recorded as a regulatory asset. See Note 5 for further discussion of the Company's regulatory asset balances related to the Green Station gas conversion. At December 31, 2023 and 2022, utility plant is summarized as follows:

		2023	2022
Classified plant in service:			
Production plant	$	1,446,008	1,366,409
Transmission plant		438,660	396,500
General plant		81,647	62,678
Other		67	67
		1,966,382	1,825,654
Less accumulated depreciation		1,094,034	1,095,847
		872,348	729,807
Construction in progress		122,670	214,305
Utility plant – net	$	995,018	944,112

Big Rivers' secured long-term debt obligations and the 2023 2nd Amended and Restated Syndicated Senior Secured Credit Agreement, dated June 20, 2023, are secured under Big Rivers' Indenture dated as of July 1, 2009, as supplemented and amended (the "Indenture"), between Big Rivers and U.S. Bank National Association, as trustee (the "Indenture Trustee"). Obligations are secured under the 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 Indenture.

Depreciation expense on utility plant for the years ended December 31, 2023, 2022 and 2021, was $48,980, $43,312 and $41,187, respectively.

Interest capitalized for the years ended December 31, 2023 and 2022, was $3,404 and $5,543, respectively.

As of December 31, 2023 and 2022, the Company had recorded $47,285 and $45,621, 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 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 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, 2023 and 2022:

		2023		2022	
ARO balance at beginning of year	$	69,267		72,760	
Changes in estimated timing or cost		4,968	(a)	—	
Accretion expense		3,538	(b)	3,553	(b)
Obligations settled during current period		(34,253)		(7,046)	
ARO balance at end of year	$	43,520		69,267	

(a) During 2023, closure plans for both the Green Station and Station Two ash ponds were finalized. As a result of these final plans, Big Rivers recorded an adjustment to the Green Station and Station Two ash pond ARO liabilities to reflect both a change in cost estimate and extension of the final closure date. Big Rivers' future intent to utilize the Sebree landfill was also extended during 2023. As a result of the extended use of the Sebree landfill, Big Rivers recorded an adjustment to the Sebree landfill ARO liability to reflect an extension of the final closure date.

(b) The 2023 and 2022 annual ARO accretion expense of $3,538 and $3,553, respectively, was deferred and included in the Regulatory Assets amount reported on the Company's balance sheet as of December 31, 2023 and 2022. The KPSC final order in Case No. 2019-00435, the Environmental Compliance Plan, approved the recovery of the capital costs for ash pond closure through the environmental surcharge mechanism ("ESM") based on non-levelized amortization of the actual ash pond closure spending-to-date, allocable over a rolling 10-year period. This method ensures that cost recovery from Members through the ESM is based on actual project spending while also allowing Big Rivers to match its amortization expense with ESM revenue.

(Dollars in thousands)

(4) Debt and Other Long-Term Obligations

Details of long-term debt at December 31, 2023 and 2022 are as follows:

	2023	2022
CFC Refinance Promissory Note, Series 2012B, serial note pricing, 4.30% effective interest rate, final maturity date of May 2032	$ 158,152	173,143
RUS 2009 Series B Promissory Note, stated amount of $245,530, no stated interest rate, 5.80% imputed interest rate, maturing December 2023	—	115,891
CoBank Promissory Note, Series 2012A, 4.30% fixed interest rate, final maturity date of June 2032	127,135	139,008
2018 RUS Guaranteed FFB Loan, W8, 2.83% effective interest rate, final maturity date of January 2033	18,834	20,169
2018 RUS Guaranteed FFB Loan, X8, 2.94% effective interest rate, final maturity date of December 2043	15,777	16,209
2021 RUS Guaranteed FFB Loan, Y8A, 1.94% effective interest rate, final maturity date of December 2043	24,542	24,542
2022 RUS Guaranteed FFB Loan, Y8B, 3.34% effective interest rate, final maturity date of December 2043	122,765	122,765
2022 RUS Guaranteed FFB Loan, AA8, 2.31% effective interest rate, final maturity date of December 2043	57,500	57,500
2023 RUS Guaranteed FFB Loan, Z8, 4.97% effective interest rate, final maturity date of December 2043	13,152	—
2023 RUS Guaranteed FFB Loan, AC58, 4.37% effective interest rate, final maturity date of December 2042	122,765	—
2022 CFC Loan 1, 4.58% fixed interest rate, final maturity date of September 2042	47,622	49,225
2022 CFC Loan 2, 4.82% fixed interest rate, final maturity date of September 2042	48,080	49,625
2022 CFC Farmer Mac Loan, 4.37% fixed interest rate, final maturity date of September 2042	47,569	49,207
2023 CFC Loan 1, 5.45% fixed interest rate, final maturity date of September 2043	34,508	—
2023 CFC Loan 2, 5.45% fixed interest rate, final maturity date of September 2043	24,649	—
2023 CFC Loan 3, 5.46% fixed interest rate, final maturity date of September 2043	75,000	—
CFC Promissory Note, Series 2020B, 2.49% fixed interest rate, final maturity date of February 2031	83,300	83,300
Total long-term debt	1,021,350	900,584

