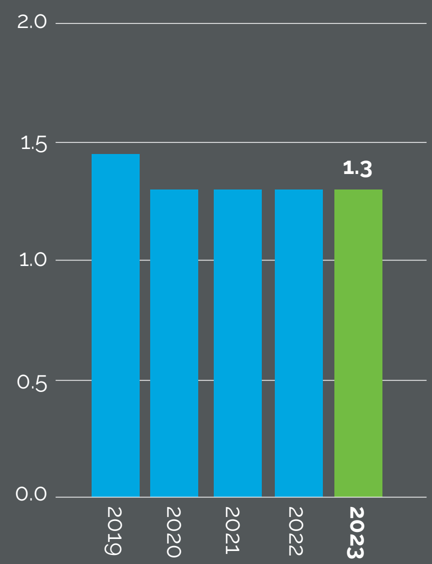
# NEW HORIZONS

## 2023 ANNUAL REPORT

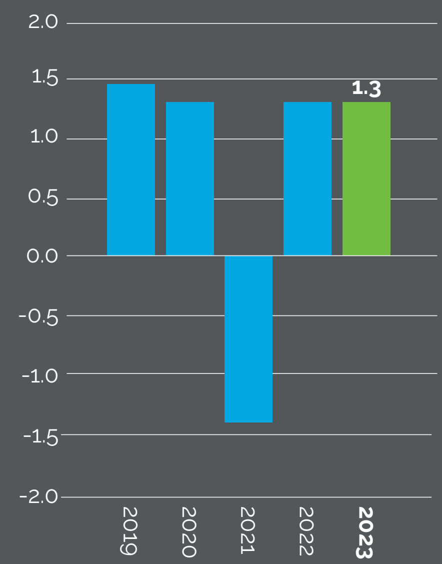
Big Rivers
ELECTRIC CORPORATION

## FINANCIAL HIGHLIGHTS

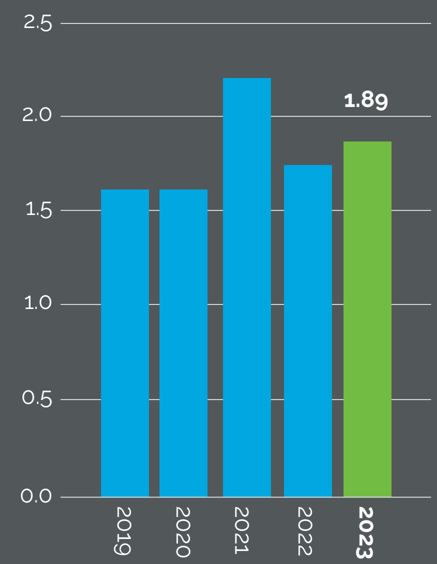
### MARGINS FOR INTEREST RATIO (MFIR)




### TIMES INTEREST EARNED RATIO (TIER)*

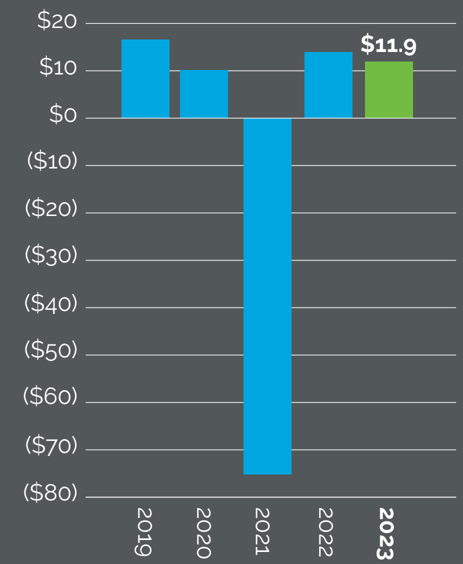



### DEBT SERVICE COVERAGE RATIO (DSCR)



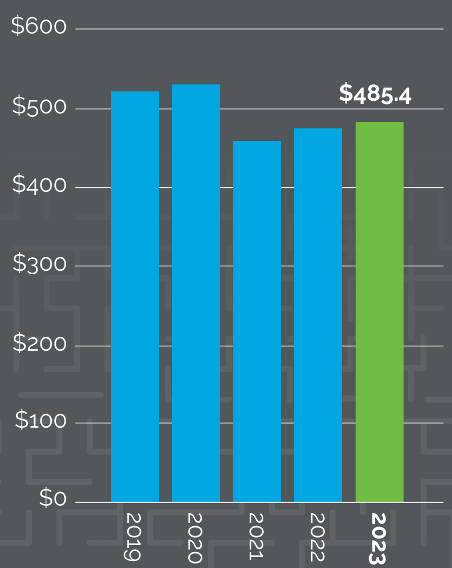

### NET MARGIN

(dollars in millions)



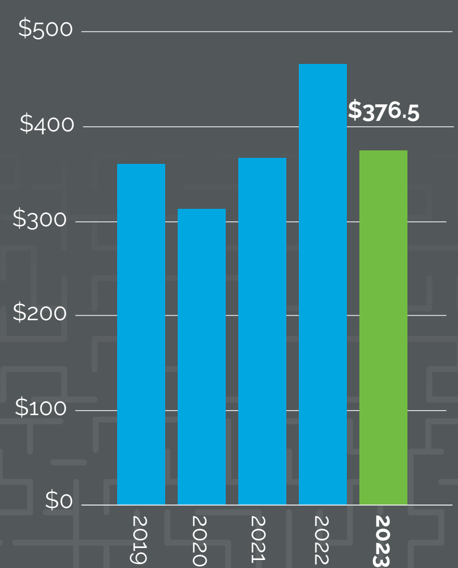

### EQUITY

(dollars in millions)



