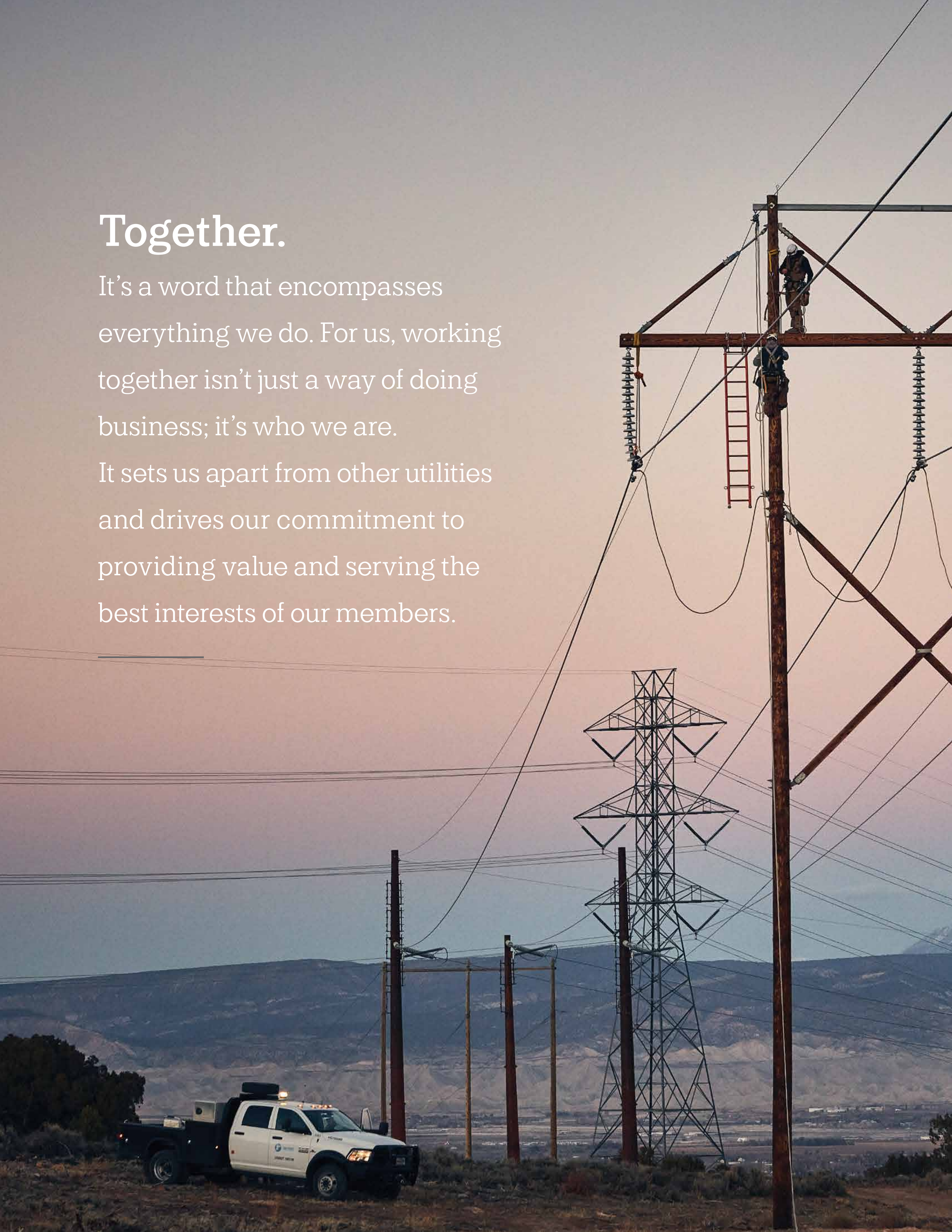
Better together

TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.
2018 ANNUAL REPORT



Together.

