













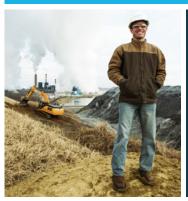


LEADING TOGETHER

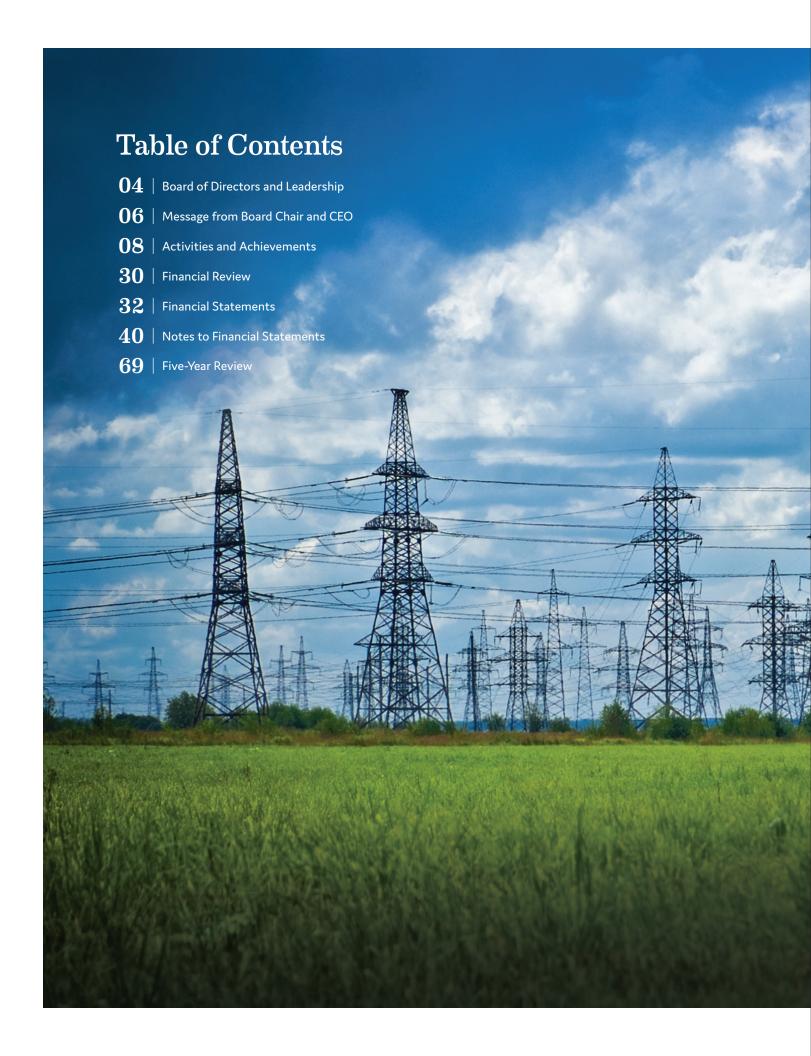
2016 ANNUAL REPORT











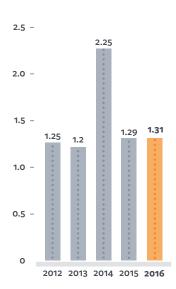


2016 Financial Highlights

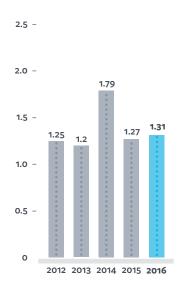
As of December 31, 2016 and the four preceding Fiscal Years

DEBT RATIOS

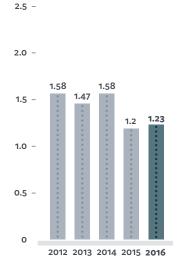
MARGINS FOR INTEREST RATIO (MFIR)



TIMES INTEREST EARNED RATIO (TIER)



DEBT SERVICE COVERAGE RATIO (DSCR)



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



1,297

miles of transmission line systems owned, operated and maintained

24

transmission substations owned, operated and maintained

25

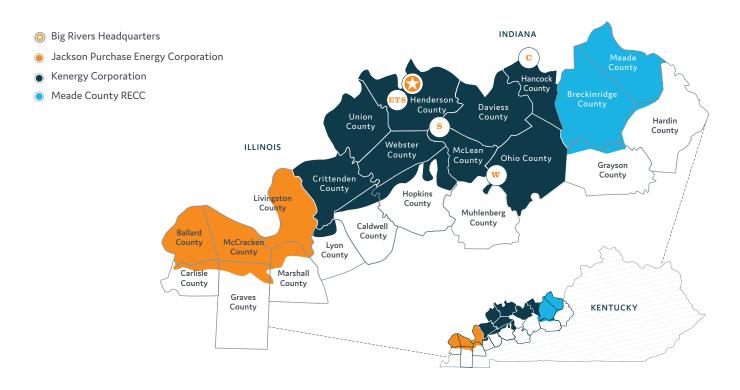
interconnections link our transmission system with seven neighboring utilities

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 Corporation, headquartered in Paducah; Kenergy Corporation, headquartered in Henderson; and Meade County Rural Electric Cooperative Corporation, headquartered in Brandenburg. Together, the Member-Owners distribute retail electric power to more than 116,000 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 1,444 net megawatts (MW) of generating capacity from four power stations: Robert A. Reid (130 MW), Robert D. Green (454 MW), D.B. Wilson (417 MW), and Kenneth C. Coleman (443 MW, idled in 2014). Total power capacity is 1,819 MW, including rights to Henderson Municipal Power and Light's (HMP&L) Station Two and contracted capacity from the Southeastern

Power Administration (SEPA). High-voltage electric power is delivered to the Member-Owners over a system of 1,297 miles of transmission lines and 24 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 more than 500 people at five 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, a robust energy efficiency program, and customer support services. As a long-standing member of Touchstone Energy®, 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 safely keep the cost of electricity affordable and the reliability of service high.





SEBREE STATION

Green Units 1 & 2 Reid Unit 1 **Reid Combustion Turbine** HMP&L Station Two-Units 1 & 2 Total net generating capacity: 896 MW



WILSON STATION

Wilson Unit 1

Total net generating capacity: 417 MW



COLEMAN STATION

Idled in May 2014 Coleman Unit 1, 2, 3 Total net generating capacity: 443 MW



PLANT & TRANSMISSION MANAGEMENT

(Left to right)

Keith Scott, Wilson Station and Coleman Station Plant Manager

Ron Gregory, Sebree Station

Plant Manager

Tim Tapp, Director Transmission System

OUR MISSION

Safely deliver competitive and reliable wholesale power and cost-effective shared services desired by our Member-Owners.

Big Rivers will be viewed as one of the top G&Ts in the country and will provide services our Member-Owners desire in meeting future challenges.

OUR VALUES

Safety, Excellence, Integrity, Teamwork, Member and Community Service, Respect for the Employee, Environmentally Conscious

BOARD OF DIRECTORS



Wayne Elliott Chair, Jackson Purchase **Energy Corporation**



Paul Edd Butler Vice Chair, Meade County RECC



William Denton Secretary-Treasurer, Kenergy Corporation



James Miller Corporate Counsel



John Warren **Kenergy Corporation**



Gary Joiner Jackson Purchase Energy Corporation



Dr. James Sills Meade County RECC



SENIOR LEADERSHIP TEAM

Left to right

Mark Eacret **VP Energy Services**

Jennifer Keach **Director Communications** and Community Relations

Tom Davis VP Administrative Services

Paula Mitchell **Executive Assistant**

Robert Berry President and Chief Executive Officer

Lindsay Barron Chief Financial Officer

Mike Pullen **VP Production** Mike Chambliss **VP System Operations**

Sharla Austin **Director Legislative Affairs** and Governmental Relations

Today, the three Member-Owners of Big Rivers serve more than 116,000 members in 22 western Kentucky counties.



JACKSON PURCHASE ENERGY CORPORATION

Dennis L. Cannon
President and CEO

SERVES

Ballard, Carlisle, Graves, Livingston, Marshall and McCracken Counties

HEADQUARTERED

Paducah, KY

NUMBER OF ACCOUNTS

29,835

MILES OF LINES

2,957



KENERGY CORPORATION

Jeffrey Hohn
President and CEO

SERVES

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

HEADQUARTERED

Henderson, KY

NUMBER OF ACCOUNTS

57,008

MILES OF LINES

7,135



MEADE COUNTY RURAL ELECTRIC COOPERATIVE CORPORATION

Martin Littrel
President and CEO

SERVES

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

HEADQUARTERED

Brandenburg, KY

NUMBER OF ACCOUNTS

29,480

MILES OF LINES

3,223

MEMBER-OWNER HEADQUARTERS



Kenergy Corporation

Meade County Rural Electric Cooperative Corporation







Big Rivers is proud to once again report that 2016 has been a year of positive development, and we are confident that our experienced leadership and valuable resources will result in additional growth and success moving forward.

Big Rivers Electric Corporation strives to safely deliver reliable power, continue to build a stable financial future for our company, and best serve our three cooperative Member-Owners—Jackson Purchase Energy Corporation, Kenergy Corporation and Meade County Rural Electric Cooperative Corporation. In a world of fast-changing challenges and opportunities, these commitments are kept first in every decision and choice we make. Big Rivers is proud to once again report that 2016 has been a year of positive development, and we are confident that our experienced leadership and valuable resources will result in additional growth and success moving forward.

Big Rivers' employees are one of the most critical pieces in our success, bringing us the skills, knowledge, and experience to overcome challenges and exceed expectations. To protect our most valuable assets, employee safety is the top priority. While the company has already achieved numerous awards and recognitions, we are constantly looking for new ideas

and actions to improve safety for everyone. Headquarters, Sebree Station, and Wilson Station all received another Governor's Health and Safety Award in 2016, giving Big Rivers a total of 42 and continuing to make us the most decorated entity in the Commonwealth. In addition to these accolades, the company was selected as a 2016 Kentucky Employers' Mutual Insurance Destiny Award winner for our safety accomplishments and honored by a visit from Kentucky's Lieutenant Governor Jenean Hampton. Most importantly, the real reward is reaching five years without a lost-time injury at all locations and knowing that our employees actively practice safety to protect themselves and each other.

Beyond our dedication to safety, Big Rivers is making a substantial investment in our employee knowledge base. The company is focused on helping our current leaders excel, while providing our future leaders with the industry experience and leadership training necessary to succeed. A number of new corporate education programs were launched in 2016, including

Partnership selected for MISO Competitive Transmission Project 312.9M

in Net Margins for 2016

Governor's Health and Safety Awards through 2016

a Supervisor Development Program and a Management and Leadership Program in partnership with Western Kentucky University. Big Rivers is also cultivating relationships between Big Rivers and our Member-Owners, creating a Cooperative Leadership Program in 2016 to foster better communication, industry experience, and talent development across the system.

Big Rivers continues to expand power marketing efforts across the Commonwealth and the country, securing shortterm and long-term contracts for our excess energy. Building on the 69 MW Nebraska contract set to begin in 2018, the Kentucky Public Service Commission approved a ten-year 100 MW Big Rivers contract with the Kentucky Municipal Energy Agency (KyMEA) in December 2016. KyMEA is an inter-local cooperation agency representing a number of city-owned utilities seeking a new power arrangement. Big Rivers was one of three suppliers selected for the KyMEA power portfolio, and the contract contains a potential increase of an additional 50 MW later in the term. Combined with significant internal load growth and economic development, these projects further stabilize Big Rivers' revenue and help ensure competitive rates for our Member-Owners.

The strength of Big Rivers' engineering and management, in conjunction with a LS Power and Hoosier Energy partnership, aided the company in securing the first Midcontinent Independent System Operation, Inc. (MISO) competitive transmission project in 2016. As part of the Duff-Coleman EHV 345 kV project, Big Rivers and its partners will implement, own, and operate a new transmission line extending approximately 30 miles from our Coleman EHV substation in Hancock County, Kentucky to Dubois County, Indiana. The proposal designed by Big Rivers and our partners provided the best balance of high-quality construction, cost, operations, and maintenance, and we were honored by MISO's selection for this innovative project. Big Rivers will be responsible for the four miles of transmission line in Kentucky, with construction scheduled to begin in 2018.

The 2016 year brought a number of changes to the power landscape and our nation, with new faces in both the state and federal government, shifting energy sources, and undecided environmental regulations. Navigating that uncertainty will be one of the biggest challenges for Big Rivers, our Member-Owners, and the industry. However, we remain confident that our leadership and skilled employees will continue guiding the company to long-term stability. Big Rivers is always analyzing the best use of our generating stations and researching how technological advancements and energy prices will impact future operations. In an effort to fully examine alternative power sources and provide hands-on information for our Member-Owners, Big Rivers will be installing seven small solar arrays across our service territory in 2017. The 120 kW solar project will also serve as an educational tool for local community members, teachers, and students, who will be able to view the arrays in person and monitor generation data online.

Big Rivers is focused on being viewed as one of the nation's top generation and transmission cooperatives, with our efficient assets, knowledgeable employees, power marketing excellence, advanced engineering, and strong relationships aligning us with that vision. In closing, we believe that these invaluable resources and advantages form an environment where Big Rivers is "Leading Together" and will continue leading in the future.