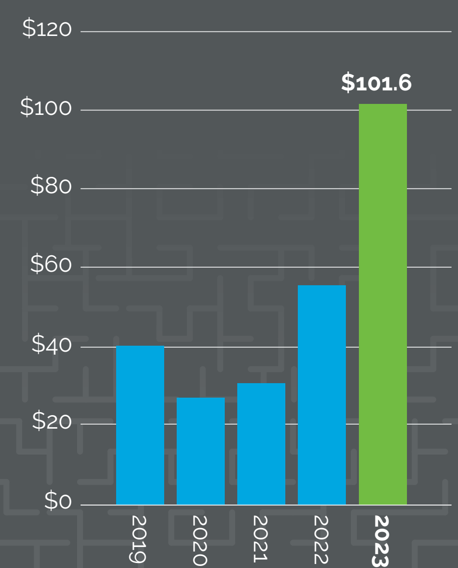

### ELECTRIC ENERGY REVENUE

(dollars in millions)




### CASH, CASH EQUIVALENTS & SHORT-TERM INVESTMENTS

(dollars in millions)




### NEW HORIZONS

At Big Rivers, we're setting sights on "New Horizons" for safety, resilient resources, reliability, and community that will position Big Rivers as one of the nation's leading generation and transmission cooperatives.

*The negative TIER in 2021 is due to the voluntary one-time usage of equity to reduce regulatory assets.

# ABOUT BIG RIVERS:

Big Rivers Electric Corporation is a member-owned, not-for-profit, generation and transmission cooperative (G&T).

We provide wholesale electric power and shared services to three distribution cooperative Member-Owners across 22 counties in western Kentucky. The Member-Owners are Jackson Purchase Energy Cooperative, headquartered in Paducah; Kenergy Corp, headquartered in Henderson; and Meade County Rural Electric Cooperative Corporation, headquartered in Brandenburg. Together, the Member-Owners distribute retail electric power to more than 120,000 homes, farms, businesses, and industries.

Incorporated in June of 1961, the mission of Big Rivers is to safely deliver competitive and reliable wholesale power and cost-effective shared services desired by the Member-Owners. Business operations revolve around seven core values: safety, excellence, teamwork, integrity, Member and community service, respect for the employee, and environmental consciousness. Big Rivers owns and operates 936 MW of generating capacity from three power stations: Robert D. Green (454 MW), Robert A. Reid CT (65 MW), and D.B. Wilson (417 MW). The total power capacity is 1,114 MW, including contracted capacity from the Southeastern Power Administration (SEPA). High-voltage electric power is delivered to the Member-Owners over a system of 1,353 miles of transmission lines and 29 substations owned by Big Rivers. Twenty-five transmission interconnections link our system with several surrounding utilities.

Big Rivers is led by an experienced management team and is governed by a six-member board of directors. The board is comprised of two representatives from each Member-Owner. Big Rivers employs approximately 300 people at four locations in Kentucky, who actively contribute to the communities our Member-Owners serve. Continually focused on the needs and local priorities of our Member-Owners, Big Rivers provides shared services in areas such as information technology, mapping and planning, safety programs and training, economic development, an energy efficiency program, and customer support services. Big Rivers and the Member-Owners pledge to serve western Kentucky with integrity, accountability, innovation, and a commitment to community. Our priority has always been to keep the cost of electricity affordable and the reliability of service high.

**MISSION:** Big Rivers will safely deliver competitive and reliable wholesale power and cost-effective shared services desired by our Member-Owners.

**VISION:** Big Rivers will be viewed as one of the top G&Ts in the country and will provide services the Members desire in meeting future challenges.

Today, the three Member-Owners of Big Rivers serve more than 120,000 members in 22 western Kentucky counties.

BIG RIVERS HEADQUARTERS

JACKSON PURCHASE ENERGY COOPERATIVE

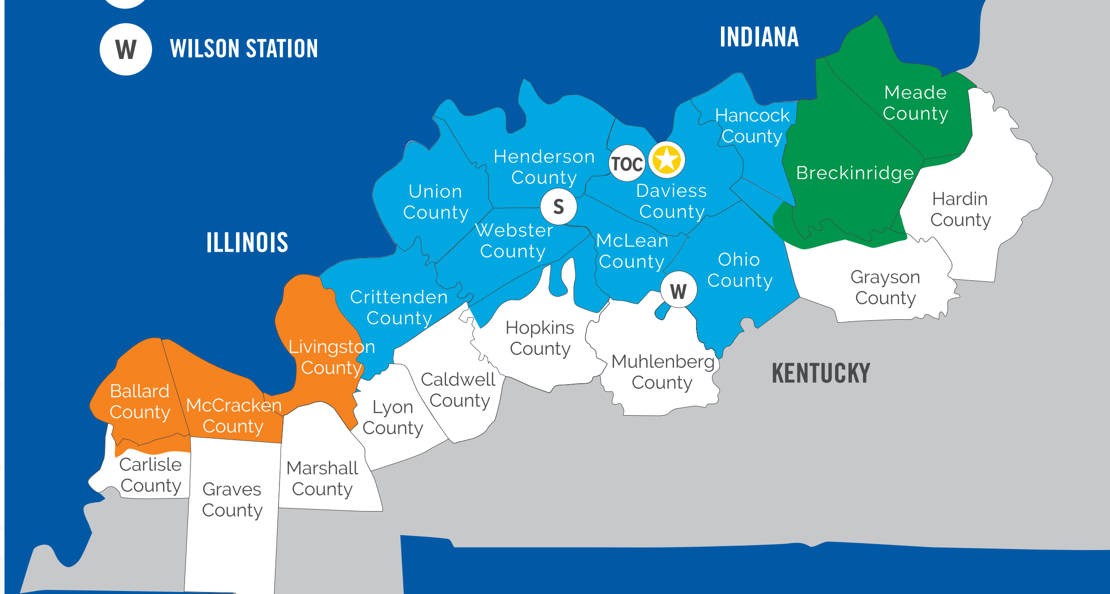
KENERGY CORP

MEADE COUNTY RURAL ELECTRIC COOPERATIVE CORPORATION

TOC TRANSMISSION OPERATIONS CENTER

S SEBREE STATION (GREEN STATION AND REID CT)

W WILSON STATION



# CEO AND BOARD CHAIR LETTER

> As the nation grapples with a rapid generation source transition and increasing reliability concerns, Big Rivers is taking an "all of the above" approach to sustainability that prioritizes reliable baseload electricity.