(Dollars in thousands)

		2023	2022
Total long-term debt		1,021,350	900,584
Less current maturities		50,125	149,308
Less unamortized deferred debt issuance costs		3,041	2,625
Less advance payments unapplied – RUS cushion of credit		3,981	3,810
Total long-term debt – net of current maturities, deferred debt issuance costs, and advance payments	$	964,203	744,841

The following are scheduled maturities of long-term debt at December 31, 2023:

		Amount
Year:		
2024	$	50,125
2025		50,736
2026		56,648
2027		54,889
2028		61,502
Thereafter		747,450
Total	$	1,021,350

(a) Indenture dated July 1, 2009

All debt of Big Rivers is secured by the indenture.

(b) Loan Proceed Purpose

The primary purpose for the proceeds of Big Rivers' loans is financing of capital expenditures. Two exceptions include RUS FFB Y8B and RUS FFB AC58 proceeds were used to refinance RUS Series B Note.

(c) Loan Interest

All RUS Guaranteed FFB Notes have a fixed interest rate which excludes the RUS Administrative fee. The effective rate on all RUS Guaranteed FFB Notes is the fixed interest rate plus the 0.125% RUS Administrative fee.

For all CoBank and CFC loans, the stated and effective interest rates are the same. There are no additional administrative fees.

(d) Line of Credit (CFC Syndicated Line), Series 2023A

On June 20, 2023, the existing 2020 Agreement, that was previously amended and restated, was replaced with a $150,000 Syndicated Secured Credit Agreement (the "2023 Agreement") with CFC, CoBank, Fifth Third Bank, Regions Bank, and Bank of America. In conjunction with the 2023 Agreement, Big Rivers issued secured promissory notes (the "Series 2023A Notes"), equal to each lender's commitment, which are secured under Big Rivers' Indenture. The line of credit is billed monthly for interest only. The rate is a variable rate tied to the Secured Overnight Financing Rate plus the applicable margin. The applicable margin range is 1.00% to 1.65%. The line matures June 20, 2026.

As of December 31, 2023, Big Rivers had outstanding borrowings of $0 under the 2023 Agreement and $0 in issued letters of credit outstanding. As of December 31, 2022, Big Rivers had outstanding borrowings of $25,000 under the 2020 Agreement and $36,190 in issued letters of credit outstanding, which reduced its available borrowing capacity under the 2020 Agreement from $150,000 to $88,810.

(e) RUS Cushion of Credit

In 2018, Big Rivers began participating in the cushion of credit program administered by the RUS in conjunction with the execution of the 2018 W8 and X8 RUS Guaranteed FFB Loans. Under the cushion of credit program, RUS borrowers may make voluntary irrevocable deposits into the cushion of credit account. Per the terms of the RUS' commitment to guarantee Big Rivers' W8 and X8 Loans, Big Rivers agreed to make an initial deposit of $3,200 to the cushion of credit account upon receipt of the loan funds and to make additional deposits, as needed, so that the balance at the beginning of each year going forward is equal to or greater than the annual payments due on the W8 and X8 Loans during the year. The interest rate is equal to the one-year Treasury rate as of October 1 of each year. The rate in effect as of December 31, 2023, is 5.46%. During 2023, the cushion of credit account accrued interest at an annual rate of 4.05%.

Big Rivers' amounts in the cushion of credit account (deposits and accrued interest) may only be used to make scheduled principal and interest payments on the W8 and X8 Loans.

(f) 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 MFIR is the sum of margins for interest plus interest charges, divided by interest charges. The 2023 Agreement requires that Big Rivers, throughout the duration of the agreement, maintain a minimum Members' Equities' Balance at the end of each fiscal quarter-end and as of the last day of each fiscal year in an amount at least equal to $365,000 plus 50% of the cumulative positive net margin for the period from December 31, 2022, to the end of the Borrower's most recently ended fiscal year. Big Rivers' MFIR for the fiscal year ended December 31, 2023, was 1.30, taking into account the TIER Credit discussed in note 5, and its Equities balance was $485,381.

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

(Dollars in thousands)

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 becoming due immediately.