Robert W Bury Ways & Olan

Robert Berry

President & CEO

Wayne Elliott

Chair, Board of Directors

Safety is more than a word or concept at Big Rivers. It is a foundational element of our company culture and a key focus for each employee every day. This was proven once again in 2016, through the following safety achievements:

Coleman Station employees achieved **10 years** without a lost-time injury

Wilson employees achieved **9 years** without a lost-time injury and received their **14**th **Governor's Safety and Health Award**

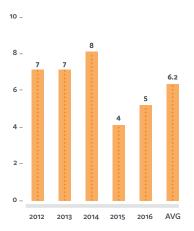
Sebree Station employees achieved **5 years** without a lost-time injury and received their **12**th **Governor's Safety** and **Health Award**

2016 Safety Achievements Transmission employees achieved **6 years** without a lost-time injury, **1 year** without a recordable injury

Headquarters employees achieved **5 years** without a lost-time injury, **4 years** without a recordable injury, and received their **3**rd **Governor's Safety and Health Award**

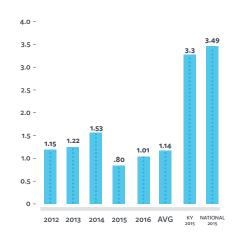
All employees achieved **5 years** without a lost-time injury

NUMBER OF RECORDABLE INCIDENTS*



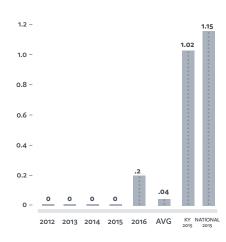
RECORDABLE INCIDENT RATE*

Incident Rate: Number of incidents x 200.000/number of hours worked

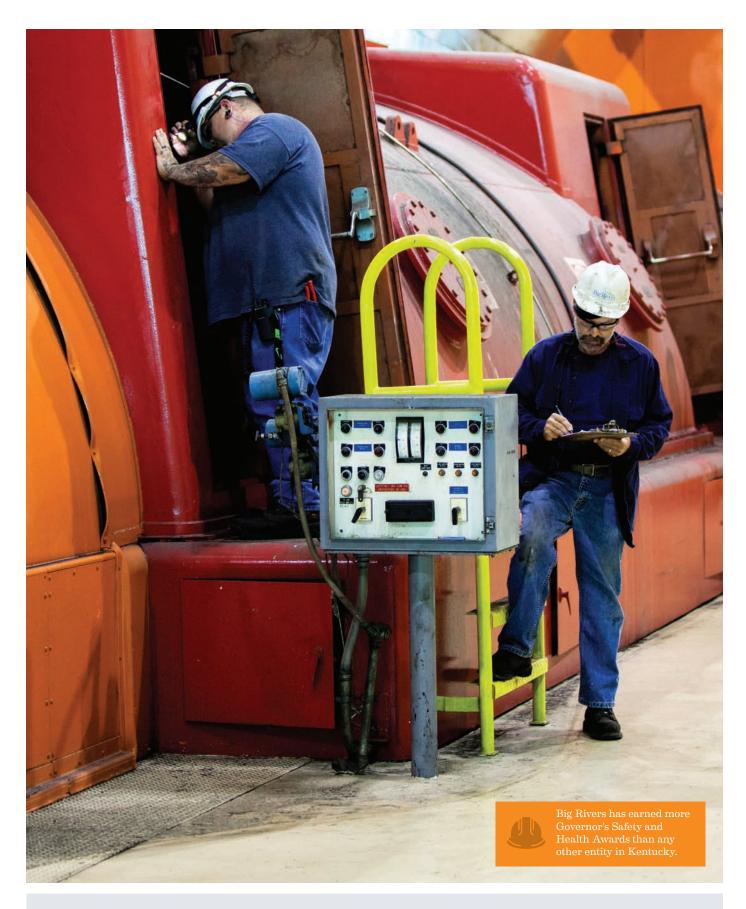


LOST-TIME INCIDENT RATE**

Incident Rate: Number of incidents x 200,000/number of hours worked.



- * Recordable Incident: An injury or illness that results in medical attention beyond first aid and/or results in modified work duty and/or lost-time from work.
- ** Lost-time incident: An injury or illness that causes an employee to miss one or more scheduled full workday(s) following the incident.



42 Governor's Safety and Health Awards



A New Partnership with Local Fire Departments Strengthens Safety at Big Rivers' Plant Locations and the Community

Big Rivers formed an official partnership with the Daviess County Fire Department in 2016. The fire department will now respond to high-angle rescue needs at Wilson Station. As part of the formal agreement, the company also provided the firefighters with the opportunity to train at plant locations. A similar agreement was signed with the Henderson Fire Department in 2010, providing response to high-angle rescue needs at Sebree Station.

Each year Big Rivers' safety leadership team participates in a variety of events and workshops to further promote the safety and wellness culture. In January 2016, approximately 250 contractors and employees attended the annual Contractor Kick-Off Meeting held in Philpot, KY. Big Rivers was also recognized by the Kentucky Safety & Health Network (KSHN) in appreciation for our sponsorship of the Governor's Safety and Health Conference. Safety personnel also assisted Member-Owners and the Kentucky Association of Electric Cooperatives with various workshops and training demonstrations throughout the year.

Going forward, the safety group will continue to focus on enhancing not only a safe working environment, but offer tools to incorporate a constant awareness of safety at home as well. One step towards this goal was the development of Big Rivers' annual Safety Vision book, which focuses on both work and home safety.

250

Big Rivers' contractors and employees attended the 7th Annual Contractor Kick-Off Meeting to promote our safety and wellness culture.



people educated by our new highvoltage safety trailer in 2016

volt arcs are simulated



"During demonstrations, you can tell when folks in the audience are learning; you can see it in teachers tell stories about how their children and students have utilized information learned

HIGHLIGHT // HIGH-VOLTAGE SAFETY DEMONSTRATION TRAILER

Big Rivers' mission puts the safety of our employees and our members first. As part of that commitment to provide power and protect people, the late 2015. The trailer is used to promote electrical safety to schoolchildren, adults, and area first responders. In 2016, Big Rivers had the opportunity to

energized from a local source, with attendees able to witness the effects of 7,200-volt arcs. While all of the demonstrations are potentially lifesaving, the Safety and Training Manager can modify the sessions with fun experiments for younger audiences and rescue-related information for local firefighters. The demonstrations are held across the Big Rivers' service territories and



Generation // Big Rivers has been providing the power supply to Member-Owners since 1966. Today, the Production Department oversees three generation facilities, utilizing a staff that operates and maintains those assets to the highest standards.

Operational Excellence and Continuous Improvement at the Plants

Throughout 2016, personnel at the plants continued to focus on operational improvement. Specific improvement areas include:

- Increased asset management through economic dispatch improvements, lower unit minimum generation levels, ancillary services, and PCI software implemented.
- New software and performance monitoring technology were added to improve heat rate at Wilson Station. The location was converted to Asset 360 in 2016, allowing the company to keep and update all existing data. The new system is accessible online to everyone within the company, opening usage and improvement opportunities to performance engineers, plant managers, production leaders and maintenance leaders.
- Big Rivers implemented a new fuels accounting and administration software in 2016. The ComTrac software is provided by Fusion Alliance and allows for improved planning of solid fuel and reagent shipments from the mines

and quarries to Big Rivers' various stations. The truck coal deliveries are uploaded via the plant truck scales to the software. The program then assists in collection of the various data to aid in tracking quantity and quality, along with also providing accounting information for contract payments.

 Reviewing and updating plant procedures and operating instructions.

Environmental Infrastructure Projects

The Mercury and Air Toxics Standards went into effect in April 2016. Plant upgrades were required at Sebree Station and Wilson Station for compliance, including the installation of Dry Sorbent Injection and Activated Carbon Injection systems. In addition, operating practices and increased documentation of work practices were required.

The Production Department is also planning for future regulations, such as Effluent Limitation Guidelines, by looking at new technologies for the plants. The department is also analyzing the costs and benefits of natural gas conversion for the coal-fired units.

Reliability Metrics for Big Rivers' generating units compared to its peer group 2011 Q3-2016 Q2

- O Lower is Better
- Higher is Better

Metric	Big Rivers Generating Units	Top Quartile	Peer Group Median
• EAF¹	89.61%	87.39%	81.21%
o EFOR²	5.14%	4.00%	6.98%
• NCF³	79.04%	69.30%	56.47%

- ¹ Equivalent Availability Factor Percentage of time a generating unit is available for power production at its full capacity
- ² Equivalent Forced Outage Rate Percentage of time a generating unit is unexpectedly offline or unable to obtain its rated capacity
- ³ Net Capacity Factor Percentage of the maximum generation actually generated

HIGHLIGHT // SEBREE STATION LANDFILL PROJECT

The Sebree Complex Landfill is the permitted on-site engineered landfill that accepts all of the fly ash, bottom ash, and flue gas desulphurization (FGD) byproducts of the electric generation process. Fly ash and dewatered FGD product are mixed with fixation lime at the process facility to form a stabilized material called Poz-O-Tec. The Poz-O-Tec and bottom ash are then transported to the landfill. However, this aging landfill created an engineering challenge for Big Rivers. The landfill was nearing the end of its useful life, with approximately 1.6 million cubic yards of open space remaining. Sebree Station produces approximately 875,000 cubic yards of material per year, leaving the complex with a little under two years of remaining fill capacity.

To extend the life of the landfill and keep costs as low as possible, Big Rivers had to be innovative. This innovation involved a thorough analysis of all possible alternatives for either creating a new landfill, offsite disposal, or expanding the capacity of the existing landfill. With current and future environmental regulations in mind, Big Rivers determined that expanding the capacity of the existing landfill was the most economically desirable option. This expansion involves a unique hybrid wall consisting of a 15-foot tall anchored soldier pile wall at the base of the perimeter that will act as the footer for the 45-foot high mechanically stabilized Poz-O-Tec (MSP) wall for an overall height of 60 feet. This hybrid wall will be used to encircle an area to be filled with Poz-O-Tec, increasing the capacity of the landfill to 13 million cubic yards and providing approximately 15 years of additional storage.

The wall construction will be completed in three stages. The anchored soldier pile wall section of Stage 1 is nearing completion, with the start of the MSP wall construction scheduled to begin in the spring of 2017.

"This project proves that Big Rivers is invested in conquering current and future challenges. Through innovations such as this and the desire to succeed, Big Rivers will continue to excel as one of the top G&Ts in the country."

Billy Boarman, Maintenance Supervisor



Energy Services // The Energy Services Department's ultimate goal is to identify long-term contracts for the capacity and energy beyond what is needed to serve our Member-Owners.

In its efforts to pursue increased sales to existing and new load, the department has successfully negotiated and continued to advance several contracts in 2016:

10-Year Contract Approval

In December, the Kentucky Public Service Commission (KPSC) approved a ten-year power supply contract with the Kentucky Municipal Energy Agency (KyMEA). Under the agreement signed in July, Big Rivers will provide 100 MW beginning in June of 2019. The KyMEA has an option to increase the size of the transaction to 150 MW.

Approval of Two Multi-Year Capacity Transactions

In November, the KPSC approved two multi-year capacity transactions, one with a group of municipal utilities in Missouri and one with a national power marketer. These transactions will fix the price that Big Rivers receives for a portion of its generating capacity for the next several years.

Short-Term Energy and Capacity Program

Also in 2016, Energy Services has continued to implement a short-term energy and capacity hedging program, reducing our exposure to the spot energy markets and MISO capacity auctions.

New Services to Begin in 2018

Additionally, work has continued on implementation of the agreements with our wholesale customers in Nebraska, in anticipation of service beginning in January 2018.

Finding customers for our capacity and energy in the shortand long-term will contribute to the stability of revenues, margins, and cash flow necessary for Big Rivers to achieve its financial objectives. Since 2013, Big Rivers has made offers totaling nearly 7,500 MW across 16 states and five regional transmission organizations.

Energy Services has also been involved with several projects for our Member-Owners:

Investing in Energy Efficiency Programs

We manage the energy efficiency programs for our Member-Owners, investing \$1M annually in such costeffective measures as upgrading commercial lighting, residential weatherization, and replacement of inefficient residential appliances.

Solar Energy

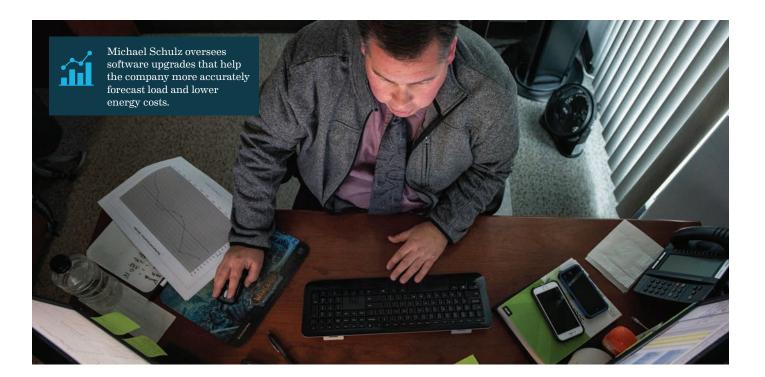
Energy Services has been managing a project to install seven small solar energy arrays on sites dispersed across our system, for educational and demonstration purposes. The 120 kW project is slated for the summer of 2017.

Using support from Alliance for Cooperative Energy Services (ACES), the Energy Services Department also manages our day-to-day commercial interactions with MISO such as load forecasts, generation offers, and settlement analyses. In 2016, Big Rivers installed new software to analyze MISO revenues and costs and went through a process to optimize existing software used for short-term load forecasting. The Energy Services Department stays involved with the longerterm MISO decision-making process through participation in working groups and committees.

7,500 + MW

offers in total across 16 states and 5 regional transmission organizations since 2013





"Not only will this project help us to more accurately predict our load and help keep our load costs down, but it will also allow us the opportunity to get hourly meter data loaded and sent to MISO each day. It helps to reduce the amount of energy being shifted through MISO Settlements, which allows Accounting to better reflect our financial position."