## Big Rivers Electric Corporation was founded more than sixty years ago to safely deliver reliable and affordable power

to three Member-Owner cooperatives—Jackson Purchase Energy Corporation, Kenergy Corp, and Meade County Rural Electric Cooperative Corporation. Western Kentucky witnessed the birth of cooperatives in the late 1930s, becoming one of the first regions in the Commonwealth to provide electric service to rural communities. As electricity for homes and industry continued to develop, these cooperatives realized the need for a local, long-term power supplier designed to keep costs low and service high. In 1961, these cooperatives established Big Rivers Electric Corporation in the small Ohio River city of Henderson, Kentucky. Big Rivers would serve the Member-Owners out of a downtown Henderson office building for more than six decades, generating power from local plants and delivering energy on a transmission system crossing 22 counties. Just as Big Rivers hit its 60th year, Kentucky's shifting utility and infrastructure landscape would open up opportunities for a new home.

The decision to move Headquarters came after years of negotiation and research. Owensboro would offer a more central location to reach the entire service territory and better position the cooperative to support the rapidly growing industrial sector. City of Owensboro leaders would also provide a warm community welcome and incentives to aid in new construction. In early 2023, the doors to the new Big Rivers Headquarters in Owensboro would open to employees for the first time. This 47,000-square-foot, four-story facility would provide Big Rivers employees with more modern office and collaboration spaces to meet future utility needs. While the Headquarters location changed, Big Rivers' guiding mission to the Member-Owners remained consistent. 2023 would go on record as a year of significant progress for safety, resources, reliability, and community development.

Safety would be one of the most important accomplishments for Big Rivers in 2023. For the first time in company history, all employees worked for one year without a single recordable incident or injury. Big Rivers has long prioritized its safety culture with employee-led initiatives and company recognition, but the recordable injury achievement pushed program results to new heights. One year after a devastating workplace accident, employees would strive for greater safety ownership for themselves and their coworkers. In late 2023, Big Rivers officially launched Mission Zero, celebrating the recordable injury feat and hoping to extend the tradition for future years. The energy industry often exposes employees to dangerous or harsh working conditions. However, Big Rivers continues to reach new safety milestones, including an industry-leading 13 years without a lost-time injury for Transmission employees. We could not be more proud of the continued safety success witnessed in 2023, with the addition of the 58th Governor's Safety and Health Award and the eighth consecutive Kentucky Employers' Mutual Insurance (KEMI) Destiny Award.

Big Rivers Electric Corporation was created to be the local, reliable, and affordable source of rural power. One coal-fired Kentucky power plant would grow to several by the 1980s before evolving financial and environmental issues would require greater diversity. Following a significant load change in the 2010s, Big Rivers shuttered older units and invested in more efficient resources as part of an aggressive effort to restore the cooperative's position. Today, Big Rivers is a powerful resource for financial stability and energy generation for the Member-Owner cooperatives, seeking to best serve the region with reliable operations and innovative technology. In 2023, Big Rivers built on a record of financial success and endeavors to drive down costs for Members. Net margins exceeded $37 million in 2023 (pre-TIER credit), with $10.3 million set aside for 2024 Member bill credits.

Big Rivers is also taking bold steps to preserve key generation facilities, allowing power plants to continue valuable energy production while cutting emissions and saving Members money. As the nation grapples with a rapid generation source transition and increasing reliability concerns, Big Rivers is taking an "all of the above" approach to sustainability that prioritizes reliable baseload electricity. Big Rivers filed the latest Integrated Resource Plan in 2023, including a critical study supporting the company's plans to retire older units and replace generation with a new, more efficient natural gas unit. Big Rivers also pursued an opportunity through the new Powering Affordable Clean Energy (PACE) Program, qualifying to apply for a RUS loan for a new 100 megawatt (MW) solar development in McCracken County.

In 2023, Big Rivers entered into a contract to sell gypsum, a byproduct from the Flue Gas Desulfurization process at Wilson Station. The contract purchases will be credited to the Environmental Surcharge, lowering the power plant's variable operating costs. Big Rivers also successfully closed the first phase of the Wilson Station Landfill with a state-of-the-art synthetic liner and artificial turf system that will eliminate groundwater penetration and reduce annual maintenance costs.

Upgraded generation and operational facilities will be critical to maintaining high levels of Member service. Our region experienced another round of reliability tests in the summer of 2023, with temperatures nearing 100 degrees for several days and tight MISO conditions. Rolling outages and public appeals were avoided despite the excessive heat's strain on the power grid. Big Rivers also improved on a stellar reliability record in 2023 by advancing engineering technology and transmission construction projects. Systemwide, Big Rivers finished the year with a System Average Interruption Duration Index (SAIDI) score of 1.404, equating to just over one minute of average outage time for all Member-Owners.

Western Kentucky is experiencing increasing interest in economic development, and Big Rivers is proud to play an active role in supporting the growth of our local communities. By offering a competitive energy rate, Big Rivers was able to help secure Pratt Paper's decision to build a paper mill and corrugated box manufacturing plant in Henderson. These new facilities involve a capital investment of approximately $465 million and jobs for an estimated 320 full-time employees. Significant engineering and transmission upgrades were completed in 2023 to provide service for Pratt Paper and industry expansion near Paducah. In addition to opening the new Headquarters in 2023, Big Rivers broke ground on a new Transmission Operations Center in Owensboro. This state-of-the-art facility will bring together Energy Control, Engineering, Transmission, and Substation employees in one location designed to enhance service and response during severe weather.

Big Rivers is marking this new chapter in the cooperative's history with greater efforts to partner with surrounding communities and a desire to make our region a great place to live and work. We're investing in programs that strengthen our workforce and develop leaders ready to face future challenges. The company is embracing change while keeping safe, reliable, and affordable power for our Member-Owners at the core of everything we do. We're setting sights on "New Horizons" for safety, resilient resources, reliability, and community that will position Big Rivers as one of the nation's leading generation and transmission cooperatives.