(5) Rate Matters

In connection with the rate matters discussed below, the following tables provide a summary of Regulatory Assets and Liabilities reflected in the Balance Sheet as of December 31, 2023 and 2022:

		Regulatory assets	
		2023	**2022**
Coleman plant deferred depreciation	$	—	6,464
Non-FAC PPA		25,719	26,198
Asset retirement obligations		48,878	43,965
Environmental costs (CCR)		10,744	12,279
ECP case expense		40	137
Station Two contract termination		79,776	93,998
Coleman plant retire/decommission		134,760	134,158
Reid 1 plant retire/decommission		—	9,446
Green plant gas conversion		84,260	94,333
Total regulatory assets	$	384,177	420,978

		Regulatory liabilities	
		2023	**2022**
Member rate mitigation	$	10,341	11,711
TIER Credit		26,811	26,566
Total regulatory liabilities	$	37,152	38,277

The rates charged to Big Rivers' members generally 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 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, 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, an environmental surcharge, and the Member Rate Stability Mechanism ("MRSM").

Coleman plant depreciation and Wilson plant depreciation:

The KPSC entered an order on October 29, 2013, granting Big Rivers an annual revenue increase of $54,227, effective August 20, 2013 (Case No. 2012-00535). In its order, the KPSC excluded the Coleman plant depreciation from rate recovery. 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 would be idled, and the impact of the rate increase on customers. As of December 31, 2023, Big Rivers had fully recovered the deferred depreciation expense for the Coleman plant, which includes the TIER credit reduction from 2019, as discussed below. Management believes the remaining balance is probable of recovery in future rates. The Coleman plant was retired September 30, 2020, as described below for Case No. 2020-00064.

Non-FAC PPA:

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 Fuel Adjustment Clause ("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.

Asset Retirement Obligations:

On January 5, 2016, the KPSC issued an order in Case No. 2015-00333 approving Big Rivers' request 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 Green Station and Station Two ash ponds' AROs and other incremental expenses. On June 11, 2021, the KPSC issued an order in Case No. 2021-00079 approving Big Rivers' requests to establish a regulatory asset for the deferral of certain expenses related to the Green Station and to recover those deferred expenses through a levelized amortization of the deferred amount over the period from 2023 through 2044. The ARO for the Green Station landfill is recorded in this regulatory asset. On October 25, 2022, the KPSC issued an order in Case No. 2022-00201, approving Big Rivers' request 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 ARO for the Wilson Station landfill.

Environmental Costs (CCR) and ECP Case Expense:

On August 6, 2020, the KPSC approved Big Rivers' 2020 Environmental Compliance Plan ("2020 ECP"), (1) granting Big Rivers the authority to close the Green Station and Station Two ash ponds; (2) granting Big Rivers the authority to move the Coleman Station flue gas desulfurization system ("FGD") to Wilson Station to replace Wilson's FGD; (3) conditionally granting Big Rivers' request to establish regulatory assets for the accretion and depreciation expense related to the Coleman Station legacy ash ponds, should the CCR Final Rule be extended to apply to such legacy ash ponds; (4) conditionally granting Big Rivers the authority to close the Coleman Station ash ponds, should the CCR Final Rule be extended to apply to such legacy ash ponds; (5) authorizing Big Rivers to amortize the Green Station and Station Two ash pond AROs through its environmental surcharge; (6) conditionally authorizing Big Rivers to amortize the costs incurred to close the Coleman Station ash pond through its environmental surcharge should the CCR Final Rule be extended to apply to the Coleman Station ash ponds; (7) authorizing Big Rivers to amortize the regulatory asset for CCR-related expenses through its environmental surcharge; and (8) authorizing Big

Rivers to establish a regulatory asset for the costs of preparing and prosecuting the 2020 ECP case, the recovery of which regulatory asset was approved in Case No. 2021-00061.

As of December 31, 2023, the total amount of CCR-related expenses and costs for asset retirement obligations deferred and included in Regulatory Assets on the Company's balance sheet was $59,622, and the costs of preparing and prosecuting the ECP case that have been deferred and included in Regulatory Assets on the Company's balance sheet was $40.

Station Two Contract Termination:

On August 29, 2018, the KPSC entered an order (Case No. 2018-00146) (i) finding that the Station Two units were no longer capable of the normal, continuous, reliable operation for the economically competitive production of electricity; (ii) finding that the Station Two contracts, except for the Joint Facilities Agreement, have therefore terminated pursuant to their own terms; (iii) granting Big Rivers' request for authority to continue to operate Station Two under terms of the Station Two contracts for a period up to May 31, 2019; and (iv) reserving a ruling on Big Rivers' request for authority to establish a Station Two regulatory asset. The remaining issues in this case were resolved with a Settlement Agreement between the Office of the Attorney General, the Kentucky Industrial Utility Customers ("KIUC"), and Big Rivers. The Settlement Agreement provided, among other things, that the KPSC would approve the Station Two regulatory asset. On October 23, 2018, the KPSC issued a final order approving the Settlement Agreement in full. RUS approved the Settlement Agreement on February 22, 2019. As of December 31, 2023, the total amount of the Station Two contract termination included in the Regulatory Assets on the Company's balance sheet was $79,766. This includes Station Two assets transferred from utility plant to Regulatory Assets and the Company's portion of decommissioning costs incurred to date.