It's a word that encompasses everything we do. For us, working together isn't just a way of doing business; it's who we are.
It sets us apart from other utilities and drives our commitment to providing value and serving the best interests of our members.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BEARS
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BEARS
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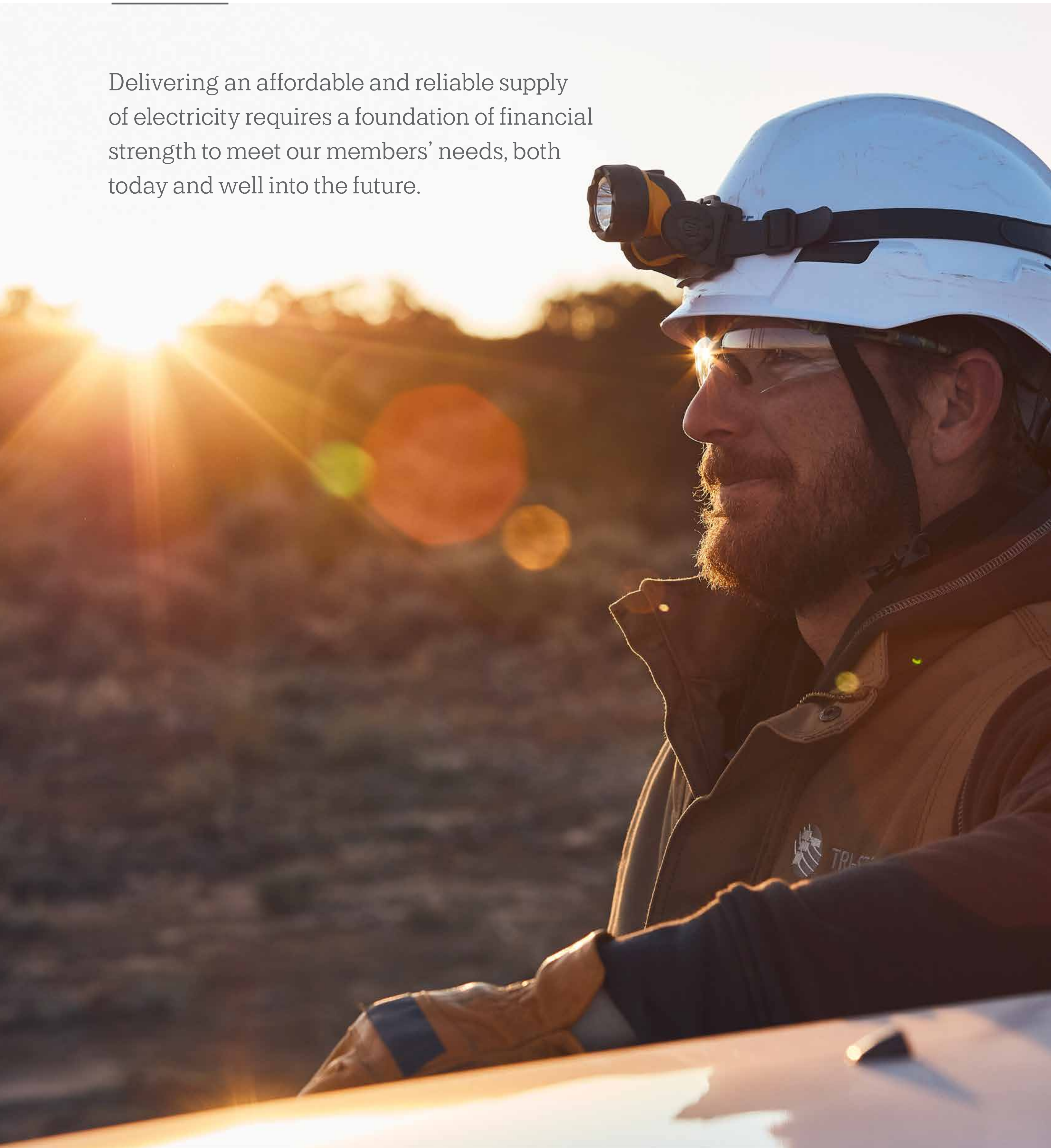
By the numbers

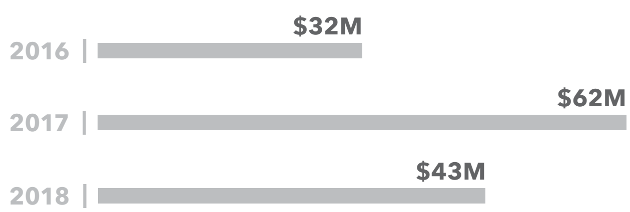
Delivering an affordable and reliable supply of electricity requires a foundation of financial strength to meet our members' needs, both today and well into the future.



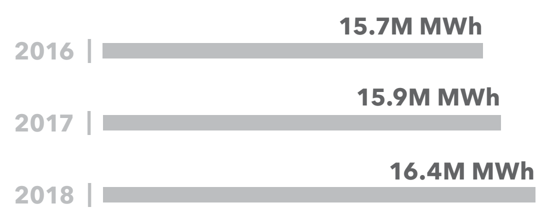
Financials and quick facts

$1.3B OPERATING REVENUE	$43M NET MARGIN	1,504 TOTAL EMPLOYEES
$5.0B TOTAL ASSETS	5,665 MILES OF LINE	7.5¢/kWh AVERAGE MEMBER WHOLESALE RATE