**Don Gulley**
President & CEO

**Wayne Elliott**
Chair, Board of Directors

# SAFETY

Big Rivers is setting new records for safety achievement. For the first time in company history, all locations reached one year without a recordable injury or incident in October 2023.

The energy field often contains dangerous and unpredictable conditions, highlighting the significance of this remarkable milestone. In celebration of the new record, Big Rivers launched the Mission Zero campaign to encourage continued safety focus and injury prevention through the end of 2023 and beyond.

Safety has long been tied to Big Rivers' mission, guided by a strong, employee-led safety culture and extensive workplace training. Above all, Big Rivers promotes safety as a way of life for every employee, reminding every person on every job that no operating condition or urgency of service can ever justify endangering actions. Mission Zero's ongoing success through the remainder of 2023 was only possible thanks to our dedicated workforce and their unwavering support of safety education programs and initiatives identifying safety issues.

Big Rivers' commitment to safety continues to result in positive outcomes, industry-leading milestones, and widespread award recognition. Transmission employees reached 13 years without a lost-time incident and eight years without a recordable incident in 2023, an exceptional safety record that surpasses most utilities. Big Rivers holds the title for the most Governor's Safety and Health Awards, with Wilson Station earning one new award in 2023, bringing the companywide total to 58. Kentucky Employers' Mutual Insurance (KEMI) also selected Big Rivers for an eighth consecutive Destiny Award, which highlights companies with robust safety programs and the lowest experience modification rates.

## 2023

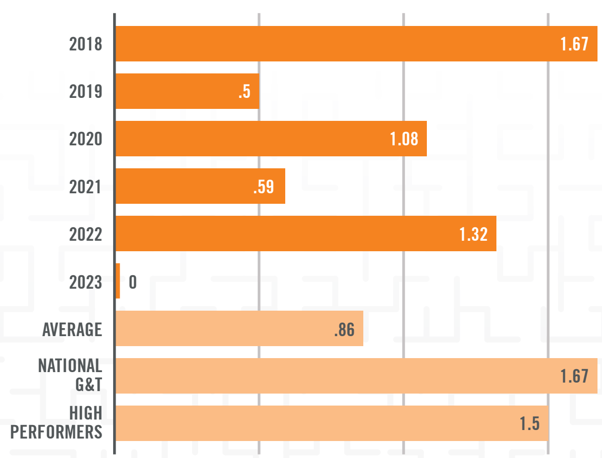
**0** For the first time in Big Rivers' history, all locations worked for one year without a single recordable incident or injury.

**13** Years without a lost-time incident and 8 Years without a recordable incident by Transmission employees.

**1 YR** YEAR WITHOUT A RECORDABLE INJURY FOR ALL EMPLOYEES

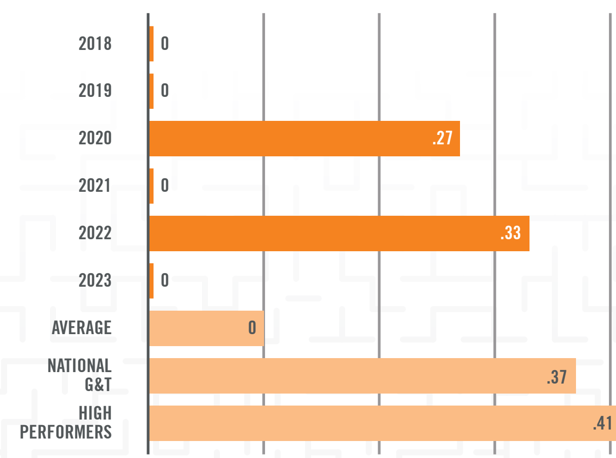
### RECORDABLE INCIDENT RATE

Incident Rate = # of incidents X 200,000/# of hours worked




### LOST-TIME INCIDENT RATE

Incident Rate = # of incidents X 200,000/# of hours worked



## SAFETY MILESTONES:

**12** Years without a lost-time incident and 7 Years without a recordable incident by Headquarters employees.

**7** Years without a lost-time incident and 1 Year without a recordable incident by Wilson Station employees.

**58TH** Governor's Safety and Health Award — More than any other entity in Kentucky.

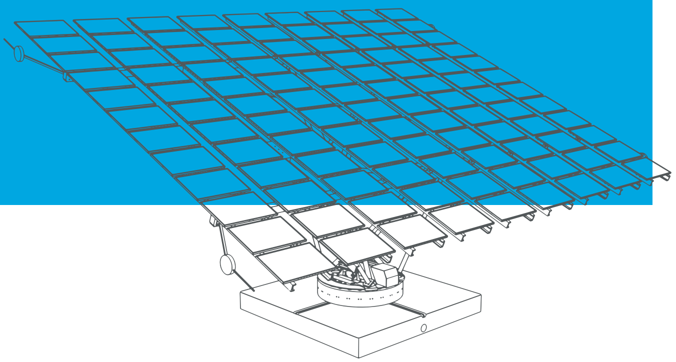
## 2023 KEMI DESTINY AWARD WINNER

**Eighth consecutive year.** The KEMI Destiny Award is given to the Kentucky companies with the lowest experience modification rates in the state.


# RESILIENT RESOURCES

**SUCCESS OF DIVERSIFICATION**

Generation portfolio diversification efforts have cut carbon emissions by 70% since 2005. Big Rivers has also qualified to apply for federal loans that could lead to the construction of a 100 MW solar project in McCracken County.



## Big Rivers emerged from three western Kentucky cooperatives seeking to provide their Members with a long-term and affordable power supplier.

More than six decades later, Big Rivers is still on a mission to supply safe and reliable energy from our diverse power portfolio and provide innovative services supported by solid financials. In 2023, the company continued to build on financial moves that benefit Members and maximize recent power plant projects.