Coleman Plant and Reid 1 Plant Retire/Decommission:

On June 25, 2020, the KPSC entered an order in Case No. 2020-00064 approving a Settlement Agreement, as modified by the Commission, between Big Rivers, KIUC and the Attorney General, which approved Big Rivers' requests to: (1) establish regulatory assets for the remaining net book value of Coleman Station and Reid Station Unit 1 at retirement, and for the costs to decommission those units; (2) cease charging DSM savings to a regulatory liability; (3) utilize the existing DSM regulatory liability in 2020 and 80% of equity headroom in 2021 to reduce Smelter Load Mitigation (SLM) regulatory assets (the Wilson and Coleman depreciation regulatory assets; the Coleman, Reid 1, and Station Two retirement and decommissioning regulatory assets; and a regulatory asset through which the costs related to a focused management audit were deferred); and (4) recover the amounts deferred in those regulatory assets through amortization. The KPSC also approved replacing the TIER Credit mechanism in Big Rivers' MRSM tariff with a new TIER Credit mechanism. Under the new TIER Credit, in years in which Big Rivers earns in excess of a 1.30 TIER, 40% of the excess margins will be returned to Big Rivers' members over the following year through a monthly bill credit. The remaining 60% of the excess margins will be deferred in regulatory liability accounts, with a minimum required balance of $9,000 (which the KPSC increased to $11,300 in Case No. 2023-00038), to be utilized in a year in which Big Rivers does not achieve a 1.30 TIER or to further decrease the balance of the regulatory assets with KPSC approval. The first $700 of the bill credit each year will be allocated to Rural customers, and any bill credit over $700 will be allocated between the Rural and Large Industrial customers based on revenues.

On March 8, 2022, Big Rivers filed a motion for clarification of the KPSC's Order entered on June 25, 2020, in Case No. 2020-00064. Specifically, Big Rivers asked the KPSC to clarify that the utilization of equity headroom to reduce the Smelter Load Mitigation ("SLM") regulatory assets is not recoverable from its members. The KPSC issued an order on March 15, 2022, clarifying the June 25, 2020 Order, by stating that Big Rivers' member equity headroom in 2021 to record a one-time amortization of the SLM regulatory assets is not recoverable from Big Rivers' members in current or future rates. Big Rivers recorded $84,945 for utilization of its equity headroom as a charge to amortization expense in 2021. During 2023 and 2022, the Company reduced the SLM regulatory asset balances by recording amortization of $30,610 and $39,770, respectively. The amortization recorded was ordered in Case No. 2020-00064 and includes the equity headroom adjustment in 2021, annual TIER credit allocation, and monthly amortization.

Green Plant Gas Conversion:

On June 11, 2021, the KPSC granted Big Rivers a certificate of public convenience and necessity ("CPCN") to convert Big Rivers' two existing coal-fired generating units at its Green Station to run on natural gas, authorized the gas conversion assets to be depreciated over a seven-year period, and granted Big Rivers the authority to establish a regulatory asset to defer recognition of the costs that Big Rivers expects to incur as a result of the retirement of certain Green Station assets, including Sebree Station landfill, that will no longer be utilized after the conversion. The gas conversion was completed in late May 2022. The costs incurred as a result of the gas conversion, including the retirement of the assets in the amount of $66,823, discussed in Note 2, were recorded in the regulatory asset. The gas conversion assets are being depreciated over a seven-year period beginning in June 2022.

Regulatory Liabilities:

On June 25, 2020, the KPSC approved changes to the company's MRSM tariff. In years in which Big Rivers earns margins in excess of a 1.30 TIER, excluding the utilization of equity headroom, 40% of the excess margins will be returned as a monthly bill credit, the new TIER Credit, to Big Rivers' members over the following year through the MRSM tariff. The remaining 60% of the excess margins will be deferred in regulatory liability accounts. Big Rivers' new TIER Credit was $25,852 for 2023, with 40%, or $10,341 to be returned to members through bill credits over a twelve-month period beginning February 2022. This amount is recorded as a regulatory liability at December 31, 2023, presented between current and long-term maturities based on the timing of future bill credits expected to be provided to the members. The remaining 60%, or $15,511, was also deferred in regulatory liability accounts and is expected to offset the regulatory assets, as described above, subject to KPSC approval. The regulatory liability of $11,300 remaining from 2023 will continue to remain as a minimum required balance as described above. The new TIER Credit was recorded as depreciation and amortization expense on the statement of operations.