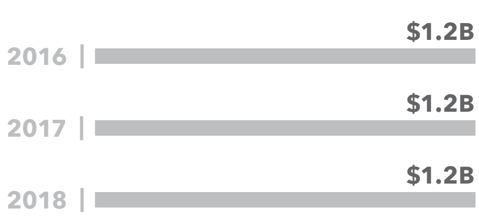
Net margin



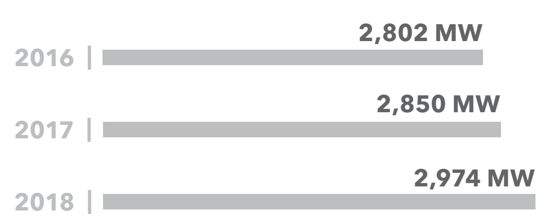
Energy sold to members



Operating expenses

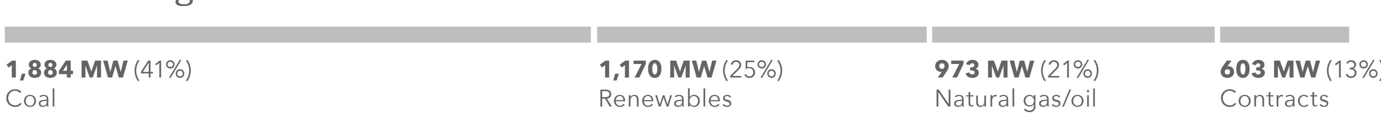


Member coincident peak demand



Energy sales

Sources of generation



Rick Gordon | Chairman

At year's end, we increased the patronage capital refund to our members to $30 million.

Working together across our association of 43 member distribution cooperatives and public power districts, in 2018 our family of electric utilities delivered reliable, affordable and responsible power under our not-for-profit, cooperative business model.

2018 was another strong financial year for Tri-State, and we reduced costs even as we produced more electricity. At year's end, we increased the patronage capital refund to our members to $30 million while meeting our financial goals and deferring revenues for future financial flexibility.

With a continued focus on cost management, our members' wholesale rate will be unchanged for 2019, and we will continue to focus on initiatives to meet the members' rate and reliability expectations in the future.

Enhancing member engagement is a board priority. In 2018, we completed the next phase of an assessment to ensure our alignment with the membership on the important matters facing the association, including our energy portfolio, the wholesale contract and rates. The assessment confirmed the association's positive relationship with our members and identifies opportunities to continue to meet members' needs.

Following engagement with the membership, the board approved changes in our self-generation policy to implement contract provisions for energy storage. We also strengthened our financial goals policy to ensure we remain financially strong and can mitigate the potential for future rate increases and prepare for unseen challenges. As we look to 2019, the board intends to convene the contract committee to review potential changes to the wholesale contract.

The board approved two new renewable energy projects in 2018 that will increase our wind and solar resources by 45 percent, and at a low cost that benefits the entire membership. While some outside of our industry oversimplify its challenges, I am reminded of the complexity of the work Tri-State does on behalf of our members to develop new resources, balance cost, reliability and sustainability, and serve member needs.

We have the privilege to work with others toward this common purpose. In the years I've worked with Mike McInnes, his focus on the mission of this association has been unwavering through all that has come our way. As he prepares for retirement, I'd like to acknowledge his dedication. He's a man who keeps his promises. He's proven it to Tri-State and to our membership, and now he gets to focus on continuing to prove it to his family.

Our commitment to our members sets us apart from other utilities, and our spirit of collaboration empowers and enables our members, knowing we are brighter, stronger and better together.

Rick Gordon, Chairman

Our rate-stabilization efforts are having a meaningful impact and helping make the association a more competitive power supplier.

For Tri-State, providing reliable power is just the beginning of our commitment to our member systems and the communities they serve. As critical as electricity remains every second of every day, we go much further to provide valued services and be partners in our members' collective success. Our roots are intertwined, as Tri-State was created by and for our members, and working together, that legacy will endure for decades to come.

With the guidance of our board and continued efforts of our management team and staff to control costs and add non-member revenues, our rate-stabilization efforts are having a meaningful impact and helping make the association a more competitive power supplier.

In 2018, we had solid net margins of $42.7 million even as we deferred revenue to create additional financial flexibility in the future. Energy sales to our members increased three percent, and with continued cost management, we will have no increase in our wholesale rate in 2019.

Tri-State reached a new peak load of 2,974 megawatts, which is a four percent increase over the previous year's peak. We continued to invest in our transmission system, and our diverse generation resources remained reliable and competitive in our market. The association's energy management expertise ensured our access to low-cost market power and the best value for our members.

Tri-State's progress with our members on emissions-free resources is remarkable, with nearly a third of the energy consumed in the communities our members serve coming from renewable resources. Expecting prices would continue to fall, our board's pragmatic approach to adding renewables has resulted in contracts for additional wind and solar resources in 2018 being our lowest-cost renewable resources to date.

Working safely is part of everything we do. Our goal is to have no injuries and workplace illnesses, which is ambitious given the depth and breadth of the association's operational and maintenance requirements. Our results are impressive and the National Safety Council recognized Tri-State in 2018 with multiple awards for safety.