Following a decade of change and recovery, Big Rivers is utilizing its financial strength to create valuable growth opportunities. Credit ratings remain above the investment-grade level, and careful lending and refinancing measures give the company greater flexibility to preserve existing power plants and construct new facilities. Members are also reaping the benefits of the cooperative's stable financial position. Net margins exceeded $37 million in 2023 (pre-TIER credit), with $10.3 million set aside for 2024 Member bill credits.

NET MARGINS (PRE-TIER) IN 2023 EXCEEDED **$37MM**

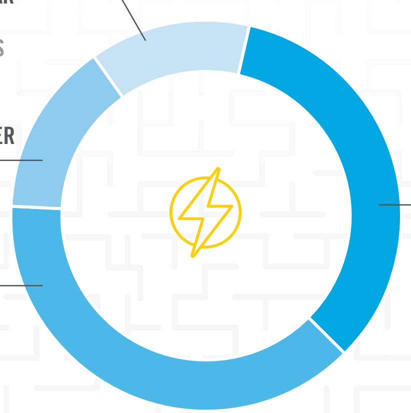
Wilson Station has grown in profitability and sustainability following the $100 million scrubber upgrade project. The installation of the former Coleman Station scrubber at Wilson Station in 2022 was designed to improve plant efficiency and reduce environmental impact. In 2023, Big Rivers signed a contract to sell gypsum from Wilson Station. Gypsum develops as a byproduct during the power plant's Flue Gas Desulfurization process, and the contract purchases will lower Wilson's variable operating and landfill maintenance costs. Big Rivers successfully closed the first phase of the Wilson Station Landfill using a groundbreaking synthetic liner and artificial turf system that prevents groundwater penetration and reduces annual maintenance costs. Work on the Green and Reid ash pond closures began in 2023, moving toward a project completion date in 2024.

The success of Big Rivers relies on an efficient and diverse power portfolio. In 2023, the company filed the latest Integrated Resource Plan, detailing the need to retire older power plants and replace generation with a new Combined Cycle Unit in the near future. While Big Rivers continues to value its traditional power plants, the company has also embraced opportunities to incorporate new energy sources. Today's "all of the above" portfolio features a mix of coal and gas generation, a long-term hydropower contract, and an upcoming contract for 160 MW of solar energy with Unbridled Solar. These generation portfolio diversification efforts have cut carbon emissions by 70% since 2005. Big Rivers has also qualified to apply for new Powering Affordable Clean Energy (PACE) lending that may lead to an additional 100 MW solar energy project in McCracken County.

Big Rivers successfully closed the first phase of the Wilson Station Landfill using a ground-breaking synthetic liner and artificial turf system that prevents groundwater penetration and reduces annual maintenance costs.

Gypsum develops as a byproduct during the power plant's Flue Gas Desulfurization process, and the contract purchases will lower Wilson's variable operating and landfill maintenance costs.

### GENERATION FUEL MIX




### CREDIT RATING

| FITCH | MOODY'S | S&P |
|---|---|---|
| BBB | Baa2 | BBB |
| Stable | Stable | Stable |

# RELIABILITY

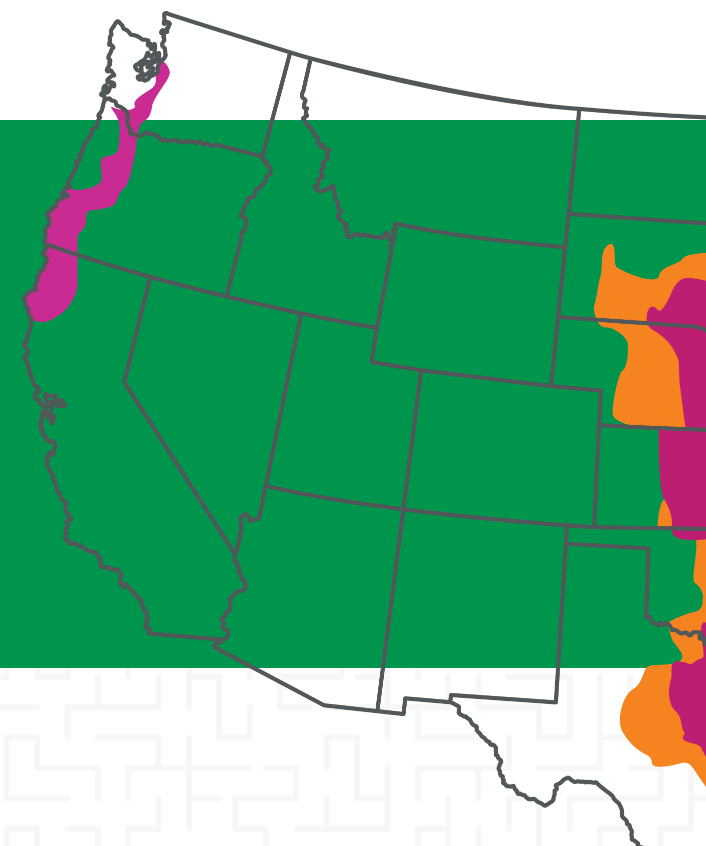
## Big Rivers' desire to be a leader in energy reliability is pushing the company beyond recent records.

The company sets high-achieving reliability targets for the system and individual Member-Owner cooperatives each year. Once again, Big Rivers successfully beat its ambitious goals, as the System Average Interruption Duration Index (SAIDI) hit 1.404 for the entire transmission system, equating to roughly one and a half minutes of Member outage time in 2023. In addition, the Meade County RECC region SAIDI score remained at zero outage minutes for a second consecutive year.