On February 28, 2023, Big Rivers filed an application with the KPSC, Case No. 2023-00038, for review of its MRSM charge for calendar year 2022. In its application, Big Rivers proposed to use the regulatory liability amount in excess of the original minimum required balance of $9,000 that was established in Case No. 2020-00064, discussed above, or $17,566, to further reduce the SLM Regulatory Assets in 2023. The KPSC approved Big Rivers' proposal on October 3, 2023.The KPSC also increased the minimum required balance in the regulatory liability from $9,000 to $11,300.

(Dollars in thousands)

On February 28, 2024, Big Rivers filed an application with the KPSC, Case No. 2024-00031, for review of its MRSM charge for calendar year 2023. In its application, Big Rivers proposed to use the regulatory liability amount in excess of the minimum required balance of $11,300 that was established in Case No. 2020-00064 and increased in Case No. 2023-00038, discussed above, or $15,511, to further reduce the SLM Regulatory Assets in 2024.The case is pending.

(6) Income Taxes

At December 31, 2023, Big Rivers had a Non-Patron Net Operating Loss (“NOL”) Carryforward of approximately $65,359 expiring at various times between 2029 and 2037 which was entirely offset by a full valuation allowance.

The Tax Cuts and Jobs Act of 2017 (“TCJA”) amendment to Section 174 requires U.S.-based and non-U.S.-based research and experimental (R&E) expenditures to be capitalized and amortized over a period of five or fifteen years, respectively, for amounts incurred in tax years starting after December 31, 2021. The Company does not expect the Section 174 capitalization rule to have a material impact on operations.

The components of the net deferred tax assets as of December 31, 2023 and 2022 were as follows:

		2023	2022
Deferred tax assets:			
Net operating loss carryforward	$	16,307	9,025
Total deferred tax assets		16,307	9,025
Deferred tax liabilities:			
Fixed asset basis difference		(5,179)	3,466
Bond refunding costs		(40)	(46)
Total deferred tax liabilities		(5,219)	3,420
Net deferred tax asset (pre-valuation allowance)		11,088	12,445
Valuation allowance		(11,088)	(12,445)
Net deferred tax asset	$	—	—

(Dollars in thousands)

A reconciliation of the Company's effective tax rate for 2023, 2022, and 2021 is as follows:

	2023	2022	2021
Federal rate	21.0 %	21.0 %	21.0 %
State rate – net of federal benefit	4.0	4.0	4.0
Permanent differences	—	0.6	—
Patronage allocation to members	(25.0)	(25.6)	(25.0)
Alternative minimum tax credit recovery		—	—
Effective tax rate	— %	— %	— %

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 2020 through 2022. The major state tax jurisdiction currently open for income tax examination is Kentucky for years 2019 through 2022. The Company has not recorded any unrecognized tax benefits or liabilities related to federal or state income taxes.

The Company classifies tax-related interest and penalties as an operating expense on the statement of operations and accrued expenses on the balance sheet. No material tax-related interest or penalties have been recorded during 2023, 2022, or 2021.

(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).

(Dollars in thousands)

Effective December 31, 2021, all employees within the defined benefit plan were frozen. No employee shall accrue any benefits under the plan on or after December 31, 2021. The employees impacted will subsequently become eligible for the base contribution accounts described above.

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 10 – Postretirement Benefits Other than Pensions). 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.

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 of 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, 2023 and 2022.

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

A reconciliation of the Company's benefit obligations of its noncontributory defined-benefit pension plan at December 31, 2023 and 2022, is as follows:

		2023	2022
Benefit obligation – beginning of period	$	7,622	13,143
Service cost – benefits earned during the period		—	—
Interest cost on projected benefit obligation		401	324
Plan curtailments		—	—
Benefits paid		(1,234)	(5,268)
Actuarial loss (gain)		320	(577)
Benefit obligation – end of period	$	7,109	7,622

Big Rivers' defined-benefit pension plan provides retirees and terminated employees with a lump-sum payment option. Benefits paid in 2023 include lump-sum payments totaling $1,096 – the result of three former employees electing the lump-sum payment option. Benefits paid in 2022 include lump-sum payments totaling $5,181 – the result of seven former employees electing the lump-sum payment option.

The accumulated benefit obligation for the defined-benefit pension plan was $7,109 and $7,622 at December 31, 2023 and 2022, respectively.