Michael Schulz, Energy Services Analyst

HIGHLIGHT // IMPROVED LOAD FORECASTING

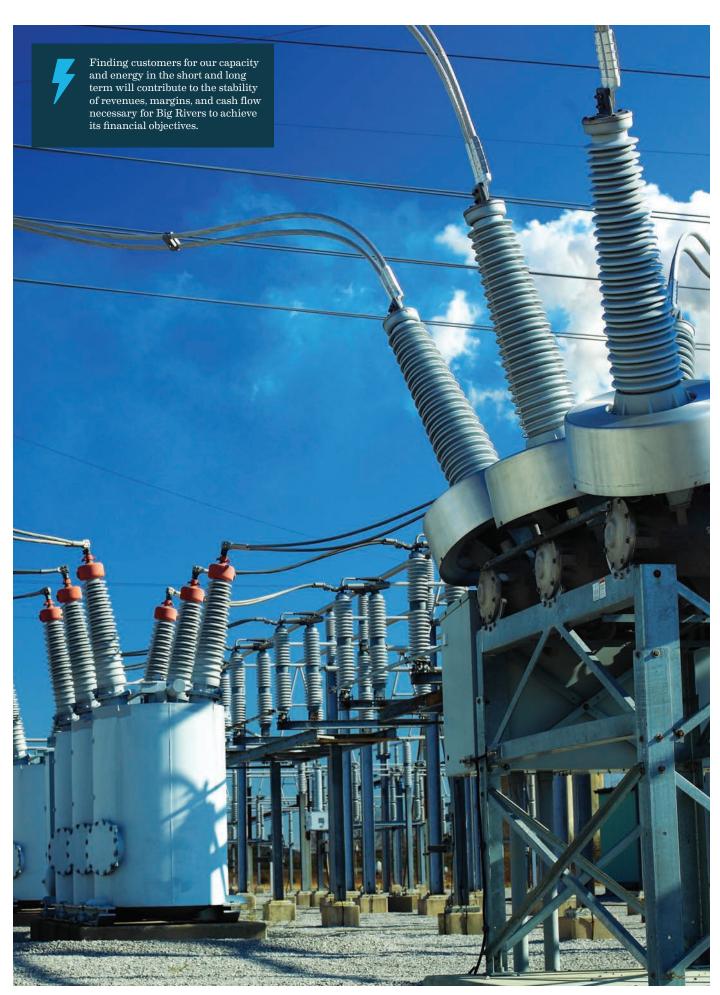
Every single day of the week, the Midcontinent Independent System Operator (MISO) wholesale energy market requires that both generation offers and demand bids are entered into its web-based system in order to calculate the energy needs and prices for the next day. The demand bid is the process through which Big Rivers submits its hour-by-hour load forecast for the following day. The load forecast entails an in-depth analysis of historical meter data for a set of weather parameters that is set against seasonal, outage, and day of week expectations.

A software system is typically used to record the latest hourly meter data, pull in weather forecasts for the local area, and then analyze against historical data to create an hour-by-hour load forecast curve for the next day. However, the software being used was out of date, and the issue was creating load forecasts that were no longer accurate. An upgrade project was needed in order to update the software, revise and simplify models, and to re-weight the weather forecast stations. This updated

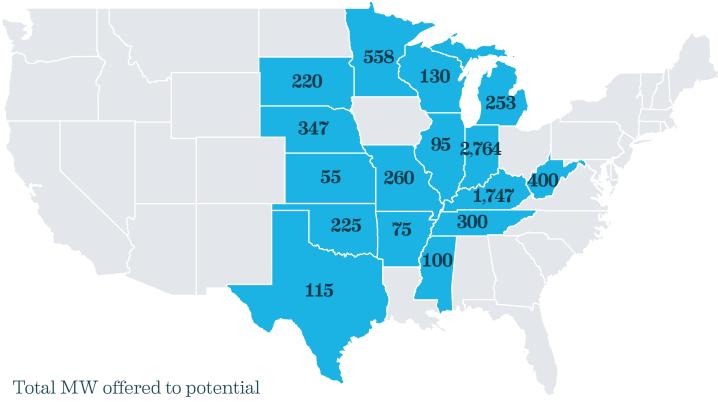
software would also introduce a newly-developed neuralnetwork capability that allows the software to learn and self-adjust its modeling behavior based on the latest actual meter and weather data.

The contract agreement process for the new software began in early 2016, and the new software infrastructure and design were completed and ready for remote installation by June. The system was also incorporated into newly in-house developed spreadsheets used for load forecasting and put into use at the beginning of July. After a month of utilization, considerable improvement in forecast accuracy was seen.

The main purpose of forecasting our hourly load each day is to predict as closely as possible how much load Big Rivers will actually realize in the Real-Time Market. This helps to reduce energy costs, distribution fees, and rates, allowing Big Rivers to lower overall costs associated with purchasing the energy to cover load.



Marketing Contacts by State (MW)



transactions nationwide:

7,644 MW

MISO

PJM

SPP

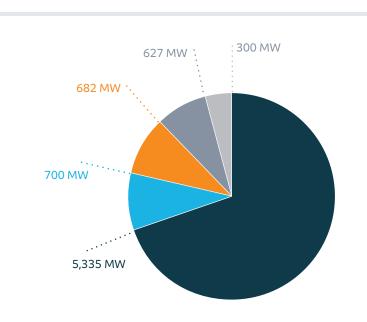
TVA

OTHER

MW Potential

(BY REGION)

The Energy Services Department has made more than 70 marketing contacts across the Midwest and South. These charts demonstrate where the potential transactions originate from by state and by transmission regions.



Transmission // The Transmission and Engineering Departments are dedicated to delivering reliable electricity service to thousands of homes and businesses across western Kentucky and beyond.

The departments operate and maintain a complex system of 1,297 miles of transmission line and 24 transmission substations, connecting us to seven neighboring utilities. Big Rivers initiated and/or completed several improvements and additions in 2016:

Aleris Lewisport Aluminum Mill

The Aleris Lewisport Aluminum Mill, a Kenergy industrial customer, is completing a major expansion to its facility. The project required the construction of a new direct serve delivery point substation and three 161 kV transmission lines. The substation and the first line were energized and placed in service in 2016. Two other transmission lines are under construction and will allow for a back-up feed to the new mill load and to the existing plant.

Meade County RECC

The Meade County RECC load continues to grow, causing a need for additional transformation at the Meade County 161 kV to 69 kV Substation. In 2016, Big Rivers completed the installation of two 100 MVA autotransformers at this location. The installation freed up the two existing 50 MVA transformers, which will be utilized on future projects.

Radio Controlled Switching

Big Rivers completed the replacement and upgrade of the Radio Controlled Switching (RCS) system. These modifications included installation of six transmitter sites and the replacement of 46 RCS remote enclosures. This upgraded system will allow for significant expansion of the number of RCS installations.

New RCW Installations

Big Rivers continued to expand the number of 69 kV RCS installations, replacing two manually-operated 69 kV switch points with steel poles, switches, interrupters and motor operators at Custer, Irvington, and Hawesville in 2016. Radio control at these sites will improve our ability to quickly and remotely sectionalize and restore the Member-Owner substations following service interruptions.

New Transformation Source Installation

With the increased loading in the eastern portion of the Jackson Purchase service territory, a new transformation source was needed in Marshall County. In 2016, Big Rivers completed the White Oak 161 kV to 69 kV substation with a 50 MVA autotransformer between Culp, Ledbetter, and Palma Junction to meet this need.

Growth in Daviess and Breckinridge Counties

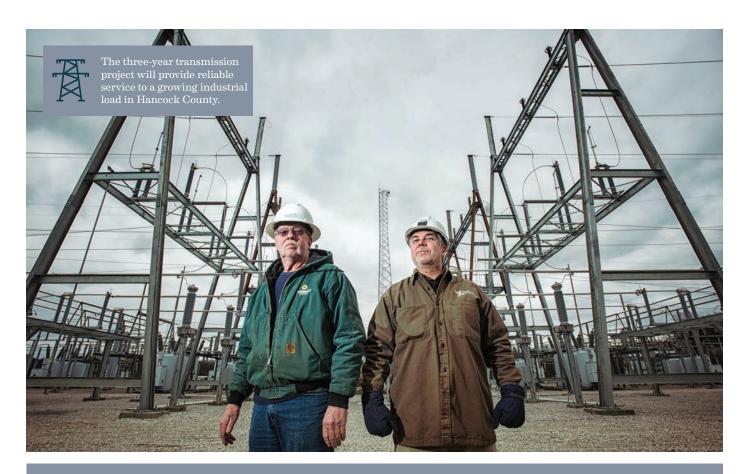
Load growth in central Daviess County and southeastern Breckinridge County resulted in 69 kV service and metering addition projects at two substations. Kenergy's Horse Fork Substation required a bay addition at that existing substation, while a greenfield substation was added by Meade County RECC at Centerview.

miles of transmission line systems owned, operated and maintained

transmission substations owned, operated and maintained

interconnections link the Big Rivers transmission system with seven neighborhoods





"The Aleris 161 kV Transmission Line Project posed some unique challenges. A portion of the line involved a special 161 kV double circuit design, along with two separate single circuit designs. This type of arrangement had never been utilized on the Big Rivers transmission system. Big Rivers Engineering designed all the steel structures in-house using our proprietary software, along with AutoCAD and Southwire Sag10 design programs."

Dale Rector, Engineer IV

HIGHLIGHT // ALERIS 161 KV TRANSMISSION LINE EXPANSION PROJECT

The Aleris expansion project includes the design and construction of a new substation and three 161 kV transmission lines: one now completed line from the Big Rivers Hancock County Substation to the new LAM-2 (Lewisport Aluminum Mill) Substation, one new line from the Big Rivers Coleman EHV Substation to the LAM-2 Substation, and another new line from the Coleman EHV Substation to the existing Aleris LAM-1 Substation. All three lines are located in northern Hancock County.

The project's purpose is to provide for the increased load resulting from the expansion of the Aleris International aluminum mill near Lewisport, KY. The combination of these three lines will also increase the reliability of the 161 kV transmission system serving this Kenergy industrial customer.

This extensive project involved a routing study, CPCN approvals, and environmental work to attain the required approvals from state and federal agencies. Right-of-way acquisition, unique line design requirements, materials procurement, clearing, line construction, and construction management were also coordinated.

Planning for this project started in 2014, with the first transmission line constructed in 2014-2015. Completion of the Coleman EHV- LAM-2 line is expected by April 2017, while the Coleman EHV-LAM-1 line is scheduled for completion in the summer of 2017.

Environmental Services // Big Rivers is dedicated to providing reliable and cost-effective electricity to our Member-Owners.

That focus extends to our efforts to protect the environment where we live and work. The Environmental Services

Department manages compliance with all existing federal and state requirements and develops plans to meet proposed regulations. The highly-experienced team faces an increasing number of rules and regulations released each year.

The Coal Combustion Residual (CCR) rule requires utilities to revisit construction designs, develop plans for storm water management and seismic stability as well as monitoring the groundwater quality for ash ponds and landfills. A professional engineer is required to certify plans and studies related to operation of ash ponds and landfills prior to the posting of the information on a public web site. Big Rivers is on track to meet the requirements of the CCR rule.

In addition to the CCR rule, the Effluent Limitation Guidelines (ELG) rule will require changes at the Big Rivers facilities. The major change will come in the handling of bottom ash. The new rule requires that bottom ash ponds be phased out and replaced with dry bottom ash handling systems. Big Rivers initiated a contract with Burns and McDonnell Engineering to develop options to comply with the rule. The study will be

completed in early 2017 and installation of dry bottom ash systems will be completed to meet the compliance deadline.

A primary concern for coal-fired utilities, like Big Rivers, is the Clean Power Plan (CPP). The final rule was announced in summer 2015 and requires states to reduce CO2 emissions by 32% by 2030 from 2005 levels. The U.S. Supreme Court granted a stay in 2016 of the CPP, and it is currently under review by the U.S. Court of Appeals for the District of Columbia. A decision by the Court of Appeals is not expected before mid-2017 and a final judgement by the U.S. Supreme Court is not expected before 2018.

Two generating facilities were required to complete multimillion dollar projects to comply with the Mercury Air Toxics Standard (MATS). The regulation became effective in April 2015, and many utilities, including Big Rivers, were granted a one-year extension. The control technology is operational and Big Rivers is meeting the requirements of the new rule.

Environmental Services continues to study all pending legislation to optimize compliance and find the best value for our Member-Owners.





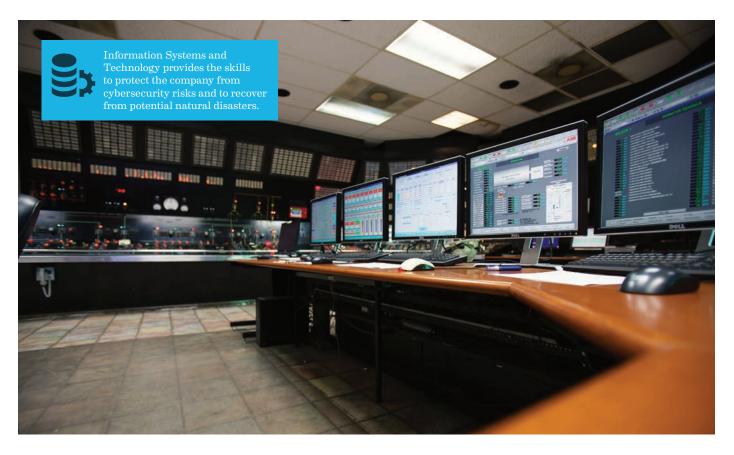
"By having the capability to analyze mercury traps in our lab, we provide instead of waiting for samples to arrive and be analyzed at another lab."

HIGHLIGHT // MERCURY TESTING

analyses of mercury traps for HMP&L 1 and HMP&L 2 in 2015. These traps capture mercury that is released during how much mercury is generated from each unit. There are two types of traps we currently analyze: one-hour traps used for spot checking process monitors and traps that span several days for use in calculating how much mercury is being released during that time period. Big Rivers' Central Laboratory analysis provides evidence that we are

The traps are long glass tubes with two to three sections separated by glass wool. Each section is made up of

through the trap. When analyzing, the tube is cut to allow the chemist to pour the activated carbon into a glass boat. The carbon is then covered with sodium carbonate and placed in a furnace at 680 degrees Celsius. This temperature releases the mercury from the carbon and the gases pass through a small atomic absorption spectrometer, which detects how many nanograms of mercury were caught by the activated carbon. The concentration of mercury in the trap is then used to calculate what volume of mercury is passing through the stack.



Accounting, Production, Environmental, Human Resources, and Transmission // Information Systems and Technology provides support, advancement, and protection for every department.

The Information Systems & Technology Department implements new user-friendly systems and provides technology support for Big Rivers and our Member-Owners, using third-party software and developing technology inhouse. Investments and projects completed in 2016 include:

Ubiquity Radio System at Meade County RECC

The Information Systems and Technology Department installed ubiquity radios to connect the Meade County Brandenburg and Hardinsburg locations allowing for increased bandwidth between the two locations which created a much better backup scenario.

Fixed Assets Conversion

The Fixed Assets conversion team consisting of Information Systems, Accounting, and HP successfully converted the AS/400 Fixed Assets system to Oracle. The project went live in May 2016. In addition to migrating Fixed Assets from the AS/400, the new system is fully integrated with our Oracle ERP system.