In 2014, I took on the most rewarding role of my career when I was named CEO of Tri-State. I've had the honor of working with our members and employees on the meaningful mission of providing power to the rural communities of the West, and I'm humbled by what we've accomplished together. It's time for me to move on to the next chapter of my life – retirement and more time with my family. I have every confidence that the association is in good hands: the hands of our employees, leadership team, our board and each of our members.

Mike McInnes, Chief Executive Officer

Mike McInnes | CEO

2018 YEAR IN REVIEW

Through collaboration with our member systems, we have been providing safe and reliable electricity to communities across the West for more than half a century. Looking back, we can celebrate all that we've accomplished. And as we look to the future, we know that we continue to be brighter, stronger and better when we work together.


TRI-STATE
TRI-STATE

Engaging the members

Tri-State exists to serve our members, and it's only through open, two-way communication that we can gauge how well we're doing on that front.

Beginning in 2017 and continuing through 2018, the Tri-State Board of Directors created a member engagement goal and initiated a process to ensure the association's operations and direction were aligned with our members' needs and expectations. A member assessment, which took a long-term view of our opportunities and challenges, was part of that initiative.

Assessment results reinforced Tri-State's strong performance in many areas, including reliability, which is extremely important to our members. Members continue to prioritize the ability to provide reliable and affordable electricity, while acknowledging challenges the association could face in the future, including the wholesale power contract with our members and the association's diversifying energy mix and growing renewable energy portfolio.

Member committees, advisory councils and orientation programs remain important to engaging our membership. We know when we convene our member system directors, CEOs and their staff, we develop a mutual understanding of the issues facing our members, Tri-State and our industry, and spark the conversations that help us move forward together.

Our executive team and staff participated in hundreds of in-person meetings and events with the membership in 2018. Each event served to reinforce connections and provide greater opportunities for meaningful dialogue and engagement.

With our members, we elevated the discussion about our growing renewable energy portfolio. The smart use of electricity remained in the spotlight and we worked together with members to spread the word about the wise use of energy. In 2018, Tri-State's energy efficiency program rebates reached a new record, with 30,582,000 kilowatt-hours saved.

Education remained a priority, with Tri-State hosting numerous technology, key accounts and customer service trainings for the membership. Partnering with our members, Tri-State also held more than a hundred Story Behind the Switch education program sessions for schoolchildren in our members' service territories.

Maintaining our financial strength

Tri-State's financial strength affords meaningful benefits to our members, who govern the financial direction of our association through our board of directors. With the allocation of margins and the return of patronage capital, each member system's balance sheet is fortified, and the financial benefits of the cooperative business model are fully realized.

Tri-State had a solid financial year and met all of the board's financial goals while reducing costs and stabilizing rates. In 2018, $30 million in patronage capital was returned to the membership, and there is no rate increase for 2019. The association also maintained its investment-grade credit ratings.

Operating expenses decreased by approximately four percent and net margins were $42.7 million after deferring revenue to create flexibility for the future. Member energy sales and revenue increased, and the association's total assets increased to over $5 billion.

Delivering power to the members

Tri-State's transmission system enables the reliable delivery of power to our members' distribution systems, provides access to markets and connects generation resources. In 2018, we enhanced transmission system reliability and capacity by completing $95 million in capital additions and improvements. With growth and changes in demand across the system, five member delivery points were modified, and two new delivery points were put in place.

Tri-State also took on responsibility for the operations, maintenance and compliance requirements related to select member assets as part of a policy that has been in place for multiple years. The policy requires Tri-State to purchase from members their transmission assets that are rated at 100 kilovolts and higher. In 2018, Tri-State purchased $5.4 million worth of assets under this policy, bringing the total to over $96 million in asset transfers.

Our transmission organization offers a wide range of services to our members, from coordinating regional transmission planning to supporting training, testing, maintenance and repair services, all of which help them manage costs. In 2018, we completed 66 requests for assistance from our member systems.

In 2018, we continued to evaluate the value of participation in an organized market. While initial efforts included analysis of joining the Southwest Power Pool with our fellow members of the Mountain West Transmission Group (MWTG), the makeup of MWTG changed and the effort was suspended. We remain focused on identifying market opportunities that could reduce member costs and increase efficiencies.

Optimizing our resources

Tri-State's energy management function optimizes the utilization of all our power resources, while buying and selling in the market to reduce costs and improve margins. We are focused on achieving the lowest possible power costs for both the near term and the long term, while also providing a wide range of services to our members.

In 2018, Tri-State issued a request for proposals for new renewable power supply, which resulted in several new power purchase agreements that will increase our wind and solar resources by about 45 percent. Resource additions included extending the Western Area Power Administration Colorado River Storage Project contract to 2054 and contracting for over 250 megawatts of new generation, which was mostly renewable and at highly favorable prices.

Extension of some existing non-member sales along with new sales resulted in strong load growth in excess of three percent in 2018. Work with our members to support load retention and economic development in their service territories drove additional growth. The range of our energy management capabilities also brings value to our members. Tri-State provides ancillary services that maintain reliable operation of the transmission system. Other services range from renewable energy standards compliance to member load forecasting, projections and analyses.