(Dollars in thousands)

A reconciliation of the Company's pension plan assets at December 31, 2023 and 2022, is as follows:

		2023	2022
Fair value of plan assets – beginning of period	$	7,087	15,176
Employer contributions		101	47
Actual return on plan assets		469	(2,868)
Benefits paid		(1,234)	(5,268)
Fair value of plan assets – end of period	$	6,423	7,087

The funded status of the Company's pension plan at December 31, 2023 and 2022, is as follows:

		2023	2022
Benefit obligation – end of period	$	(7,109)	(7,622)
Fair value of plan assets – end of period		6,423	7,087
Funded status (under)/over	$	(686)	(535)

Components of net periodic pension costs for the years ended December 31, 2023, 2022, and 2021, were as follows:

		2023	2022	2021
Service cost	$	—	—	649
Interest cost		400	324	469
Expected return on plan assets		(367)	(541)	(1,221)
Amortization of prior service cost		—	—	(33)
Amortization of actuarial loss		61	—	130
Settlement and curtailment (gain) loss		349	1,727	(1,386)
Net periodic benefit cost	$	443	1,510	(1,392)

A reconciliation of the pension plan amounts in accumulated other comprehensive income at December 31, 2023 and 2022, is as follows:

		2023	2022
Prior service cost	$	—	—
Unamortized actuarial loss		(2,215)	(2,407)
Accumulated other comprehensive income	$	(2,215)	(2,407)

(Dollars in thousands)

The recognized adjustments to other comprehensive income at December 31, 2023 and 2022, are as follows:

		2023	2022
Prior service cost	$	—	—
Unamortized actuarial gain/(loss)		(192)	1,106
Other comprehensive (income)/loss	$	(192)	1,106

At December 31, 2023 and 2022, amounts recognized in the balance sheets were as follows:

		2023	2022
Deferred credits and other	$	(686)	(535)

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

	2023	2022	2021
Discount rate – projected benefit obligation	5.05 %	5.39 %	2.57 %
Discount rate – net periodic benefit cost	5.39	2.57	2.05
Rates of increase in compensation levels	N/A	N/A	4.00
Expected long-term rate of return on assets	5.30	3.65	5.75

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 10% U.S. equities (an acceptable range of 5%–15%), 10% international equities (an acceptable range of 5%–15%), 60% Long-Term Government Fixed Income (an acceptable range of 50%-70%), and 20% U.S. Credit (an acceptable range of 10%–30%). As of December 31, 2023, the investment allocation was 10% in U.S. equities, 10% in international equities, 62% in Long Term Government Fixed income and 18% in U.S. Credit. As of December 31, 2022, the investment allocation was 9% in U.S. equities, 10% in international equities, 62% in Long Term Government Fixed income and 19% in U.S. Credit. 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, 2023 and 2022, the fair value of Big Rivers’ defined-benefit pension plan assets by asset category are as follows:

	Level 1	Level 2	December 31, 2023
Cash and money market	$ 177	—	177
Equity securities:			
Common stock	373	—	373
Mutual funds	867	—	867
Fixed:			
Corporate bonds and notes	—	5,006	5,006
	$ 1,417	5,006	6,423

	Level 1	Level 2	December 31, 2022
Cash and money market	$ 190	—	190
Equity securities:			
Common stock	398	—	398
Mutual funds	940	—	940
Fixed:			
Corporate bonds and notes	—	5,559	5,559
	$ 1,528	5,559	7,087

(Dollars in thousands)

Expected retiree pension benefit payments projected to be required during the next ten years following 2023 are as follows:

		Amount
Year ending December 31:		
2024	$	383
2025		387
2026		631
2027		461
2028		482
Thereafter		4,597
Total	$	6,941

(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 $3,915, $4,098, and $4,583 for the years ended December 31, 2023, 2022 and 2021, respectively, recorded as operating expenses on the statement of operations.

(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 employer contribution for December 31, 2023 and 2022, was $206 and $301, respectively, and the deferred compensation expense for December 31, 2023, 2022, and 2021, was $518, $16, and $364, respectively. As of December 31, 2023 and 2022, the trust assets were $2,003 and $1,779, and the deferred liability was $2,003 and $1,779, respectively. The company classifies trust assets as other deposits and investments and the deferred liability as deferred credits and other on the balance sheet.

(Dollars in thousands)

(8) Short-Term Investments

At December 31, 2023, the Company’s short-term investments included $78,061 of investments in debt securities which are included in the Company’s balance sheet at amortized cost. At December 31, 2022, the Company’s short-term investments included $5,420 of investments in debt securities which are 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 original maturity date is less than or equal to three months) or “Short-term-investments” (if the original maturity date is greater than three months but less than one year).