MATS Environmental Regulations

In order to adhere to newly-implemented environmental regulations, software enhancements were made in relation to the Mercury and Air Toxics Standard (MATS) project. New MATS inventory items were added to the Oracle system in January 2016. Information Systems and HP worked with the plants in order to load the assets into the Oracle EAM system.

Affordable Care Act

In order to fulfill the requirements of the Affordable Care Act (ACA), Information Systems and HP worked closely with Human Resources to generate the 1095c forms that report employee and dependent medical insurance coverage for the prior year. The federally-mandated forms were mailed to all employees (form 1095c) and retirees (form 1095-B) prior to the March 2016 deadline and the electronic version was sent to the IRS.

Energy Control Reliability Dashboard

The Information Systems & Technology Department created a reliability dashboard for Energy Control. The dashboard measures outage statistics (SAIDI, CAIDI, SAIFI) from the information captured from the Interruptions application.

Disaster Recovery Test

Big Rivers' has successfully completed a Disaster Recovery test of the AS400 by restoring the system from Headquarters to an AS400 at the Disaster Recovery Center. A revenue billing report was run at the Disaster Recovery Center, ensuring the data was the same as the last billing. The Information Systems & Technology Department and HP also successfully performed the annual Oracle/Hyperion Disaster Recovery test in April 2016, simulating the destruction of the Oracle system at Headquarters.

The Disaster Recovery servers were connected to Headquarters, allowing testing of Oracle applications using the backup systems and data. Personnel from IS/IT, HP, payroll, and AP physically went to the Disaster Recovery Center and processed payroll and Accounts Payable checks.

Member-Owner Support

The Information Systems & Technology Department management team meets with each Member-Owner and assists as needed with shared services, budget planning, cybersecurity training, and cyber vulnerability assessments.

HIGHLIGHT // CYBER INFRASTRUCTURE PROTECTION AUDIT AND PROCEDURES

Big Rivers is constantly changing and evolving in our cybersecurity posture. As a member of the electric industry, we are aware that our organization is far from immune to cyber threats. In 2007, Big Rivers began the development of a federally-mandated Cyber Infrastructure Protection (CIP) Program for the protection of our most critical cyber systems.

Today, 10 CIP Standards, containing 33 requirements and 98-sub requirements, govern Big Rivers' CIP Program. On July 1, 2016, Version 5 of the CIP Standards became enforceable. Version 5's tiered classification brings all Bulk Electric System generating and transmission facilities into scope.

July 2016 marked the successful culmination of an exhaustive two-year team effort to prepare for our federal audit, as members from the SERC Reliability Corporation audited Big Rivers' CIP compliance program. As the first entity in the SERC Region to be audited under the new requirements, it was extremely rewarding to receive positive results. SERC stated in its report an "observation of factors that characterize vigorous and effective compliance programs."

"Cybersecurity is an everpresent concern for utilities, faced with nearly constant threats to infrastructure. To combat this serious risk, Big Rivers dedicates a talented and educated team to protecting our system. Having those efforts reaffirmed as vigorous during a government audit is extremely rewarding and encourages our future cybersecurity development."

Greg Jones, Senior Systems Engineer



Administrative Services officially launched its "Big Rivers People Strategy" in 2015, beginning a number of new programs to engage employees and establish the company as the employer of choice in the community and the industry.

This campaign continues to work toward hiring, developing, and retaining top talent, plus further integrating performance management and leadership development into our succession planning process. Big Rivers has set a goal of soon earning recognition as one of Kentucky's "Most Healthy Companies" and "Best Places to Work." Key department developments for 2016 include:

Health and Wellness Initiative

The mission of the Wellness Plan is to put the health, well-being, and safety of Big Rivers' workforce first. After a successful development in 2015, the wellness program was strengthened in 2016 with the addition of incentives for healthy living. Sixty-five percent of Big Rivers' workforce are participating in incentives that promote attendance at company-sponsored health fairs, regular visits with a visiting health care advocate, preventive care from a primary care physician, participation in Fitbit challenges, and becoming or remaining nicotine-free. Big Rivers also supports financial wellness for its employees. One-on-one financial and retirement counseling sessions with a Fidelity certified financial planner were offered at each location in 2016.

Changing Demographics

The Administrative Services Department is in the process of planning for a significant number of upcoming retirements during the next five years. The company could experience anywhere from 20-25% of its workforce retiring during that time period. The majority of these positions come from our highly-skilled craft, operator, and technician positions, as well as a number of leadership positions. Proper planning and knowledge transfer is now taking place so that Big Rivers is ready for the change from a baby boomer to a millennial centric workforce. The company has also completed full succession planning down to the manager level and has offered leadership development programs in the area of generational change in the workplace.

Leadership Development

Big Rivers is on a journey of leading and learning together. Emphasis is being placed on training management because they play one of the greatest influential roles in developing a positive work environment. There is a focus on training and retaining top talent to prepare them for future opportunities since there will be numerous upcoming retirements. Partnering with Western Kentucky University, Big Rivers offered a Supervisor Development program and a Management and Leadership program for selected employees. Non-bargaining employees were also eligible to attend Basics in Employment Law and Business Communication courses. A Cooperative Leadership Development program was launched in 2016 and includes participants from Kenergy, Jackson Purchase Energy Corporation, Meade County RECC and Big Rivers. This new program focuses on cultivating current and future leaders, increasing industry knowledge, enhancing understanding of the overall cooperative system, and developing sustainable relationships between companies.

Employee Engagement

Administrative Services continues to make progress on the employee engagement survey recommendations through focus group meetings and developing action plans. One primary focus has been on increased company-wide communications, including enhanced management to employee communications and involvement, recording of CEO and VP employee meetings for shift workers, installation of additional message board monitors, newsletter articles, and FMLA informational meetings. Other programs include team-building exercises, opportunities for feedback and employee input, cross-training, recognition, and greater awareness of Big Rivers' Mission, Vision, and Values.

Successful Contract Negotiations for Generation Employees

A new four-year labor agreement was ratified in October 2016, covering the 27 transmission division employees represented by IBEW Local 1701. The company and union negotiating committees worked diligently to reach a mutual agreement that continues to focus on safety, business and employee needs.



"I've invited more employees to tour different local facilities, so they can see firsthand the need that is in our communities. These employee volunteers come from a wide variety of backgrounds and ages, and they can communicate their experiences to their coworkers. The tours then help employees encourage others to contribute their time or money."

Tommy Howard, Lines Crew Leader and Chairman IBEW Local 1701

HIGHLIGHT // UNITED WAY EMPLOYEE LEADERSHIP

One of the largest sources of community giving at Big Rivers comes through the annual United Way campaign. The Campaign for 2016 resulted in a 10% increase in giving and the highest level of contributions on record. Combined with a corporate match, the entire contribution totaled more than \$233,000. The Campaign for 2017 has once again beat that giving record.

While the Administrative Services Department oversees the United Way campaign each year, much of the success can be attributed to employee leadership. Employees, instead of management, at each location step up to organize kick-off events and develop creative ways to encourage giving. These employee volunteer teams come from different levels within the company, making United Way campaigns a true grassroots effort.

ET&S is one example where employee leadership has greatly impacted United Way contributions. In 2015, giving levels for the location hovered at approximately 45%. However, when Union Leader Tommy Howard and a team of location volunteers took over the campaign, contribution levels jumped to 85% in 2016. Howard and the team organized community organization tours, allowing employees to visit local charities and see the programs their contributions support.

Big Rivers is hoping to continue developing this growing program in 2017. While financial donations represent the primary component of the United Way Campaign, the Administrative Services Department is also looking for new volunteer opportunities. These programs would give employees the chance to serve the local community with donations of time and energy.

Legislative Affairs

Big Rivers advocates on behalf of our Member-Owners on state and national issues in order to protect the interest of the communities and citizens we serve. One full-time employee is dedicated to legislative affairs and represents cooperative interests across Big Rivers' service area, Frankfort and D.C.

2016 General Assembly

The 2016 Kentucky General Assembly wrapped up April 15, 2016. Proposed legislation aimed at cost recovery of environmental regulation compliance, eminent domain, open records requirements, and customer charge were just a few of the issues that raised concern across the industry. Combined lobbying efforts of utilities across the state resulted in preventing any negative changes to existing or proposed legislation to reach a committee vote. The passage of HB 283 established April 18, 2016 as National Lineman Appreciation Day and recognized the heroic efforts of utility linemen on a daily basis.

Clean Power Plan

Utilities across the nation celebrated a truly historic moment February 9, 2016, when the Supreme Court granted a stay on the EPA's Clean Power Plan. The EPA plan targets coal, the main source of Kentucky's electricity, in new and aggressive limits on carbon emissions. By temporarily halting enforcement of this rule, the Supreme Court sent a strong signal to the D.C. Court of Appeals who heard oral arguments in September on whether the rule should be overturned.

Co-ops Vote

The Touchstone Energy Cooperatives of Kentucky announced its Co-ops Vote Campaign on April 27, 2016. Kentucky Secretary of State Alison Lundergan Grimes endorsed the non-partisan

effort by joining electric cooperative leaders and Frankfort Youth Tour high school students in the state Capitol to kick-off the campaign and encourage all Kentuckians to get out and vote. The Kentucky effort is part of a nationwide initiative sponsored by the National Rural Electric Cooperative Association (NRECA) to educate and engage voters with information on voter registration, candidates, and electric co-op priorities. Big Rivers also participated in the effort with a social media campaign, employee voter registration drive, and a mock election held at Headquarters on November 7th. These efforts earned Big Rivers "5 Star Status" from NRECA. Rural voter turnout during the 2016 election was at an all-time high and research is currently ongoing to find any correlation between the program and its impact on election results.

Political Visits

During his Kentucky tour in July 2016, Senate Majority Leader Mitch McConnell requested a visit with Big Rivers' management team. Big Rivers' mitigation plan and outlook of the state's energy industry were topics of discussion.

On August 31, 2016, Kentucky's Lt. Governor Jenean Hampton spoke to a group of Big Rivers' employees at the Sebree Station. She praised Big Rivers' commitment to safety, and toured the facility along with her staff and management of Big Rivers.

Recognition of our efforts by policymakers at both the state and national level reflects the level of commitment Big Rivers has made to ensure our Member-Owners' interests are communicated and protected across the communities we serve.

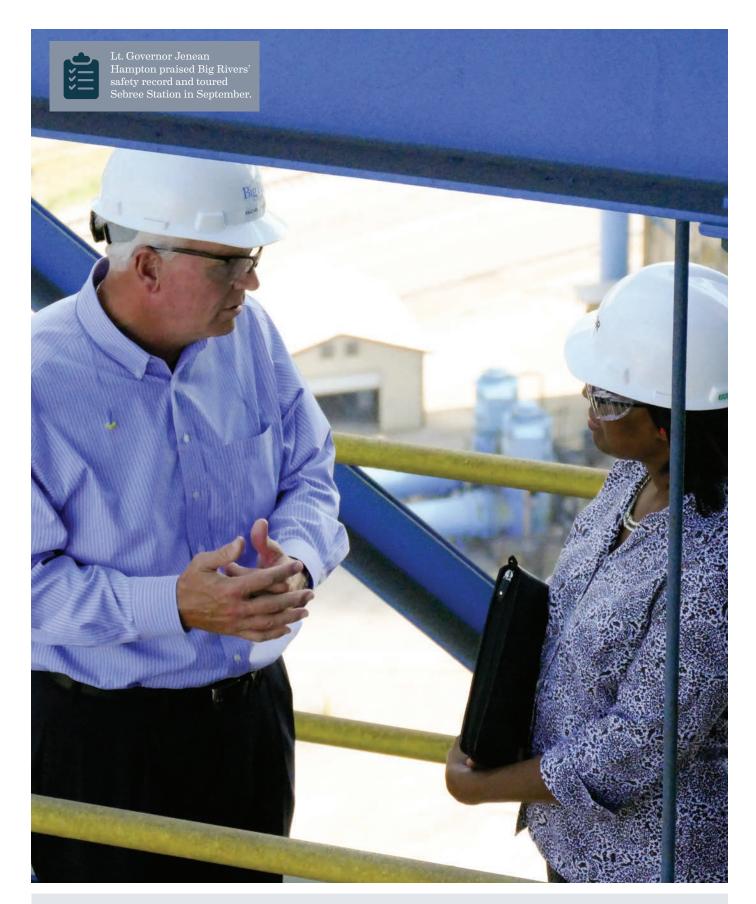
Economic Development

Big Rivers and its Member-Owners are dedicated to attracting and retaining business and jobs in western Kentucky through increased efforts in economic development. When an industry seeks to enter or expand within the service territory, Big Rivers provides support to the Member-Owners throughout the proposal and building process. Big Rivers also offers one of the most competitive economic development incentive rate discounts in the nation for qualifying expanding and new businesses. The Economic Development Incentive Rate provides a 90% reduction on demand charge and is eligible to companies that relocate, expand or build with a load greater than 1,000 kW.

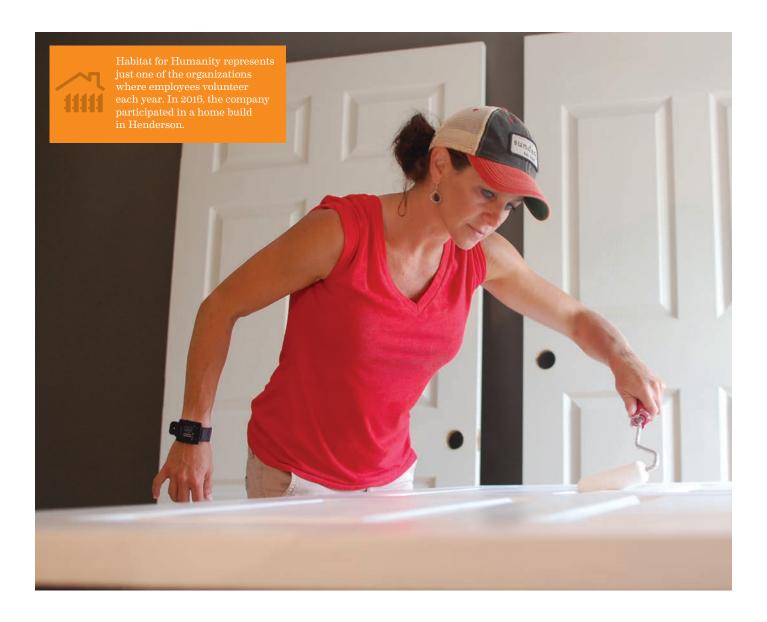
The Economic Development team, comprised of both Big Rivers and Member-Owner representatives, actively assists local

economic development organizations by providing financial support, serving on boards, and promoting available sites within our service territory. The Economic Development team also works closely with the Kentucky Cabinet for Economic Development. In 2016, the team participated in a Kentucky Cabinet for Economic Development community visit in the spring and hosted a luncheon for Cabinet staff in the fall.