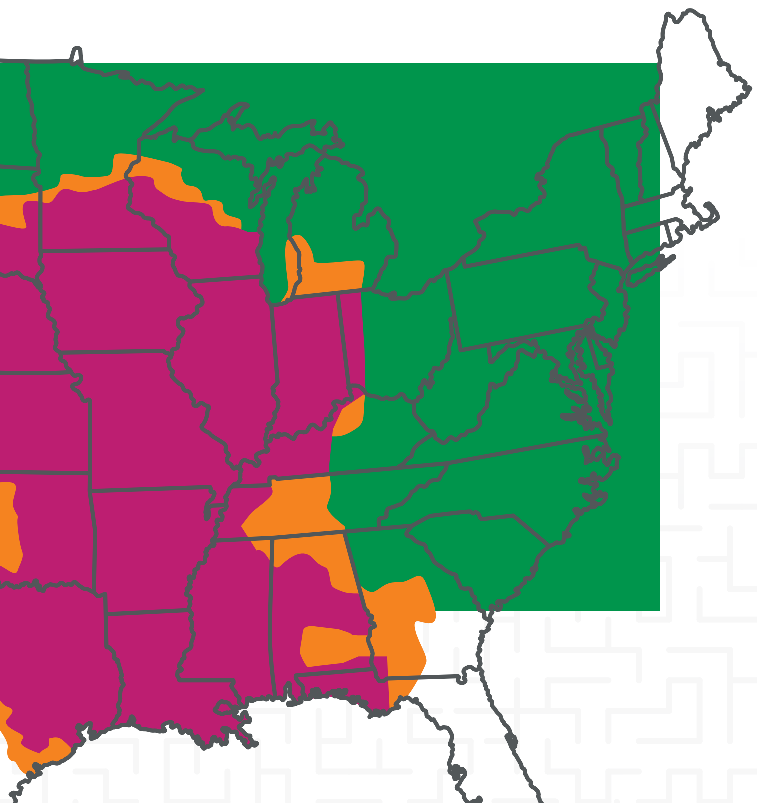
While Big Rivers celebrates the strides made in local reliability, the nation's ability to sustain reliable energy year-round remains in question. National reliability organizations are sounding the alarm and detailing how the country's current plant retirement pace, technology and transmission growth delays, and increasing energy demands strain the power grid more each year. The most significant test for 2023 would come to the Midwest in August when temperatures across the region would soar to 100 degrees and heat index readings would hit nearly 120 degrees. In preparation for the widespread heat wave, MISO predicted closing in on a new record for grid energy demand. When the temperatures finally dropped, the region had navigated yet another tight situation without energy disruption. Big Rivers continues to participate in efforts to proactively inform lawmakers about the increasing demand on the nation's power grid. The company is also creating resources to educate the public on grid issues and explain how Big Rivers' 24-hour generation resources play a critical role in protecting reliable power service for western Kentucky.

Big Rivers' success in reliability comes after several years of innovative engineering and transmission projects designed to speed up outage recovery. In addition to transmission system technology, Big Rivers continues to enhance reliability and outage recovery by focusing on right-of-way vegetation management, installing more ductile iron power poles, and replacing breakers and relays. Three new substations and major transmission engineering projects were added to the system in 2023 to support industrial growth. Big Rivers constructed a 7-mile, 161 kV transmission line to supply energy for the $500 Pratt paper mill in Henderson County and a three-mile, 161 kV transmission line to prepare for economic development in McCracken County.

Excessive heat warnings (pink) and watches (orange) from the National Weather Service on August 23, 2023.



Right-of-Way continues to expand efforts to eliminate all vegetation related outages that affect the Members. In 2023, Right-of-Way focused on tough to access agricultural areas. These targeted sites can be closed off for eight months out of the year due to agricultural production while posing a significant threat to reliability.



## BIG RIVERS SYSTEM AVERAGE INTERRUPTION DURATION INDEX (SAIDI)

| | **Target** Average minutes of outage time | **Achievement** Average minutes of outage time |
|---|---|---|
| **System** | 8.070 | 1.404 |
| **JPEC** | 8.590 | 3.345 |
| **Kenergy** | 7.39 | 1.131 |
| **Meade County RECC** | 8.890 | 0 |

# COMMITMENT TO COMMUNITY



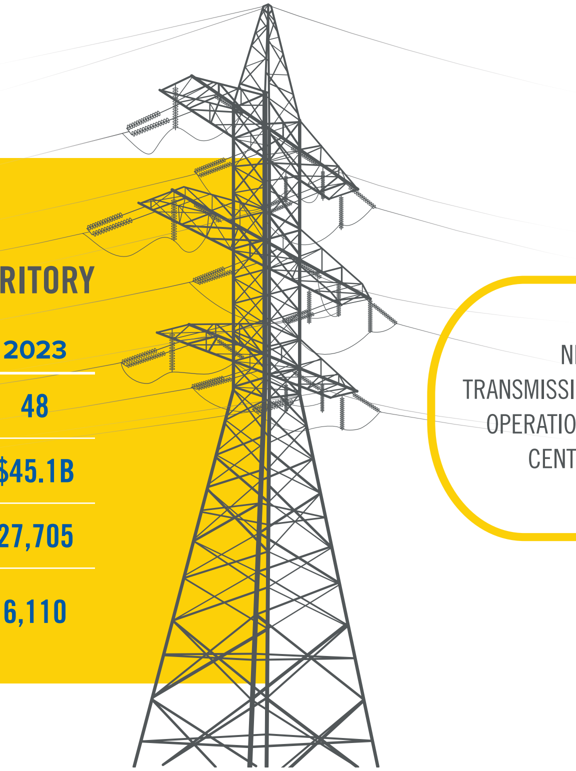

## Concern for the community is one of the seven guiding principles for cooperatives and encourages sustainable development.

Big Rivers takes this principle to heart, with community involvement tied into more than 60 years of experience. As rural electricity service developed in western Kentucky, Henderson was chosen as the future home of Big Rivers. From the Headquarters in downtown Henderson, Big Rivers would seek to serve 22 counties with energy generation and transmission and take an active community role by supporting local agencies, serving on boards, and encouraging economic development. As decades passed, the makeup of western Kentucky would change. Different regions would experience residential and industrial growth, opening up new opportunities for Big Rivers and its Member-Owners. After a long history in Henderson, the company chose to move Headquarters 30 miles to the east. A relocation to Owensboro would position the company in a central location to better serve the Member-Owners and some of the largest industrial projects. The city of Owensboro was ready to welcome Big Rivers and support the construction of a new facility.