The amortized costs and fair values (Level 1 measurement) of Big Rivers’ short-term investments at December 31, 2023 and 2022, were as follows:

	2023		2022	
	Amortized costs	**Fair values**	**Amortized costs**	**Fair values**
Debt securities:				
U.S. Treasuries	78,061	78,058	5,420	5,394
Total short-term investments	$ 78,061	78,058	5,420	5,394

Gross unrealized losses on short-term investments at December 31, 2023 and 2022, were as follows:

	2023		2022	
	Gains	**Losses**	**Gains**	**Losses**
Debt securities:				
U.S. Treasuries	—	(3)	—	(26)
Total short-term investments	$ —	(3)	—	(26)

The Treasury securities are short-term in nature, and there is no expectation of loss.

(Dollars in thousands)

(9) 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.

The carrying value of accounts receivable, net of allowance of $1,423 at December 31, 2023 and 2022, and accounts payable approximate fair value due to their short maturity. The carrying value of long-term accounts receivable is the net amount deemed certain of collection, which approximates fair value. At December 31, 2023 and 2022, the Company's cash and cash equivalents included short-term investments in an institutional U.S. government 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:

		2023	2022
Institutional U.S. government money market portfolio	$	155	147

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, 2023, consisted of CFC notes totaling $518,880, a CoBank note in the amount of $127,135, and RUS guaranteed FFB loans totaling $375,335 (Note 4). The CFC, CoBank, RUS, and FFB debt is carried at amortized cost. We determined the fair value of debt utilizing a discounted cash flow model. Key inputs to the model included the weighted average term of the debt outstanding and market interest rates for similarly situated utility borrowers as of the balance sheet dates.

		2023		2022	
		Carrying Amount	Fair Value	Carrying Amount	Fair Value
Long-term debt	$	1,021,350	853,265	900,584	853,220

(10) 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 age 55 to 61. 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 $1.40 per year of service up to 30 years. The account balance is credited with interest based on the 10-year treasury rate subject to a minimum of 2% and a maximum of 4%. The account is to be used for the sole purpose of paying the premium cost for the retiree and spouse.

(Dollars in thousands)

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

	2023	2022	2021
Discount rate – projected benefit obligation	5.13%	5.39%	2.77%
Discount rate – net periodic benefit cost	5.39%/6.36%	2.77%/4.42%/4.69%	2.44

The healthcare cost trend rate assumptions as of December 31, 2023 and 2022, were as follows:

	2023	2022
Initial trend rate	7.69% / 8.05%	6.70 % / 6.65
Ultimate trend rate	4.00	4.00
Year ultimate trend is reached	2048	2047

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

		2023	2022
One-percentage-point decrease:			
Effect on total service and interest cost components	$	(73)	(79)
Effect on year-end benefit obligation		(933)	(726)
One-percentage-point increase:			
Effect on total service and interest cost components	$	88	98
Effect on year-end benefit obligation		1,108	863

A reconciliation of the Company's benefit obligations of its postretirement plan at December 31, 2023 and 2022, is as follows:

		2023	2022
Benefit obligation – beginning of period	$	10,404	13,662
Service cost – benefits earned during the period		320	358
Interest cost on projected benefit obligation		546	439
Participant contributions		511	496
Plan amendments / Special termination benefits		1,559	382
Benefits paid		(1,975)	(1,771)
Actuarial loss (gain)		385	(3,162)
Benefit obligation – end of period	$	11,750	10,404

(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. The eligibility requirements for postretirement medical were revised on July 1, 2022, to remove the 10 years of service requirement. On November 24, 2023 the eligibility requirements were revised to include non-bargaining employees who retire at age 58. A reconciliation of the Company's postretirement plan assets at December 31, 2023 and 2022, is as follows:

		2023	2022
Fair value of plan assets – beginning of period	$	—	—
Employer contributions		1,464	1,275
Participant contributions		511	496
Benefits paid		(1,975)	(1,771)
Fair value of plan assets – end of period	$	—	—

The funded status of the Company's postretirement plan at December 31, 2023 and 2022 is as follows:

		2023	2022
Benefit obligation – end of period	$	(11,750)	(10,404)
Fair value of plan assets – end of period		—	—
Funded status	$	(11,750)	(10,404)

The components of net periodic postretirement benefit costs for the years ended December 31, 2023, 2022, and 2021 were as follows:

		2023	2022	2021
Service cost	$	320	358	491
Interest cost		546	439	354
Amortization of prior service cost		(67)	(96)	(112)
Amortization of gain		(359)	(284)	—
Curtailment recognized		—	(24)	—
Special termination benefits		—	144	—
Net periodic benefit cost	$	440	537	733