Along with our Member-Owners, Big Rivers continues to participate in Kentucky Association for Economic Development's (KAED) marketing arm, KY United. Big Rivers and Member-Owner representatives attend recruiting events across the nation and networking events throughout the state as a part of this elite group.



Big Rivers' Economic Development Incentive Rate provides a 90% reduction on demand charge for companies that relocate or expand with a load greater than $1,\!000~kW.$



Community Relations // Big Rivers is committed to being a positive community member across the 22-county service territory.

Big Rivers is committed to being a positive community member across the 22-county service territory. The company seeks to support local organizations and charities that strive to make western Kentucky a great place to live and work for everyone. Big Rivers encourages employees to donate their time and energy to local agencies, and the company provides financial donations to charities, foundations, and community events totaling approximately \$95,000 for the year.

In 2016, Big Rivers organized teams of employees to volunteer on a Habitat for Humanity build in Henderson. Numerous employees also dedicate their time to projects and community boards. The company encourages these efforts with a contribution program, where employees actively participating in a local organization are eligible to receive a \$100 donation for their charity.

Big Rivers makes investing in the region and our home communities a top priority. Improvements to the prominent, downtown Henderson Headquarters location continued in 2016, with the addition of new paint and signage at the Training Center and Central Laboratory. This follows a \$140,000 improvement project at Headquarters in 2015. The Training Center will be utilized for community functions in early 2017.

United Way Campaign*

of employees contributed

\$326.53

was the average donation per employee

employees are donating equal to or greater than one hour's pay per month

\$165,225.72 Total Employee Donation

\$82,612.86 Corporate Donation (50% of Employee Total)

\$247,838.58

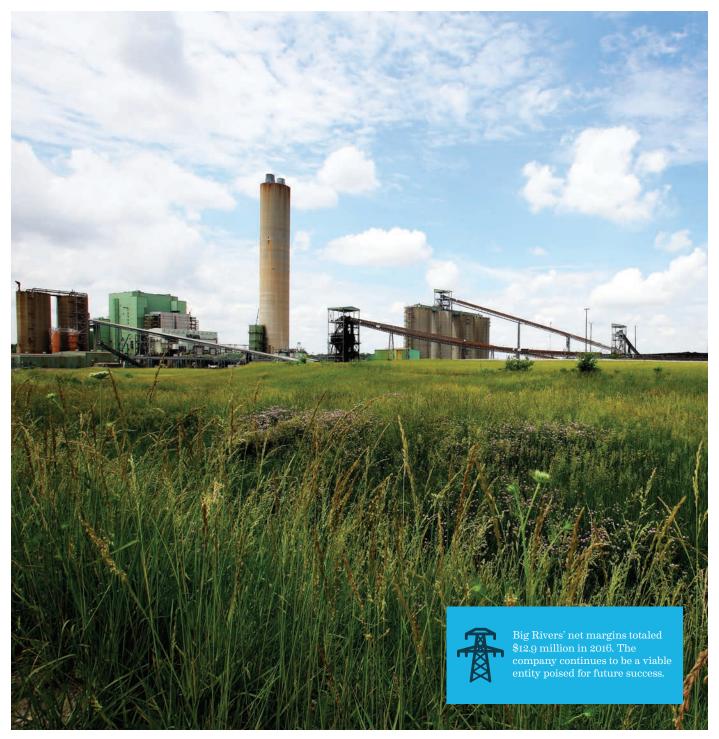
Total United Way Contribution for 2017 Giving Year

^{*} For 2017 giving year

MEASUREMENT	2017	2016
Employee Participation Rate	75%	75%
Headcount	506	511
Employee Contribution	\$ 165,225.72	\$ 155,970.92
Corporate Contribution	\$ 82,612.86	\$ 77,985.46
Grand Total	\$ 247,838.58	\$ 233,956.38

Continued Financial Performance // Big Rivers continues to meet its targeted financial metrics.

Despite the softest power market in memory, Big Rivers continues to meet its required debt covenants, maintain a healthy level of liquidity, and grow its already impressive equity level. With financial metrics that far exceed its credit ratings, Big Rivers continues to prove that it is a viable entity poised for continued future success.



Financial Overview

Net Margin (\$ IN MILLIONS)



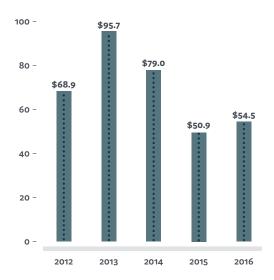
Equity (\$ IN MILLIONS)



Electric Energy Revenues* (\$ IN MILLIONS)



Cash and Cash Equivalents and Short-Term Investments (\$ IN MILLIONS)



^{*} For year ended December 31, 2016, the Company made a voluntary change in accounting principle from one acceptable method to another. The accounting classification change was applied retrospectively to the years ended December 31, 2015 and 2014 which are presented in the Company's audited financial statements. See note 1(s) of the audited Notes to Financial Statements for further discussion.



BIG RIVERS ELECTRIC CORPORATION

Financial Statements

December 31, 2016 and 2015

(With Independent Auditors' Report Thereon)



KPMG LLP 1601 Market Street Philadelphia, PA 19103-2499

Independent Auditors' Report

The Board of Directors and Members Big Rivers Electric Corporation:

Report on the Financial Statements

We have audited the accompanying financial statements of Big Rivers Electric Corporation, which comprise the balance sheets as of December 31, 2016 and 2015, and the related statements of operations, comprehensive income, equities, and cash flows for each of the years in the three-year period ended December 31, 2016, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly in all material respects, the financial position of Big Rivers Electric Corporation as of December 31, 2016 and 2015, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2016, in accordance with U.S. generally accepted accounting principles.



Report on Other Legal and Regulatory Requirements

In accordance with *Government Auditing Standards*, we have also issued a report dated April 5, 2017, on our consideration of Big Rivers Electric Corporations' internal control over financial reporting and our tests of their compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. The report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in assessing the results of our audits.



Philadelphia, Pennsylvania April 5, 2017

Balance Sheets

December 31, 2016 and 2015

(Dollars in thousands)

Assets		2016	2015
Utility plant – net	\$	1,051,970	1,079,827
Restricted investments – Member rate mitigation		312	24,315
Restricted investments – NRUCFC Capital Term Certificates		36,859	38,503
Other deposits and investments – at cost		15,467	9,290
Current assets:			
Cash and cash equivalents		48,584	42,988
Short-term investments		5,913	7,883
Accounts receivable		38,277	31,650
Fuel inventory Nonfuel inventory		56,600 24,514	78,446 24,680
Prepaid expenses		6,955	3,505
	_		
Total current assets	_	180,843	189,152
Deferred charges and other:			
Regulatory assets		86,468	59,271
Other	_	5,670	2,769
Total deferred charges and other	_	92,138	62,040
Total	\$_	1,377,589	1,403,127
Equities and Liabilities			
Capitalization:			
Equities	\$	478,152	464,661
Long-term debt	_	791,253	804,415
Total capitalization	_	1,269,405	1,269,076
Current liabilities:			
Current maturities of long-term obligations		22,576	21,717
Line of credit		26,000	26,000
Purchased power payable		866	1,091
Accounts payable		17,624	22,971
Accrued expenses Accrued interest		9,190 4,555	8,431
	_	,	4,630
Total current liabilities	_	80,811	84,840
Deferred credits and other:			
Regulatory liabilities – member rate mitigation		327	21,530
Asset retirement obligations		7,279	6,973
Deferred credits and other	_	19,767	20,708
Total deferred credits and other	_	27,373	49,211
Commitments and contingencies (note 13)	_		
Total	\$_	1,377,589	1,403,127

Statements of Operations

Years ended December 31, 2016, 2015, and 2014

(Dollars in thousands)

	_	2016	2015	2014
Operating revenue	\$_	402,590	403,549	487,072
Total operating revenue	_	402,590	403,549	487,072
Operating expenses: Operations:				
Fuel for electric generation		144,148	146,179	164,220
Power purchased and interchanged		80,341	74,136	98,389
Production, excluding fuel		43,730	39,502	41,942
Transmission and other		38,085	38,030	54,338
Severance expense Maintenance		33,791	— 39.851	(6,012) 45,591
Depreciation and amortization		19,523	18,636	19,655
Depreciation and amortization	-	19,525	10,030	19,000
Total operating expenses	_	359,618	356,334	418,123
Electric operating margin	_	42,972	47,215	68,949
Interest expense and other:				
Interest		40,711	40,205	40,987
Income tax benefit		(6,748)	(77)	_
Other – net	_	846	464	194
Total interest expense and other	_	34,809	40,592	41,181
Operating margin	_	8,163	6,623	27,768
Nonoperating margin:				
Interest income and other	_	4,742	4,593	4,899
Total nonoperating margin	_	4,742	4,593	4,899
Net margin	\$ _	12,905	11,216	32,667

Statements of Comprehensive Income

Years ended December 31, 2016, 2015, and 2014

(Dollars in thousands)

	_	2016	2015	2014
Net margin	\$	12,905	11,216	32,667
Other comprehensive income: Defined-benefit plans:				
Prior service cost		1,198	_	1
Actuarial gain (loss)		(2,591)	306	(2,223)
Amortization of loss	_	328	750	419
Defined-benefit plans	_	(1,065)	1,056	(1,803)
Postretirement benefits other than pensions:				
Prior service cost		(138)	(138)	(138)
Actuarial gain (loss)		2,021	611	(1,154)
Amortization of (gain)	_	(232)		(144)
Postretirement benefits other than pensions	_	1,651	473_	(1,436)
Other comprehensive income (loss)	_	586	1,529	(3,239)
Comprehensive income	\$ _	13,491	12,745	29,428

Statements of Equities

Years ended December 31, 2016, 2015, and 2014

(Dollars in thousands)

				Other e		
	_	Total equities	Retained margin	Donated capital and memberships	Consumers' contributions to debt service	Accumulated other comprehensive income/(loss)
Balance - December 31, 2013	\$	422,488	417,014	764	3,681	1,029
Net margin		32,667	32,667	_	_	_
Pension and postretirement benefit plans	_	(3,239)				(3,239)
Balance – December 31, 2014		451,916	449,681	764	3,681	(2,210)
Net margin		11,216	11,216	_	_	_
Pension and postretirement benefit plans	_	1,529				1,529
Balance – December 31, 2015		464,661	460,897	764	3,681	(681)
Net margin		12,905	12,905	_	_	
Pension and postretirement benefit plans	_	586				586
Balance - December 31, 2016	\$ _	478,152	473,802	764	3,681	(95)

Statements of Cash Flows

Years ended December 31, 2016, 2015, and 2014

(Dollars in thousands)

	_	2016	2015	2014
Cash flows from operating activities:				
Net margin	\$	12,905	11,216	32,667
Adjustments to reconcile net margin to net cash provided by operating activities:			·	
Depreciation and amortization		24,497	23,822	22,881
Interest compounded – RUS Series A Note		53	50	47
Interest compounded – RUS Series B Note		9,180	8,667	8,182
Noncash member rate mitigation revenue		(25,116)	(54,062)	(65,945)
Provision for deferred income tax benefit		6,509	_	_
Changes in certain assets and liabilities:				
Accounts receivable		(6,626)	2,183	15,045
Inventories		22,012	(34,035)	(8,882)
Prepaid expenses and other		(6,705)	27	(2,367)
Deferred charges		(7,026)	(2,912)	(1,572)
Purchased power payable		(224)	(2,889)	450
Accounts payable Accrued expenses		(5,015)	(4,709)	(7,184)
Other – net		683 (844)	(3,182)	(6,792) 7,892
Other – Het	_	(044)	11,731	7,092
Net cash (used in) provided by operating activities	_	24,283	(44,093)	(5,578)
Cash flows from investing activities: Capital expenditures Proceeds from restricted investments and deposits Purchases of restricted investments and other deposits and investments		(22,812) 23,872 —	(46,436) 57,330 —	(49,843) 58,284 510
Proceeds of short-term investments (maturities greater than 90 days) Purchases of short-term investments (maturities greater than 90 days)		7,883 (5,913)	(7,883)	
Net cash provided by investing activities	_	3,030	3,011	8,951
Cash flows from financing activities: Principal payments on long-term obligations Payments on line of credit Borrowing on line of credit	_	(21,717) (26,000) 26,000	(20,903) — 26,000	(20,127) — —
Net cash provided by (used in) financing activities	_	(21,717)	5,097	(20,127)
Net increase in cash and cash equivalents		5,596	(35,985)	(16,754)
Cash and cash equivalents – beginning of year	_	42,988	78,973	95,727
Cash and cash equivalents – end of year	\$ _	48,584	42,988	78,973
Supplemental cash flow information: Cash paid for interest Cash paid for income taxes	\$	32,072 1	32,647 1	32,030 —

Notes to Financial Statements

December 31, 2016 and 2015

(Dollars in thousands)

(1) Organization and Summary of Significant Accounting Policies

(a) General Information

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

(b) Estimates

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

(c) System of Accounts

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

(d) Revenue Recognition

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

(e) Utility Plant and Depreciation

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

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250 or more before consideration of such allowance. The interest capitalized is determined by

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(Dollars in thousands)

applying the effective rate of Big Rivers' weighted average debt to the accumulated expenditures for qualifying projects included in construction in progress.

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

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

For 2016, 2015, and 2014, the average composite depreciation rates were 2.39%, 2.39%, and 2.34%, respectively. At the time plant is disposed of, the original cost plus cost of removal less salvage value of such plant is charged to accumulated depreciation, as required by the RUS.