In February 2023, approximately 70 employees moved into a new Big Rivers Headquarters building in downtown Owensboro. The four-story, state-of-the-art facility features the technology and collaborative meeting spaces designed to meet future needs. When the finishing touches were complete, Kentucky Governor Andy Beshear and local leaders gathered to formally celebrate the building in May 2023. Big Rivers excitedly joined the Owensboro community, giving back through sponsorships and employee volunteer projects for local charities and earning the Greater Owensboro Chamber of Commerce Business of the Year designation.

## BREC SERVICE TERRITORY

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| **RFI's** (Request for information) | 24 | 10 | 14 | 48 | 71 | 48 |
| **Capital Investment** | $300M | $1.3B | $2B | $29.1B | $42.5B | $45.1B |
| **Jobs** | 1,700 | 2,545 | 2,150 | 26,123 | 41,697 | 27,705 |
| **MW's** | 1,713 | 676 | 563 | 4,657 | 5,205 | 6,110 |



NEW TRANSMISSION OPERATIONS CENTER **$50MM**

In October 2023, Big Rivers would begin a second move to Owensboro, with a groundbreaking ceremony for the new Transmission Operations Center. The $50 million facility near the Audobon Parkway will serve as a modern home base for Big Rivers Transmission, Substation, Energy Control, Engineering, and Information Technology employees. These employees will move from the former Big Rivers Headquarters and Energy Transmission & Substation locations in Henderson to one larger and more secure center that will improve operations and cooperation among departments. The state-of-the-art control center will allow for remote control of the entire transmission system and generating unit dispatch, with a data center serving as the primary location for all business-critical applications, including computing equipment reserved exclusively for emergency management services. Indoor space for equipment and radiant heat parking will reduce service response times during inclement weather and increase reliability.

These Owensboro facilities represent a significant investment in updated employee equipment and technology to support our Member-Owners and communities for future decades. Beyond the infrastructure projects, Big Rivers is investing in the education and training of our employees. The Cooperative Leadership Program returned in 2023, bringing together 20 participants from Big Rivers and the Member-Owner cooperatives. Leadership program participants met at each company for site and power plant tours, plus classes to learn about sharing best practices, industry knowledge, and teambuilding skills. Big Rivers also hosted new employee orientation for 26 people in 2023 and provided in-depth training to 23 people through the nine-month Supervisor Program held in partnership with Western Kentucky University.

Whether through community participation or economic development, Big Rivers wants to be a leader in making western Kentucky a better place to live and work. As industrial interest in western Kentucky expands, Big Rivers brings the resources and experience needed to meet the demands of new development and existing business growth. Recent economic development successes benefit each Member-Owner cooperative territory, including the $500 million Pratt Paper facility in Henderson. In 2023, Big Rivers received approval on the Pratt Paper electric service agreement to serve both a paper mill and a corrugated box manufacturing plant. Long-term, competitive power pricing was a critical factor in Pratt's choice to build a new facility in Kentucky, and Big Rivers was able to help secure the project by offering an economic development rate. Pratt's building projects will involve an estimated capital investment of approximately $465 million and employment of roughly 320 full-time positions. Big Rivers is also aiding the rapid development of solar energy in the region by entering generator interconnection agreements that will connect new arrays and hundreds of MWs of electricity to the grid.

# FIVE-YEAR REVIEW

## AS OF DECEMBER 31, 2023 AND THE FOUR PRECEDING YEARS UNAUDITED

(DOLLARS IN THOUSANDS)

[1]Includes intangible plant. [2]Includes investment income receivable. [3]Includes current maturities of long-term obligations. [4]The reduction in Big Rivers' net generating capacity owned is due to the retirement of Reid Station Unit 1 and the units at Coleman Station as of September 30, 2020. [5]The negative TIER in 2021 is due to the voluntary one-time usage of equity to reduce regulatory assets.