Generating electricity

The generation resources owned by Tri-State continued to support the reliability of the system in 2018. Tri-State installed infrastructure for data collection and live monitoring of the generation fleet and began live monitoring of Craig and Escalante stations.

The Craig Unit 3 generator was successfully rebuilt, and inspections and improvements at all stations continued. Nucla Station maintained ready-to-run status and was called upon during the 416 Fire in southwest Colorado to ensure system stability, and again to meet market demand.

To continue to meet the fuel needs of our coal-fired generation, the Collom Pit at the Colowyo Mine was opened, while reclamation of the New Horizon North Mine was substantially completed.

Maintaining safety and compliance

Tri-State's policy and compliance efforts help us ensure safety and meet stringent regulations across all facets of our operations while also representing the interests of the association and our members in numerous regulatory and legislative processes.

With a goal of 100 percent compliance, staff worked across the organization to ensure compliance and support best practices with reliability, security and environmental requirements.

The safety of our teams remained a priority in 2018, with Tri-State maintaining a better-than-average safety record and being recognized with 14 National Safety Council awards.

Throughout the year, Tri-State reviewed a wide range of federal and state regulatory and legislative proposals and provided comment, actively participated in regulatory reform processes, and educated policymakers on the impacts their actions ultimately have on the communities we serve.

In 2018, our efforts, in collaboration with our members and statewide cooperative organizations, resulted in no new negative requirements in the five states in which we operate. To represent the views and concerns of electric cooperatives, staff served in local, state and federal organization leadership roles.

Investing in people and technology

Tri-State proactively addresses many of the technology challenges facing the utility industry. Protection of our critical infrastructure is a priority to deliver safe and reliable energy, and our goal is to protect the integrity, confidentiality and availability of Tri-State's systems and data. In 2018, numerous cybersecurity initiatives were completed and continued, including a large-scale disaster recovery exercise for critical systems. In addition, 42 information technology projects were completed.

As we look to the future, research, development and demonstration of energy technologies remain central to our ability to manage costs, address challenges and thrive in a dynamic industry. In 2018, Tri-State participated with the Electric Power Research Institute on more than 50 research and development projects and partnered with the U.S. Department of Energy, national labs, universities and cooperative partners.

Investing in the future also means investing in our people. Employee leadership training programs were improved in 2018, while several new employee training programs were created. In total, we provided more than 500 training classes to the trades and crafts employees, with 22 transmission apprentices and 18 generation apprentices graduated to journeyman status.

Our members

COLORADO

DM Delta-Montrose Electric Association, Montrose
EM Empire Electric Association, Inc., Cortez
GC Gunnison County Electric Association, Inc., Gunnison
HL Highline Electric Association, Holyoke
KC K.C. Electric Association, Inc., Hugo
LP La Plata Electric Association, Inc., Durango
MC Morgan County Rural Electric Association, Fort Morgan
MP Mountain Parks Electric, Inc., Granby
MV Mountain View Electric Association, Inc., Limon
PV Poudre Valley Rural Electric Association, Inc., Fort Collins
SI San Isabel Electric Association, Inc., Pueblo West
SV San Luis Valley Rural Electric Cooperative, Inc., Monte Vista
SM San Miguel Power Association, Inc., Nucla
SC Sangre de Cristo Electric Association, Inc., Buena Vista
SE Southeast Colorado Power Association, La Junta
UN United Power, Inc., Brighton
WR White River Electric Association, Inc., Meeker
YW Y-W Electric Association, Inc., Akron

NEBRASKA

CR Chimney Rock Public Power District, Bayard
MW Midwest Electric Cooperative Corporation, Grant
NW Northwest Rural Public Power District, Hay Springs
PH Panhandle Rural Electric Membership Association, Alliance
RS Roosevelt Public Power District, Scottsbluff
WB Wheat Belt Public Power District, Sidney