(f) Impairment Review of Long-Lived Assets

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

(g) Asset Retirement Obligations

ASC Topic 410-20, Asset Retirement and Environmental Obligations – Asset Retirement Obligations, requires legal obligations associated with the retirement of long-lived assets to be recognized at fair value when incurred and capitalized as part of the related long-lived asset. ASC Topic 410-20 clarifies the term conditional asset retirement obligation where an obligation exists even though the method or timing of settlement may be conditional. The liability is accreted to its present value each period, and the capitalized cost is depreciated over the useful life of the related asset. When the asset is retired, the entity settles the obligation for its recorded amount or incurs a gain or loss. The U.S. Environmental Protection Agency's (EPA) Disposal of Coal Combustion Residuals from Electric Utilities rule ("CCR Final Rule") was published in the Federal Register on April 17, 2015. As such, Big Rivers has recorded liabilities in its financial statements for the asset retirement obligations (AROs) related to the requirements of the CCR Final Rule for the coal ash ponds located at its Green Station and the City of Henderson's Station Two ("Station Two") generating units. See note 3 for further discussion of the Company's AROs.

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(Dollars in thousands)

(h) Inventory

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

(i) Restricted Investments

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

(j) Cash and Cash Equivalents

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

(k) Short-Term Investments

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

(I) Regulatory Assets and Liabilities

ASC Topic 980-10 applies to regulated entities for which rates are designed to recover the costs of providing service. In accordance with this topic, certain items that would normally be reflected in the statement of operations are deferred on the balance sheets. Regulatory assets represent probable future revenues associated with certain incurred costs, which will be recovered from customers through the rate-making process. Regulatory assets are charged to earnings as collection of the cost in rates is recognized or when future recovery is no longer probable. Conversely, regulatory liabilities represent future reductions in revenues associated with amounts that are to be credited to customers through the rate-making process. Regulatory liabilities are charged against earnings when the reduction of the cost in rates is recognized or when future recovery by the customer is no longer probable.

(m) 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' receipts 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.

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(Dollars in thousands)

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

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

(n) Patronage Capital

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

(o) Derivatives

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

(p) Fair Value Measurements

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

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

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(Dollars in thousands)

(q) Deferred Loan Costs

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

The Company adopted Accounting Standards Update (ASU) 2015-03, Interest – Imputation of Interest (Subtopic 835-30); Simplifying the Presentation of Debt Issuance Costs, for the fiscal year beginning January 1, 2016. The update required deferred loan costs related to a recognized debt liability to be presented in the balance sheet as a direct deduction from the carrying amount of the related debt liability instead of being presented as an asset. The new guidance represents a change in accounting principle and required retroactive application. The deferred loan costs previously reported within other assets as of December 31, 2015 have been reclassified as shown in the table below:

		Originally		
	_	reported	Reclassified	As adjusted
Other assets	\$	5,638	2,869	2,769
Long-term debt, noncurrent portion		807,284	2,869	804,415

(r) New Accounting Pronouncement - Going Concern

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

(s) Accounting Principle Changes

For the year ended December 31, 2016, the Company made a voluntary change in accounting principle from one acceptable method to another related to the classification of sales to and purchases of power back from MISO in contemplation of a sale to nonmember counterparties in the MISO territory. Historically, the Company presented these transactions as gross sales and purchases increasing both operating revenue and power purchased and interchanged in the statements of operations. Under the new classification, the Company is presenting these MISO sales and purchases of power as net revenues or costs (netted on an hourly basis) and recorded in power purchased and interchanged in the statements of operations. The Company believes that this classification is preferred as the revenues and purchased power costs associated with these transactions are similar, completed in contemplation of one another and the actual sale to the nonmember counterparty being booked as revenue best reflects the nature of the transactions. The accounting classification change was applied retrospectively to all periods presented. There was no change to electric operating margin, however, operating revenue decreased by \$41,727 and \$18,788, and power purchased and interchanged decreased by the same amount for the years ended December 31, 2015 and December 31, 2014, respectively.

Notes to Financial Statements December 31, 2016 and 2015 (Dollars in thousands)

(2) Utility Plant

At December 31, 2016 and 2015, utility plant is summarized as follows:

	_	2016	2015
Classified plant in service:			
Production plant	\$	1,793,786	1,754,575
Transmission plant		274,681	262,776
General plant		49,044	47,008
Other	_	292	292
		2,117,803	2,064,651
Less accumulated depreciation	_	1,094,235	1,053,992
		1,023,568	1,010,659
Construction in progress		28,402	69,168
Utility plant – net	\$	1,051,970	1,079,827

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

Interest capitalized for the years ended December 31, 2016 and 2015 was \$519 and \$1,143, respectively.

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

As of December 31, 2016 and 2015, the Company had an estimated \$53,474 and \$51,347, respectively, related to nonlegal removal costs included in accumulated depreciation as required by RUS.

Notes to Financial Statements December 31, 2016 and 2015 (Dollars in thousands)

(3) Asset Retirement Obligations

The Company has asset retirement obligations (AROs) arising from legal obligations associated with the retirements of certain long-lived assets. The liabilities were initially measured at fair value and subsequently adjusted for accretion expense, subject to future adjustments for changes in the amount or timing of estimated cash flows. The corresponding asset retirement costs are capitalized as a part of the carrying amount of the related long-lived assets and depreciated over their remaining useful lives. The following table presents the activity for the AROs for the years ended December 31, 2016 and 2015:

	 2016	2015
Balance at beginning of year	\$ 6,973	_
Additional obligations incurred	_	6,776
Accretion expense	 306 ^(a)	197
Balance at end of year	\$ 7,279	6,973

⁽a) The 2016 and 2015 ARO accretion expense of \$306 and \$197, respectively, was deferred and included in the Regulatory Assets amount reported on the Company's Balance Sheet as of December 31, 2016. These amounts will be amortized and recognized as expense during the respective period(s) in which they are recovered through rates.

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(Dollars in thousands)

(4) Debt and Other Long-Term Obligations

A detail of long-term debt at December 31, 2016 and 2015 is as follows:

	 2016	2015
CFC Refinance Promissory Note, Series 2012 B, serial note pricing, effective interest rate of 4.30%, final maturity		
date of May 2032	\$ 252,055	263,733
CoBank Promissory Note, Series 2012A, stated interest rate of 4.30%, final maturity date of June 2032	199,591	208,122
RUS Series B Promissory Note, stated amount of \$245,530, no stated interest rate, with interest imputed at 5.80%,		
maturing December 2023	164,093	154,913
County of Ohio, Kentucky, promissory note, fixed interest rate of 6.00%, maturing in July 2031	83,300	83,300
RUS Series A Promissory Note, stated amount of \$80,456, stated interest rate of 5.75%, with an imputed interest rate of 5.84% maturing July 2021	80,213	80,160
CFC Equity Note, Series 2012B, stated interest rate of 5.35%,	00,213	00,100
final maturity date of May 2032	 37,265	38,773
Total long-term debt	816,517	829,001
Less current maturities	22,576	21,717
Less unamortized deferred debt issuance costs	 2,688	2,869
Total long-term debt – net of current maturities		
and deferred debt issuance costs	\$ 791,253	804,415

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

	 Amount
Year:	
2017	\$ 22,576
2018	23,488
2019	26,851
2020	69,096
2021	60,844
Thereafter	 613,662
Total	\$ 816,517

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

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

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

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

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

(c) RUS Notes

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

(d) Pollution Control Bonds

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

(e) Line of Credit

In August 2013, Big Rivers amended and restated its \$50,000 revolving line of credit agreement with CFC, dated as of July 16, 2009, (the "2009 Agreement") with the 2013 Amended & Restated Revolving Line of Credit Agreement (the "2013 Agreement"). The 2013 Agreement amended the 2009 Agreement by, among other things, extending the term of the line of credit to July 16, 2017, and amending sections that would have otherwise caused the 2009 Agreement to become unavailable to Big Rivers on August 20, 2013. Based on the terms of the 2013 Agreement, Big Rivers would have been able to draw on the line of credit if its unrestricted cash balance at the time of an advance was less than \$35,000. Additionally, the amount of any advance was limited to the difference between the \$35,000 and Big Rivers' unrestricted cash at the time of the advance.

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In connection with the 2013 Agreement, Big Rivers issued a secured promissory note (the "Series 2013A Note") with a stated principal amount equal to the CFC commitment. The Series 2013A Note was payable to the order of CFC and secured under Big Rivers' Indenture.

Advances on the 2013 Agreement bore interest at a variable rate and outstanding balances were payable in full by the maturity date of July 16, 2017. The CFC variable rate was equal to the CFC Line of Credit Rate, which was defined as "the rate published by CFC from time to time, by electronic or other means, for similarly classified lines of credit, but if not published, then the rate determined for such lines of credit by CFC from time to time".

As of December 31, 2014, Big Rivers had no outstanding borrowings on the 2013 Agreement. Letters of credit issued under an associated Letter of Credit Facility with CFC reduced the borrowing capacity under the 2013 Agreement by \$8,594 as of December 31, 2014. On March 5, 2015, Big Rivers entered into a new \$130,000 Syndicated Senior Secured Credit Agreement (the "2015 Agreement") with CFC, CoBank, Fifth Third Bank, KeyBank National Association and Regions Bank. In conjunction with the closing of the 2015 Agreement, Big Rivers' 2013 Agreement with CFC was terminated and Big Rivers issued secured promissory notes (the "Series 2015A Notes"), equal to each lender's commitment, which are secured under Big Rivers' Indenture.

A portion (\$25,630) of the 2015 Agreement is reserved for interim financing of capital expenditures associated with Big Rivers' 2012 Environmental Compliance Plan (2012 ECP). Once long-term financing of the 2012 ECP has been secured, Big Rivers will be required to repay any outstanding draws on the 2015 Agreement which were used to fund 2012 ECP expenditures and the total amount available under the 2015 Agreement will be reduced by \$25,630. As of December 31, 2016, no amounts have been borrowed under the 2015 Agreement for interim financing of the 2012 ECP.

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

As of December 31, 2015, Big Rivers had \$26,000 in outstanding borrowings under the 2015 Agreement and \$6,094 in issued letters of credit outstanding, which together reduced its borrowing capacity under the 2015 Agreement by \$32,094.

(f) Covenants

Big Rivers is in compliance with all debt covenants associated with both long-term and short-term debt. The Company's Indenture and other debt agreements require that a Margins for Interest Ratio (MFIR) of at least 1.10 be maintained for each fiscal year. The 2015 Agreement requires that Big Rivers, throughout the duration of the agreement, maintain a minimum Members' Equities balance at each fiscal quarter-end and year-end of \$375,000 plus 50% of the Company's cumulative positive net margins for each of the preceding fiscal years, beginning with the fiscal year ended December 31, 2015. Big Rivers' MFIR for the fiscal year ended December 31, 2016 was 1.31, and it's Members' Equities balance was \$478,152.

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

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

(g) RUS Loan Approvals

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

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

Big Rivers is currently working with the RUS to finalize the loan agreements, some of which will also require KPSC approval. Big Rivers currently plans to finalize both RUS guaranteed FFB loan agreements and receive the required KPSC approvals by the end of 2017.

(5) Rate Matters

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

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The Company has certain KPSC approved tariff riders; including a fuel adjustment clause and an environmental surcharge, offset by an unwind surcredit (a refund to tariff members of certain charges collected from two aluminum smelters in accordance with the contract terms). The net effect of these tariffs is recognized as revenue on a monthly basis with a partial offset to the regulatory liability – member rate mitigation described below.

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

Big Rivers as wholesale power supplier, and Kenergy Corp. ("Kenergy") as retail power supplier, served two aluminum smelters, Century Aluminum Company ("Century") and Alcan Primary Products Corporation ("Alcan") under their respective Retail Service Agreements with Kenergy. On August 20, 2012, Big Rivers and Kenergy received a letter from Century serving Notice of Termination of its Retail Service Agreement with Kenergy. As a result of Century's notification of termination, the Company filed an application with KPSC, on January 15, 2013, requesting authority to adjust its rates for wholesale electric service (Case No. 2012-00535). The KPSC entered an order on October 29, 2013, granting Big Rivers an annual revenue increase of \$54,227, effective August 20, 2013. In its order, the KPSC excluded the Coleman plant depreciation from rate recovery at this time. The KPSC directed the Company to defer this depreciation expense and record the deferred amounts in a regulatory asset account. The KPSC's order indicated this action was being taken due to the planned temporary idling of Coleman, the length of time the plant will be idled, and the impact of the rate increase on customers. As of December 31, 2016, cumulative depreciation expense of \$19,623 was deferred for the Coleman plant, which management believes is probable of recovery in future rates.

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

On January 30, 2013, Alcan provided a Notice of Termination of its Kenergy Retail Service Agreement to Big Rivers and Kenergy. As a result of Alcan's notification of termination, the Company filed an application with KPSC, on June 28, 2013, requesting authority to adjust its rates for wholesale electric service in the amount of \$70,397 (Case No. 2013-00199). This requested amount was later revised to \$71,223 in the Company's rebuttal testimony filed December 17, 2013. The Company proposed to temporarily offset this rate increase by utilization of the MRSM. The Company also proposed to use transmission revenues from both smelters to replenish the Economic Reserve Fund. An evidentiary hearing was held by the KPSC in January 2014. The KPSC entered an order on April 25, 2014, granting Big Rivers an annual revenue increase of \$36,160, effective February 1, 2014. In its order, the KPSC approved Big Rivers' 2012 Depreciation Study, but excluded Wilson plant depreciation from rate recovery at this time. The KPSC directed the Company to defer the Wilson depreciation expense and record in a regulatory asset account, similar to the Coleman depreciation expense deferral per the KPSC's order in Case No. 2012-00535. As of December 31, 2016, cumulative depreciation expense of \$58,991 was deferred for the Wilson plant, which management believes is probable of recovery in future rates. The KPSC also approved Big Rivers' proposal to temporarily offset the rate increase by utilization of the MRSM. The KPSC further granted Big

Notes to Financial Statements December 31, 2016 and 2015 (Dollars in thousands)

Rivers' proposed accounting treatment for transmission revenues related to the Hawesville smelter but included the test year transmission revenues related to the Sebree smelter in the determination of Big Rivers' revenue requirement. The net effect of this accounting treatment is the recognition of revenue on a monthly basis with an offset to the applicable regulatory liability accounts as the reserve funds are used to offset the impact of the base rate increase on the members' monthly bills. The wholesale rate increase granted by the KPSC in Case No. 2013-00199 resulted in a base wholesale rate increase of approximately 16.3% for rural customers and 13.7% for large industrial customers.