| SUMMARY OF OPERATIONS | 2023 | 2022 | 2021 | 2020 | 2019 |
|---|---|---|---|---|---|
| **Operating Revenue:** | | | | | |
| Electric Energy Revenue | $376,497 | $468,065 | $368,650 | $314,390 | $362,252 |
| Other Operating Revenue and Income | 18,703 | 22,283 | 24,494 | 14,318 | 16,475 |
| Total Operating Revenue | 395,200 | 490,348 | 393,144 | 328,708 | 378,727 |
| **Operating Expenses:** | | | | | |
| Fuel for Electric Generation | 75,899 | 125,354 | 130,019 | 83,939 | 119,831 |
| Power Purchased | 84,132 | 131,733 | 37,436 | 35,756 | 37,893 |
| Operations (Excluding Fuel), Maintenance and Other | 105,995 | 108,620 | 113,762 | 114,605 | 123,062 |
| Depreciation | 87,142 | 72,465 | 172,136 | 54,630 | 49,356 |
| Total Operating Expenses | 353,168 | 438,172 | 453,353 | 288,930 | 330,142 |
| **Interest Expense and Other:** | | | | | |
| Interest | 36,289 | 41,267 | 28,575 | 33,393 | 36,937 |
| Income Tax Expense/(Benefit) | - | - | - | (448) | (28) |
| Other-Net | 644 | 592 | 684 | 830 | 696 |
| Total Interest Expense and Other | 36,933 | 41,859 | 29,259 | 33,775 | 37,605 |
| Operating Margin | 5,099 | 10,317 | (89,468) | 6,003 | 10,980 |
| Non-Operating Margin | 6,793 | 3,710 | 14,072 | 4,192 | 5,735 |
| Net Margin (Loss) | $11,892 | $14,027 | $(75,396) | $10,195 | $16,715 |
| **SUMMARY OF BALANCE SHEET** | | | | | |
| Total Utility Plant | $2,112,076 | $2,061,715 | $2,059,963 | $1,888,955 | $2,098,129 |
| Accumulated Depreciation | 1,094,315 | 1,095,847 | 1,151,975 | 1,102,333 | 1,193,043 |
| Net Utility Plant[1] | 1,017,761 | 965,868 | 907,988 | 786,622 | 905,086 |
| Cash and Cash Equivalents | 23,541 | 50,027 | 29,913 | 20,400 | 30,733 |
| Restricted Cash-Construction Funds Trustee | - | - | - | 353 | 353 |
| Short-Term Investments | 78,061 | 5,420 | 352 | 6,603 | 9,437 |
| Reserve Account Investments[2] | - | - | - | 666 | 1,391 |
| Other Assets | 529,667 | 568,412 | 486,772 | 543,591 | 402,213 |
| Total Assets | $1,649,030 | $1,589,727 | $1,425,025 | $1,358,235 | $1,349,213 |
| Equities | $485,381 | $475,667 | $460,226 | $531,539 | $523,164 |
| Long-Term Debt[3] | 1,014,328 | 894,149 | 697,294 | 696,742 | 733,942 |
| Line of Credit | - | 25,000 | 60,000 | - | - |
| Regulatory Liabilities - Member Rate Mitigation and TIER Credit | 37,152 | 38,277 | 53,543 | 33,334 | 2,111 |
| Asset Retirement Obligations | 43,520 | 69,267 | 72,760 | 40,410 | 34,557 |
| Other Liabilities and Deferred Credits | 68,649 | 87,367 | 81,202 | 56,210 | 55,439 |
| Total Liabilities and Equity | $1,649,030 | $1,589,727 | $1,425,025 | $1,358,235 | $1,349,213 |
| **ENERGY SALES (MWh)** | | | | | |
| Member Rural | 2,098,136 | 2,268,701 | 2,219,103 | 2,164,850 | 2,261,069 |
| Member Large Industrial | 1,350,614 | 919,426 | 781,628 | 824,680 | 946,070 |
| Other | 1,837,685 | 2,329,312 | 3,571,299 | 1,898,036 | 2,879,231 |
| Total Energy Sales (MWh) | 5,286,435 | 5,517,439 | 6,572,030 | 4,887,566 | 6,086,370 |
| **SOURCES OF ENERGY (MWh)** | | | | | |
| Generated | 3,047,509 | 3,121,412 | 5,443,411 | 3,440,864 | 4,964,983 |
| Purchased | 2,287,089 | 2,481,549 | 1,214,634 | 1,520,984 | 1,166,472 |
| Losses and Net Interchange | (48,163) | (85,522) | (86,015) | (74,282) | (45,085) |
| Total Energy Available (MWh) | 5,286,435 | 5,517,439 | 6,572,030 | 4,887,566 | 6,086,370 |
| **NET CAPACITY (MW)** | | | | | |
| Net Generating Capacity Owned[4] | 936 | 936 | 936 | 936 | 1,444 |
| Rights to HMP&L Station Two | - | - | - | - | - |
| Other Net Capacity Available | 178 | 178 | 178 | 178 | 178 |
| Total Net Capacity (MW) | 1,114 | 1,114 | 1,114 | 1,114 | 1,622 |
| **DEBT RATIOS** | | | | | |
| Margins for Interest Ratio (MFIR) | 1.30 | 1.30 | 1.30 | 1.30 | 1.45 |
| Times Interest Earned Ratio (TIER)[5] | 1.30 | 1.30 | (1.41) | 1.30 | 1.45 |
| Debt Service Coverage Ratio (DSCR) | 1.89 | 1.76 | 2.22 | 1.63 | 1.63 |

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# 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

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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)

| | | | Other equities | | | |
|---|---|---|---|---|---|---|
| | | Retained margin | Donated capital and memberships | 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) |



(Continued)

(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



(Continued)

(Dollars in thousands)

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.

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 |



(Continued)

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.

## BOARD OF DIRECTORS

**Wayne Elliott**
*Chair*
Jackson Purchase Energy Cooperative

**Paul Edd Butler**
*Vice-Chair*
Meade County RECC

**Brent Wigginton**
*Secretary-Treasurer*
Kenergy Corp

**Erick Harris**
Jackson Purchase Energy Cooperative

**Robert White**
Kenergy Corp

**Stephen Barr**
Meade County RECC

**Tyson Kamuf**
Corporate Counsel

## SENIOR LEADERSHIP TEAM

**Don Gulley**
President and CEO

**Amanda Jackson**
Executive Assistant

**Talina Mathews**
Chief Financial Officer

**Mike Mizell**
Chief Administrative Officer

**Chris Bradley**
VP Systems Operations

**Terry Wright**
VP Energy Services

**Jennifer Keach**
Director Communications and Community Relations

**Brittaney Johnson**
Director Member Services and Economic Development

## MEMBER OWNERS

### Jackson Purchase Energy Cooperative

**Greg Grissom**
President and CEO

**Serves**
Ballard, Carlisle, Graves, Livingston, Marshall, and McCracken counties

**Headquartered**
Paducah, Kentucky

**Number of Accounts**
30,611

**Miles of Lines**
2,990

### Kenergy Corp

**Tim Lindahl**
President and CEO

**Serves**
Breckinridge, Caldwell, Crittenden, Daviess, Hancock, Henderson, Hopkins, Livingston, Lyon, McLean, Muhlenberg, Ohio, Union, and Webster counties

**Headquartered**
Henderson, Kentucky

**Number of Accounts**
59,510

**Miles of Lines**
7,239

### Meade County Rural Electric Cooperative Corporation

**Martin Littrel**
President and CEO

**Serves**
Breckinridge, Grayson, Hancock, Hardin, Meade, and Ohio Counties

**Headquartered**
Brandenburg, Kentucky

**Number of Accounts**
31,323

**Miles of Lines**
3,302

Big Rivers
ELECTRIC CORPORATION

**Big Rivers Electric Corporation**
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Owensboro, KY 42301
www.bigrivers.com