NEW MEXICO

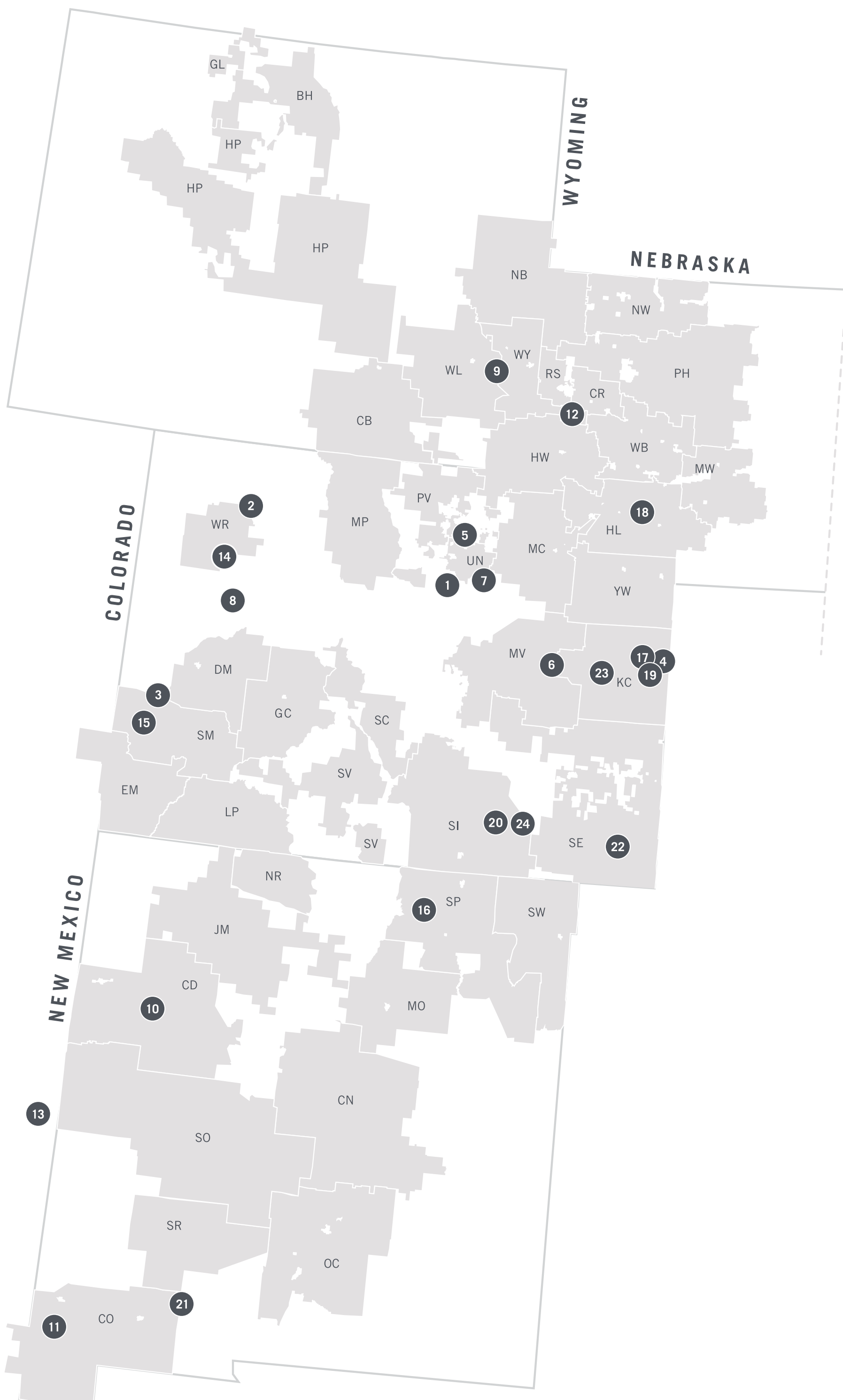
CN Central New Mexico Electric Cooperative, Inc., Mountainair
CO Columbus Electric Cooperative, Inc., Deming
CD Continental Divide Electric Cooperative, Inc., Grants
JM Jemez Mountains Electric Cooperative, Inc., Española
MO Mora-San Miguel Electric Cooperative, Inc., Mora
NR Northern Rio Arriba Electric Cooperative, Inc., Chama
OC Otero County Electric Cooperative, Inc., Cloudcroft
SR Sierra Electric Cooperative, Inc., Elephant Butte
SO Socorro Electric Cooperative, Inc., Socorro
SW Southwestern Electric Cooperative, Inc., Clayton
SP Springer Electric Cooperative, Inc., Springer

WYOMING

BH Big Horn Rural Electric Company, Basin
CB Carbon Power & Light, Inc., Saratoga
GL Garland Light & Power Company, Powell
HP High Plains Power, Inc., Riverton
HW High West Energy, Inc., Pine Bluffs
NB Niobrara Electric Association, Inc., Lusk
WL Wheatland Rural Electric Association, Wheatland
WY Wyrulec Company, Torrington