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

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

The CCR Final Rule requires Big Rivers to address the eventual permanent closures of its coal ash ponds. Big Rivers believes it will face significant liabilities with respect to the treatment of the ash ponds at its Green Station and the City of Henderson's Station Two generating stations upon those stations' retirements from service or closures of the ash ponds. In accordance with ASC Topic 410-20, *Asset Retirement and Environmental Obligations – Asset Retirement Obligations* and under the RUS Uniform System of Accounts, Big Rivers initially recognized its coal ash pond Asset Retirement Obligations (AROs) at fair value and subsequently adjusted for accretion expense as of December 31, 2016 (note 3).

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

Notes to Financial Statements

December 31, 2016 and 2015

(Dollars in thousands)

CCR-related expenses deferred and included in Regulatory assets on the Company's balance sheet was \$2,264.

In connection with the rate matters discussed above, the following tables provide a summary of Regulatory Assets and Liabilities reflected in the Balance Sheet as of December 31, 2016 and 2015:

	Regulatory assets			
	2016	2015		
Coleman plant deferred depreciation	\$ 19,623	13,692		
Wilson plant deferred depreciation	58,991	38,613		
Rate case expense and other	713	1,482		
Non-FAC PPA	4,878	4,590		
Asset retirement obligations	1,805	718		
Environmental costs (CCR)	 458	176		
Total regulatory assets	\$ 86,468	59,271		
	Regulatory I	iabilities		
	2016	2015		
Economic reserve-member rate mitigation	\$ 327	297		
Rural economic reserve-member rate mitigation	 	21,233		
Total regulatory liabilities	\$ 327	21,530		

(6) Income Taxes

At December 31, 2016, Big Rivers had a Non-Patron Net Operating Loss (NOL) Carryforward of approximately \$15,266 expiring at various times between 2029 and 2036. The NOL Carryforward was entirely offset by a full valuation allowance.

The Company also had, at December 31, 2016, an Alternative Minimum Tax Credit (AMT) Carryforward of approximately \$6,984, which carries forward indefinitely. At December 31, 2015, Big Rivers had an AMT Credit Carryforward of approximately \$7,241, which was entirely offset by a full valuation allowance. During 2016, Big Rivers determined that it was eligible to claim an accelerated AMT credit under Internal Revenue Code (IRC) Sec. 168(k)(4) on its 2015 through 2018 federal income tax returns, and that it was more likely than not that it would be able to recover approximately \$6,748 of its AMT Credit Carryforward, net of a 6.8% sequestration imposed by the IRS which is expected to continue for future tax years. Accordingly, Big Rivers recognized a \$6,748 benefit during 2016, recorded as a credit to federal income tax expense as a result of the change in its ability to recover the AMT Credit Carryforward.

During 2016, Big Rivers recovered \$240 of the total AMT benefit recognized in 2016, as a refund through its 2015 federal income tax return. At December 31, 2016, \$3,254 of the remaining benefit (the portion the Company anticipates to recover with its 2016 federal income tax return) is included in Prepaid expenses and other, and the other \$3,254 (the portion the Company anticipates to recover with its 2017 and 2018 federal income tax returns) is included in Other Assets.

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December 31, 2016 and 2015
(Dollars in thousands)

The Company did not record any federal income tax expense for the years ended December 31, 2015, and 2014.

The components of the net deferred tax assets as of December 31, 2016 and 2015 were as follows:

	_	2016	2015
Deferred tax assets:			
Net operating loss carryforward	\$	5,939	5,749
Alternative minimum tax credit carryforwards		3,491	7,241
Fixed asset basis difference		1,238	1,946
Total deferred tax assets		10,668	14,936
Deferred tax liabilities:			
RUS Series B Note		(5,212)	(5,212)
Bond refunding costs		(122)	(130)
Total deferred tax liabilities		(5,334)	(5,342)
Net deferred tax asset (prevaluation allowance)		5,334	9,594
Valuation allowance		(2,080)	(9,594)
Net deferred tax asset	\$	3,254	

A reconciliation of the Company's effective tax rate for 2016, 2015, and 2014 is as follows:

	2016	2015	2014
Federal rate	35.0%	35.0%	35.0%
State rate – net of federal benefit	3.9	3.9	4.5
Permanent differences	1.0	0.5	_
Patronage allocation to members	(39.9)	(39.5)	(39.6)
Tax benefit of operating loss carryforwards			
and other	_	0.1	0.1
Alternative minimum tax credit recovery	(109.6)		
Effective tax rate	(109.6)%	%_	<u>—%</u>

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 2013 through 2015. The major state tax jurisdiction currently open for income tax examination is Kentucky for years 2012 through 2015, also due to unused net operating loss carryforwards. The Company has not recorded any unrecognized tax benefits or liabilities related to federal or state income taxes.

The Company classifies interest and penalties as an operating expense on the statement of operations and accrued expenses on the balance sheet. No material interest or penalties have been recorded during 2016, 2015, or 2014.

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December 31, 2016 and 2015

(Dollars in thousands)

(7) Pension Plans

(a) Defined-Benefit Plans

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

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

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

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

FASB ASC 715 also requires an employer to measure the funded status of a plan as of the date of its year-end balance sheet and requires disclosure in the notes to the financial statements certain additional information related to net periodic benefit costs for the next fiscal year. The Company's pension and other postretirement benefit plans are measured as of December 31, 2016 and 2015.

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

Notes to Financial Statements

December 31, 2016 and 2015

(Dollars in thousands)

A reconciliation of the Company's benefit obligations of its noncontributory defined-benefit pension plan at December 31, 2016 and 2015 is as follows:

	 2016	2015
Benefit obligation – beginning of period	\$ 19,097	21,276
Service cost – benefits earned during the period	907	918
Interest cost on projected benefit obligation	816	756
Plan amendment	(1,198)	_
Benefits paid	(1,126)	(2,098)
Actuarial loss (gain)	 2,786	(1,755)
Benefit obligation – end of period	\$ 21,282	19,097

Big Rivers' defined-benefit pension plan provides retirees and terminated employees with a lump-sum payment option. Benefits paid in 2016 include lump-sum payments in the amounts of \$1,096 – the result of two retirees or terminated employees electing the lump-sum payment option. Benefits paid in 2015 include lump-sum payments in the amounts of \$2,073 – the result of eight retirees or terminated employees electing the lump-sum payment option.

The accumulated benefit obligation for the defined-benefit pension plan was \$17,183 and \$14,611 at December 31, 2016 and 2015, respectively.

A reconciliation of the Company's pension plan assets at December 31, 2016 and 2015 is as follows:

	 2016	2015
Fair value of plan assets – beginning of period	\$ 18,077	20,212
Actual return on plan assets	1,483	(37)
Benefits paid	 (1,126)	(2,098)
Fair value of plan assets – end of period	\$ 18,434	18,077

The funded status of the Company's pension plan at December 31, 2016 and 2015 is as follows:

	 2016	2015
Benefit obligation – end of period	\$ (21,282)	(19,097)
Fair value of plan assets – end of period	 18,434	18,077
Funded status	\$ (2,848)	(1,020)

Notes to Financial Statements

December 31, 2016 and 2015

(Dollars in thousands)

Components of net periodic pension costs for the years ended December 31, 2016, 2015, and 2014 were as follows:

	 2016	2015	2014
Service cost	\$ 907	918	900
Interest cost	816	756	855
Expected return on plan assets	(1,289)	(1,414)	(1,423)
Amortization of prior service cost	_	1	1
Amortization of actuarial loss	328	285	177
Settlement loss	 	465	242
Net periodic benefit			
cost	\$ 762	1,011	752

A reconciliation of the pension plan amounts in accumulated other comprehensive income at December 31, 2016 and 2015 is as follows:

	 2016	2015
Prior service cost	\$ 1,198	_
Unamortized actuarial loss	 (6,549)	(4,285)
Accumulated other comprehensive income	\$ (5,351)	(4,285)

In 2017, \$136 of prior service cost and \$502 of actuarial loss is expected to be amortized to periodic pension benefit cost.

The recognized adjustments to other comprehensive income at December 31, 2016 and 2015 are as follows:

	 2016	2015
Prior service cost	\$ (1,198)	_
Unamortized actuarial gain/(loss)	 2,263	(1,056)
Other comprehensive (income)/loss	\$ 1,065	(1,056)

At December 31, 2016 and 2015, amounts recognized in the balance sheets were as follows:

	 2016	2015
Deferred credits and other	\$ (2,848)	(1,020)

Notes to Financial Statements December 31, 2016 and 2015 (Dollars in thousands)

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

	2016	2015	2014
Discount rate – projected benefit obligation	3.80%	4.19%	3.76%
Discount rate – net periodic benefit cost	4.19	3.76	4.61
Rates of increase in compensation levels	4.00	4.00	4.00
Expected long-term rate of return on assets	7.25	7.25	7.25

The expected long-term rate of return on plan assets for determining net periodic pension cost for each fiscal year is chosen by the Company from a best estimate range determined by applying anticipated long-term returns and long-term volatility for various asset categories to the target asset allocation of the plan, as well as taking into account historical returns.

Using the asset allocation policy adopted by the Company noted in the paragraph below, the expected rate of return at a 50% probability of achievement level based on (a) forward-looking rate of return expectations for passively managed asset categories over a 20-year time horizon and (b) historical rates of return for passively managed asset categories. Applying an approximately 80%/20% weighting to the rates determined in (a) and (b), respectively, produced an expected rate of return of 7.28%, which was rounded to 7.25%.

Big Rivers utilizes a third-party investment manager for the plan assets, and has communicated thereto the Company's Retirement Plan Investment Policy, including a target asset allocation mix of 50% U.S. equities (an acceptable range of 45%–55%), 15% international equities (an acceptable range of 10%–20%), and 35% fixed income (an acceptable range of 30%–40%). As of December 31, 2016 and 2015, the investment allocation was 54% and 53%, respectively, in U.S. equities, 10% and 6%, respectively, in international equities, and 36% and 41%, respectively, in fixed income. The objective of the investment program seeks to (a) maximize return on investment, (b) minimize volatility, (c) minimize company contributions, and (d) provide the employee benefit in accordance with the plan. The portfolio is well diversified and of high quality. The average quality of the fixed income investments must be "A" or better. The equity portfolio must also be of investment grade quality. The performance of the investment manager is reviewed semiannually.

Notes to Financial Statements

December 31, 2016 and 2015

(Dollars in thousands)

At December 31, 2016 and 2015, the fair value of Big Rivers' defined-benefit pension plan assets by asset category are as follows:

		Level 1	Level 2	December 31, 2016
Cash and money market Equity securities:	\$	425	_	425
Common stock		7,804	_	7,804
Preferred stock		431	_	431
Mutual funds Fixed:		4,027	_	4,027
U.S. Government agency bonds		_	354	354
Tax exempt bonds and notes		_	2,642	2,642
Corporate bonds and notes			2,750	2,750
	\$	12,687	5,746	18,433
		Level 1	Level 2	December 31, 2015
Cash and money market Equity securities:	\$	312	_	312
Common stock		7,380	_	7,380
Preferred stock		379	_	379
Mutual funds		3,588	190	3,778
Fixed:				
U.S. Government agency bonds		_	591	591
Tax exempt bonds and notes		_	2,746	2,746
Corporate bonds and notes	_		2,891	2,891
	\$	11,659	6,418	18,077

Notes to Financial Statements

December 31, 2016 and 2015

(Dollars in thousands)

Expected retiree pension benefit payments projected to be required during the years following 2016 are as follows:

	_	Amount	
Year ending December 31:			
2017	\$	913	
2018		1,470	
2019		1,268	
2020		1,962	
2021		2,531	
Thereafter		12,405	
Total	\$	20,549	

(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 \$4,862, \$4,550, and \$4,511 for the years ended December 31, 2016, 2015 and 2014 respectively.

(c) Deferred Compensation Plan

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

The nonqualified deferred compensation plan is unfunded, but the Company has chosen to finance its obligations under the plan, including any employee deferrals, through a rabbi trust. The trust assets remain a part of the Company's general assets, subject to the claims of its creditors. The 2016 employer contribution was \$98 and deferred compensation expense was \$98. As of December 31, 2016, the trust asset was \$321 and the deferred liability was \$321.

Notes to Financial Statements December 31, 2016 and 2015 (Dollars in thousands)

(8) Restricted Investments

The amortized costs and fair values (Level 1 measurement) of Big Rivers' restricted investments held for Member rate mitigation at December 31, 2016 and 2015 were as follows:

		201	16	20	15
	_	Amortized costs	Fair values	Amortized costs	Fair values
Debt securities: Money Market U.S. Treasuries	\$	312 —	312 	3,637 20,678	3,637 20,678
Total	\$_	312	312	24,315	24,315

Gross unrealized gains and losses on restricted investments at December 31, 2016 and 2015 were as follows:

	2016		2015	
	 Gains	Losses	Gains	Losses
Debt securities:				
U.S. Treasuries	\$ 			11
Total	\$ 	<u> </u>	<u> </u>	11

Debt securities at December 31, 2016 and 2015 mature, according to their contractual terms, as follows (actual maturities may differ due to call or prepayment rights):

		2016		2015	
	<i>A</i>	Amortized costs	Fair values	Amortized costs	Fair values
In one year or less After one year through five years	\$	312	312	24,315	24,315
,	-				
Total	\$	312	312	24,315	24,315

Notes to Financial Statements

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(Dollars in thousands)

Gross unrealized losses on investments and the fair values of the related securities, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at December 31, 2016 and 2015 were as follows:

	 2016		2015	
	Less than 1	12 months	Less than 12 months	
	Losses	Fair values	Losses	Fair values
Debt securities: U.S. Treasuries	\$ 	312	11_	20,667
Total	\$ 	312	11	20,667

The unrealized loss positions were primarily caused by interest rate fluctuations. The number of investments in an unrealized loss position as of December 31, 2016 and 2015 was 0 and 9, respectively. Since the Company does not intend to sell any of the investments prior to their stated maturity dates, the Company will more likely than not, maintain each debt security until its anticipated recovery, and no significant credit risk is deemed to exist, these investments are not considered other-than-temporarily impaired.