(Dollars in thousands)

A reconciliation of the postretirement plan amounts in accumulated other comprehensive income at December 31, 2023 and 2022 is as follows:

		2023	2022
Prior service credit	$	(1,603)	23
Unamortized actuarial gain		5,290	6,034
Accumulated other comprehensive income	$	3,687	6,057

The recognized adjustments to other comprehensive income (loss) at December 31, 2023 and 2022, are as follows:

		2023	2022
Prior service cost	$	(1,559)	(238)
Unamortized actuarial gain/(loss)		(385)	3,162
Amortization of net gain		(426)	(404)
Other comprehensive income/(loss)	$	(2,370)	2,520

At December 31, 2023 and 2022, amounts recognized in the balance sheets were as follows:

		2023	2022
Accounts payable	$	(1,312)	(1,554)
Deferred credits and other		(10,438)	(8,850)
Net amount recognized	$	(11,750)	(10,404)

Expected retiree benefit payments projected to be required during the years following 2023 are as follows:

		Amount
Year:		
2024	$	1,312
2025		1,117
2026		1,024
2027		974
2028		917
Thereafter		4,512
Total	$	9,856

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 $771 and $718 at December 31, 2023 and 2022, respectively. The postretirement expense recorded was $74, $30, and $141, for 2023, 2022, and 2021, respectively, and the benefits paid were $21, $79, and $140 for 2023, 2022, and 2021, respectively.

(11) Related Parties

For the years ended December 31, 2023, 2022, and 2021, Big Rivers had tariff sales to its members of $280,329, $298,514, and $221,959, respectively. In addition, for the years ended December 31, 2023, 2022, and 2021, Big Rivers had certain sales to Kenergy for the Domtar Paper Co. load of $1,393, $4,726, and $4,673, respectively.

At December 31, 2023 and 2022, Big Rivers had accounts receivable from its members of $28,564 and $31,421, respectively.

(12) Commitments and Contingencies

Big Rivers is involved in ongoing litigation with the City of Henderson and the City of Henderson Utility Commission doing business as Henderson Municipal Power and Light (collectively, "HMP&L") in which Big Rivers is seeking damages from HMP&L relating to HMP&L's refusal to pay the costs associated with Excess Henderson Energy produced at Station Two. HMP&L has filed a counterclaim alleging that if HMP&L is required to pay the costs of the Excess Henderson Energy, it is entitled to an offset for the revenues related to that energy. In December 2017, Big Rivers and HMP&L entered into an agreement to settle all claims relating to Excess Henderson Energy. Under the settlement agreement, HMP&L agreed to be responsible for all costs related to Excess Henderson Energy generated after the effective date of the settlement agreement. Big Rivers does not dispute that HMP&L is entitled to the Excess Henderson Energy-related revenues after the payment date in the settlement agreement if it paid the costs of that energy.

On May 1, 2018, the contracts under which Big Rivers was operating Station Two terminated as a result of the Station Two units no longer being capable of the economically competitive production of electricity. To allow HMP&L time to make alternate arrangements for its power supply, Big Rivers continued to operate the units under the terms of the Station Two contracts until the units were retired on January 31, 2019. The termination of the Station Two contracts has given rise to disputes between the parties, including (i) a claim HMP&L has filed seeking amounts HMP&L claims it is owed as a result of the annual budget settlement process that occurred during the term of the Station Two contracts; (ii) a claim HMP&L filed seeking a declaratory judgment on the percentage owed by each party for the decommissioning and post-closure compliance costs for the Station Two Ash Pond; (iii) a separate action HMP&L filed seeking a declaratory order that the December 2017 settlement agreement only applies to some of the Excess Henderson Energy; and (iv) a proceeding Big Rivers filed with the KPSC to resolve all outstanding disputes between it and HMP&L arising out of the Station Two contracts (KSPC Case No. 2019-00269). HMP&L's claims relating to the annual budget settlement process, the Station Two Ash Pond, and the settlement agreement are being held in abeyance pending the outcome of the KPSC case and all appeals therefrom. On

August 2, 2021, the KPSC entered a final order in Case No. 2019-00269, largely in Big Rivers' favor. HMP&L appealed that order to the Franklin Circuit Court, which is pending. On September 29, 2021, Big Rivers filed a proceeding with the KPSC asking the KPSC to enforce its final order from Case No. 2019-00269. That proceeding is pending. The Company believes there will be no material adverse effect to its financial statements when the litigation and disputes with HMP&L are resolved.

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.

(13) Subsequent Events

Management evaluated subsequent events up to and including March 22, 2024, the date the financial statements were available to be issued.