Our resources

1. **Headquarters and Operations Center**
   Westminster, Colorado
2. **Craig Station**
   Craig, Colorado
3. **Nucla Station**
   Nucla, Colorado
4. **Burlington Station**
   Burlington, Colorado
5. **J.M. Shafer Generating Station**
   Fort Lupton, Colorado
6. **Limon Generating Station**
   Limon, Colorado
7. **Frank R. Knutson Generating Station**
   Brighton, Colorado
8. **Rifle Generating Station**
   Rifle, Colorado
9. **Laramie River Station**
   Wheatland, Wyoming
10. **Escalante Generating Station**
    Prewitt, New Mexico
11. **Pyramid Generating Station**
    Lordsburg, New Mexico
12. **David A. Hamil DC Tie**
    Stegall, Nebraska
13. **Springerville Generating Station**
    Springerville, Arizona
14. **Colowyo Mine**
    Meeker, Colorado
15. **New Horizon Mine**
    Nucla, Colorado
16. **Cimarron Solar**
    Springer, New Mexico
17. **Kit Carson Windpower**
    Burlington, Colorado
18. **Colorado Highlands Wind**
    Fleming, Colorado
19. **Carousel Wind**
    Burlington, Colorado
20. **San Isabel Solar**
    Trinidad, Colorado
21. **Alta Luna Solar**
    Deming, New Mexico
22. **Twin Buttes II Wind**
    Lamar, Colorado
23. **Crossing Trails Wind (2020)**
    Seibert, Colorado
24. **Spanish Peaks Solar (2023)**
    Trinidad, Colorado


WYOMING
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Board of directors

Rick Gordon
Chairman
Mountain View Electric

Scott Wolfe
Vice Chairman
San Luis Valley Rural Electric

Julie Kilty
Secretary
Wyrulec Company

Stuart Morgan
Treasurer
Wheat Belt Public Power

Matt Brown
Assistant Secretary
High Plains Power

Tim Rabon
Assistant Secretary
Otero County Electric

Wayne Connell
Executive Committee
Central New Mexico Electric

Don Keairns
Executive Committee
San Isabel Electric

Shawn Turner
Executive Committee
The Midwest Electric Cooperative

Leroy Anaya
Socorro Electric

Robert Baca
Mora-San Miguel Electric

Robert Bledsoe
K.C. Electric

Lawrence Brase
Southeast Colorado Power

Leo Brekel
Highline Electric

Jerry Burnett
High West Energy

Richard Clifton
Carbon Power & Light

Lucas Cordova Jr.
Jemez Mountains Electric

Mark Daily
Gunnison County Electric

Jack Finnerty
Wheatland Rural Electric

Gary Fuchser
Northwest Rural Public Power

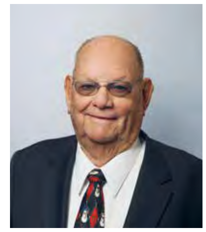
Joel Gilbert
Southwestern Electric

Jack Hammond
Niobrara Electric

Ron Hilkey
White River Electric

Ralph Hilyard
Roosevelt Public Power

Don Kaufman
Sangre de Cristo Electric



Hal Keeler
Columbus Electric

Kyle Martinez
Delta-Montrose Electric

Thaine Michie
Poudre Valley Rural Electric

William Mollenkopf
Empire Electric

Richard Newman
United Power

Stan Propp
Chimney Rock Public Power

Steve Rendon
Northern Rio Arriba Electric

Claudio Romero
Continental Divide Electric

Peggy Ruble
Garland Light & Power

Don Russell
Big Horn Rural Electric

Brian Schlagel
Morgan County Rural Electric

Don Schutz
Springer Electric

Jack Sibold
San Miguel Power

Kirsten Skeehan
La Plata Electric

Jim Soehner
Y-W Electric

Darryl Sullivan
Sierra Electric

Carl Trick, II
Mountain Parks Electric

Phil Zochol
Panhandle Rural Electric

Executive team

Ordered from left to right

I have every confidence that the association is in good hands: the hands of our employees, leadership team, our board and each of our members.

Mike McInnes, CEO

Joel Bladow
Senior Vice President
Transmission

Brad Nebergall
Senior Vice President
Energy Management

Ellen Connor
Senior Vice President
Organizational Services

Chief Technology Officer

Pat Bridges
Senior Vice President

Chief Financial Officer

Mike McInnes
Chief Executive Officer

Barbara Walz
Senior Vice President
Policy and Compliance

Chief Compliance Officer

Jennifer Goss
Senior Vice President
Member Relations

Barry Ingold
Senior Vice President
Generation

Ken Reif
Senior Vice President

General Counsel

Together we power more lives

with Garland Light & Power Company

As Garland Light & Power's load grew, it became clear that the aging infrastructure at the Kysar Substation was struggling to keep pace with Garland's needs. In 2013, their staff began exploring replacement options for the substation, but before long realized that high costs and access to resources were going to be challenges. "We knew we had to do something, but cost especially was going to be prohibitive," explained Steve Reimer, line superintendent. "But we had to do something to be responsive to the needs of our members."