In conjunction with the CFC \$302,000 secured term loan (note 4), Big Rivers was required to invest in CTCs equal to 14.29% of the Refinance Note. Proceeds of the Equity Note were used to purchase the investments in CTCs as required under the loan agreement. The interest rate on the CTCs is fixed at 4.28% and is equal to 80% of the Equity Note rate of 5.35%. The CTCs cannot be traded in the market, and therefore, a value other than their outstanding principal amount cannot be determined. The Company's investment in these CTCs at December 31, 2016 and 2015 was \$36,859 and \$38,503, respectively.

(9) Short-Term Investments

At December 31, 2016, the Company's short-term investments included \$3,858 of investments in debt securities and \$2,055 of investments in CDs, which are both included in the Company's balance sheet at amortized cost. At December 31, 2015, the Company's short-term investments included \$3,300 of investments in debt securities and \$4,583 of investments in CDs. 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 maturity date is less than or equal to three months from the balance sheet date) or "Short-term investments" (if maturity date is greater than 3 months but less than one year from the balance sheet date).

Notes to Financial Statements December 31, 2016 and 2015 (Dollars in thousands)

The amortized costs and fair values (Level 1 measurement) of Big Rivers' short-term investments in debt securities at December 31, 2016 and 2015, were as follows:

		2016		2015	
	_	Amortized costs	Fair values	Amortized costs	Fair values
Debt securities:					
Corporate notes	\$	1,145	1,144	1,567	1,565
U.S. Treasuries		1,530	1,530	625	625
U.S. Government agency	_	1,183	1,182	1,108	1,105
Total	\$_	3,858	3,856	3,300	3,295

Gross unrealized gains and losses on short-term investments at December 31, 2016 and 2015, were as follows:

	2016		2015	
	Gains	Losses	Gains	Losses
Debt securities:				
Corporate notes	\$ _	(1)	_	(2)
U.S. Government agency	 	(1)		(3)
Total	\$ 	(2)		(5)

(10) Fair Value of Other Financial Instruments

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

The carrying value of accounts receivable and accounts payable approximate fair value due to their short maturity. At December 31, 2016 and 2015, the Company's cash and cash equivalents included short-term investments in an institutional prime money market portfolio account classified as trading securities under ASC 320, *Investments – Debt and Equity Securities*, that were recorded at fair value which was determined using quoted market prices for identical assets without regard to valuation adjustment or block discount (a Level 1 measure), as follows:

	2016		2015
Institutional prime money market portfolio	\$	44,319	40,881

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

Notes to Financial Statements

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(Dollars in thousands)

Big Rivers' long-term debt at December 31, 2016 consisted of CFC loans totaling \$289,320, a CoBank loan in the amount of \$199,591, RUS notes totaling \$244,306, and fixed-rate pollution control bonds in the amount of \$83,300 (note 4). The RUS, CFC, and CoBank debt cannot be traded in the market, and therefore, a value other than their outstanding principal amount cannot be determined. At December 31, 2016, the fair value of Big Rivers' fixed-rate Series 2010A Bonds, was determined based on quoted prices available for the most recent trades of those bonds occurring in the dealer market on or near the balance sheet date (Level 1 measure) and totaled \$81,218.

(11) Postretirement Benefits Other than Pensions

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

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

	2016	2015	2014
Discount rate – projected benefit obligation	4.21%	4.35%	3.77%
Discount rate – net periodic benefit cost	4.35	3.77	4.48

The healthcare cost trend rate assumptions as of December 31, 2016 and 2015 were as follows:

	2016	2015	
Initial trend rate	6.74%	7.00%	
Ultimate trend rate	4.50	4.50	
Year ultimate trend is reached	2038	2038	

Notes to Financial Statements

December 31, 2016 and 2015

(Dollars in thousands)

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

	 2016	2015
One-percentage-point decrease: Effect on total service and interest cost components Effect on year-end benefit obligation	\$ (112) (1,193)	(138) (1,384)
One-percentage-point increase: Effect on total service and interest cost components Effect on year-end benefit obligation	\$ 143 1,467	178 1,694

A reconciliation of the Company's benefit obligations of its postretirement plan at December 31, 2016 and 2015 is as follows:

	 2016	2015
Benefit obligation – beginning of period	\$ 15,369	15,899
Service cost – benefits earned during the period	461	563
Interest cost on projected benefit obligation	552	603
Participant contributions	271	251
Benefits paid	(1,402)	(1,336)
Actuarial loss (gain)	 (2,021)	(611)
Benefit obligation – end of period	\$ 13,230	15,369

Big Rivers revised the eligibility requirements for postretirement medical with regard to age and service. Beginning January 1, 2013, eligibility for retirement is age 62 with 10 years of service. The service requirement is waived for active employees on December 31, 2012 who will not have 10 years of service at age 62. A reconciliation of the Company's postretirement plan assets at December 31, 2016 and 2015 is as follows:

		2016	2015
Fair value of plan assets – beginning of period	\$	_	_
Employer contributions		1,130	1,085
Participant contributions		272	251
Benefits paid	-	(1,402)	(1,336)
Fair value of plan assets – end of period	\$		

Notes to Financial Statements December 31, 2016 and 2015 (Dollars in thousands)

The funded status of the Company's postretirement plan at December 31, 2016 and 2015 is as follows:

	 2016	2015
Benefit obligation – end of period Fair value of plan assets – end of period	\$ (13,230)	(15,369)
Funded status	\$ (13,230)	(15,369)

The components of net periodic postretirement benefit costs for the years ended December 31, 2016, 2015, and 2014 were as follows:

	2016		2015	2014
Service cost	\$	461	563	516
Interest cost		552	603	616
Amortization of prior service cost		(138)	(138)	(138)
Amortization of gain		(232)		(144)
Net periodic benefit cost	\$	643	1,028	850

A reconciliation of the postretirement plan amounts in accumulated other comprehensive income at December 31, 2016 and 2015 is as follows:

		2015		
Prior service credit	\$	1,294	1,432	
Unamortized actuarial gain		3,962	2,172	
Accumulated other comprehensive income	\$	5,256	3,604	

In 2017, \$138 of prior service cost and \$0 of actuarial gain is expected to be amortized to periodic benefit cost.

The recognized adjustments to other comprehensive loss at December 31, 2016 and 2015 are as follows:

	 2016	2015		
Prior service cost	\$ (138)	(138)		
Unamortized actuarial gain (loss)	2,021	611		
Amortization of net gain	 (232)			
Other comprehensive income	\$ 1,651	473		

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(Dollars in thousands)

At December 31, 2016 and 2015, amounts recognized in the balance sheets were as follows:

	 2016	2015		
Accounts payable	\$ (1,044)	(1,213)		
Deferred credits and other	 (12,186)	(14,156)		
Net amount recognized	\$ (13,230)	(15,369)		

Expected retiree benefit payments projected to be required during the years following 2016 are as follows:

	 Amount	
Year:		
2017	\$ 1,044	
2018	1,027	
2019	1,088	
2020	1,074	
2021	1,148	
Thereafter	 5,002	
Total	\$ 10,383	

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 \$553 and \$471 at December 31, 2016 and 2015, respectively. The postretirement expense recorded was \$93, \$59, and \$51, for 2016, 2015, and 2014, respectively, and the benefits paid were \$10, \$7, and \$12 for 2016, 2015, and 2014, respectively.

(12) Related Parties

For the years ended December 31, 2016, 2015, and 2014, Big Rivers had tariff sales to its members of \$250,045, \$251,325, and \$258,967, respectively. In addition, for the years ended December 31, 2016, 2015, and 2014, Big Rivers had certain sales to Kenergy for the Aluminum Smelters and Domtar Paper Co. loads of \$2,694, \$2,678, and \$20,165, respectively.

At December 31, 2016 and 2015, Big Rivers had accounts receivable from its members of \$23,834 and \$17,763, respectively.

Notes to Financial Statements

December 31, 2016 and 2015

(Dollars in thousands)

(13) Commitments and Contingencies

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

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

Big Rivers is involved in ongoing litigation with the City of Henderson Utility Commission doing business as Henderson Municipal Power and Light (HMP&L) related to the rights and duties of the parties under the relevant contracts regarding Excess Henderson Energy produced at HMP&L's Station Two generating station. The Company believes there will be no material adverse effect to its financial statements when this litigation is resolved.

(14) Subsequent Events

Management evaluated subsequent events up to and including April 5, 2017, the date the financial statements were available to be issued.

Five-Year Review

As of December 31, 2016 and the Four Preceding Fiscal Years (Dollars in Thousands)

As of December 31, 2016 and the Four Preceding Fiscal Years (Dol	llars in 11			20154		20144		2012		2012
Summary of Operations		2016	-	2015		2014		2013	_	2012
Operating Revenue:										
Electric Energy Revenue	\$	390,357	\$	392,458	\$	474,618	\$	554,835	\$	563,385
Other Operating Revenue and Income	,	12,233	ı '	11,091	·	12,454		7,612	·	4,957
Total Operating Revenue	\$	402,590	\$	403,549	- \$	487,072	- \$	562,447	\$	568,342
Operating Expenses:										
Fuel for Electric Generation	\$	144,148	\$	146,179	\$	164,220	\$	210,115	\$	226,369
Power Purchased		80,341		74,136		98,389		120,770		111,465
Operations (Excluding Fuel), Maintenance and Other		115,606		117,383		135,859		143,605		134,206
Depreciation		19,523		18,636		19,655		39,425		41,090
Total Operating Expenses	\$	359,618	\$	356,334	\$	418,123	\$	513,915	\$	513,130
Interest Expense and Other:										
Interest	\$	40,711	\$	40,205	\$	40,987	\$	42,823	\$	44,414
Income Tax Expense	\$	(6,748)		(77)						
Other-net		846		464		194		1,054		546
Total Interest Expense and Other	\$	34,809	\$	40,592	\$	41,181	\$	43,877	\$	44,960
Operating Margin	\$	8,163	\$	6,623	\$	27,768	\$	4,655	\$	10,252
Non-Operating Margin	\$	4,742	\$	4,593	\$	4,899	\$	3,984	\$	1,025
Net Margin	\$	12,905	\$	11,216	\$	32,667	\$	8,639	\$	11,277
Summary of Balance Sheet										
Total Utility Plant	\$	2,146,205	\$	2,133,820	\$	2,093,126	\$	2,060,516	\$	2,050,221
Accumulated Depreciation	Ψ	1,094,235	Ψ	1,053,993	Ψ	1,018,800	Ψ	989,604	Ψ	962,994
Net Utility Plant	\$	1,051,970	\$	1,079,827	- \$	1,074,326	-	1,070,912	\$	1,087,227
Cash and Cash Equivalents	\$	54,497	\$	50,871	\$	78,973	\$	95,727	\$	68,860
Restricted Cash	Ψ	54,477	Ψ	50,071	Ψ	-	Ψ	11,829	Ψ	41,313
Reserve Account Investments ¹		312		24,335		72,603		125,120		182,994
Other Assets		270,810		248,094		201,598		173,057		166,284
Total Assets	\$	1,377,589	\$	1,403,127	\$	1,427,500	-	1,476,645	\$	\$1,546,678
Total Assets		1,577,507	· '-	1,405,127	- '-		- '-	1,470,043	· —	Ψ1,540,070
Equities (deficit)	\$	478,152	\$	464,661	\$	451,916	\$	422,488	\$	402,882
Long-term Debt ²		813,829		826,132		841,187		856,086		925,243
Line of Credit		26,000		26,000						
Regulatory Liabilities - Member Rate Mitigation		327		21,530		67,704		124,923		147,732
Asset Retirement Obligations		7,279		6,973						
Other Liabilities and Deferred Credits	<u> </u>	52,002		57,831		66,693		73,148	_	70,821
Total Liabilities and Equity	\$	1,377,589	- \$_	1,403,127	- \$_	1,427,500	- \$_	1,476,645	\$_	1,546,678
Energy Sales (MWh)										
Member Rural		2,330,007		2,325,653		2,415,564		2,374,920		2,321,477
Member Large Industrial		914,557		946,150		966,010		996,267		961,298
Smelter Contracts		-		-		305,151		5,869,334		7,424,473
Other		4,414,268		4,181,748		5,420,516		2,618,866	_	1,536,834
Total Energy Sales		7,658,832	_	7,453,551		9,701,241		11,859,387	_	12,244,082
Sources of Energy (MWh)										
Generated		5,828,106		5,809,344		6,669,469		8,700,662		9,143,111
Purchased		1,874,584		1,697,296		2,491,502		3,221,793		3,162,489
Losses and Net Interchange		(43,858)		(53,089)		(53,730)		(63,068)		(61,518)
Total Energy Available		7,658,832		7,453,551		9,107,241		11,859,387		12,244,082
Net Capacity (MW)										
Net Generating Capacity Owned		1,444		1,444		1,444		1,444		1,444
Rights to HMP&L Station Two		197		197		197		197		197
Other Net Capacity Available		178		178		178		178		178
Debt Ratios										
Margins for Interest Ratio (MFIR)		1.31		1.29 ³		2.25 ³		1.20		1.25
Times Interest Earned Ratio (TIER)		1.31		1.27		1.79		1.20		1.25
Debt Service Coverage Ratio (DSCR)		1.23		1.20		1.58		1.47		1.58

¹Includes investment income receivable. ²Includes current maturities of long-term obligations. ³Excludes impact of \$906 non-recurring charge to income based on the definition and calculation of MFIR per Big Rivers' Indenture. ⁴For year ended December 31, 2016, the Company made a voluntary change in accounting principle from one acceptable method to another. The accounting classification change was applied retrospectively to the years ended December 31, 2015 and 2014 which are presented in the Company's audited financial statements. See note 1(s) of the audited Notes to Financial Statements for further discussion.



















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