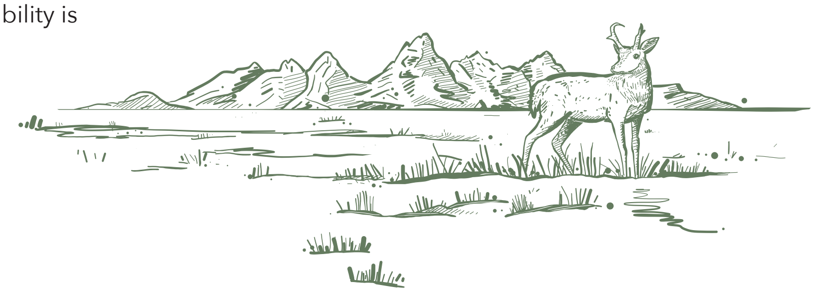
> **"Our combined efforts with Tri-State are producing tangible results for our members."**
>
> **Molly Lynn, GM**

When Molly Lynn took the position of Garland's general manager a year ago, she was ready to continue the efforts, understanding that Garland needed to find an affordable and efficient solution for their members. "Our reliability is so important and this was a big project to take on, as small as we are."

Tri-State became aware of Garland's concerns at a planning meeting and offered to join forces. Over the next several years, representatives from both organizations met to create a cost-effective solution. This resulted in the new Iron Creek Substation, which recently received final approval from the Park County Commissioners in February.

Construction on Iron Creek is slated to begin in late summer, 2019. Once complete, the substation will provide nearly 10 megawatts of power to Garland's territory, which is largely residential.

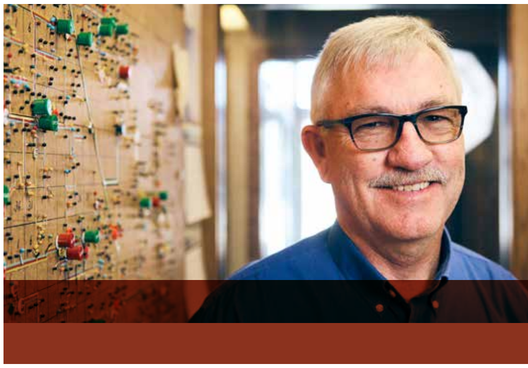
Looking forward to the project's completion next winter, Molly reflected on Garland's partnership with Tri-State: "Our combined efforts with Tri-State are producing tangible results for our members. With this new substation, we will remain a reliable community partner with the capacity to grow."



Garland Light & Power Company	**Location:** Powell, Wyoming	**Miles of line:** 346	**Meters:** 2,056	**Employees:** 6


We are
brighter together.

We are
stronger together.



Together we help members save

with Midwest Electric Cooperative Corporation

“It’s cold out. I gotta go feed my mules and it’s gonna be cold on that tractor,” said Larry Umberger, general manager of Midwest Electric Cooperative Corporation, who appreciates coming back to a warm home during the cold Nebraska winters.

Larry is always looking for savings for Midwest’s members, and for those with electric heat, winter is a good time to take advantage of any savings available. So when the opportunity arose for Midwest and Tri-State to make use of electric heat savings through Basin Electric, he wasted no time launching a new program.

> “Anything we can do to reduce the amount they pay for their electric bill, that’s what I want to do.”
>
> **Larry Umberger, GM**

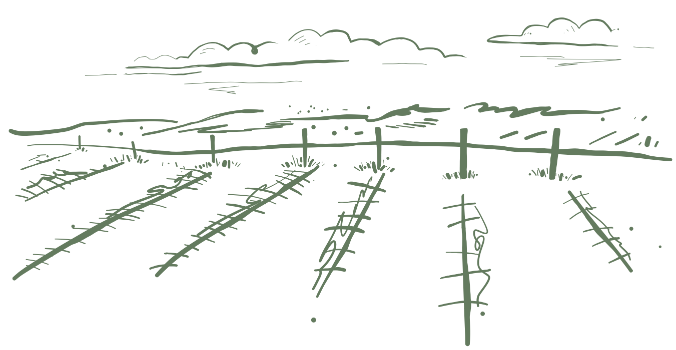
Beginning in December 2018, Midwest began offering members savings of $.025 per kilowatt hour on the electricity used for 240-volt electric heat like baseboard heating, cove heaters and heat pumps.

“Anything we can do to reduce the amount they pay for their electric bill, that’s what I want to do,” said Larry.

The electric heat rate is available to members and businesses from October through April, and results in savings of 25-30 percent on their heating bill. Midwest covers the cost of a new meter to track the electricity specifically being used for heat, and the member pays an electrician to install that new meter. With the savings experienced on their monthly bills, members normally recoup their costs in less than a full season of heating.

Tri-State and our members agree – affordability is key when it comes to meeting the needs of members. Together we look at the unique opportunities available based on the specific characteristics of the member, which can include geography, climate, type of electric load, how that load is served and more.

“This one was easy,” says Larry, “it’s really a win for everyone.”



Midwest Electric Cooperative Corporation | **Location:** Grant, Nebraska | **Miles of line:** 2,964 | **Meters:** 6,583 | **Employees:** 29



Together we power business growth

with Morgan County Rural Electric Association

In Morgan County REA's service territory, as is the case anywhere, growth requires infrastructure. Looking out at the plains of Morgan and Weld counties, historically there hadn't been much to see. But between the growth of the top industries in the area – oil and gas and dairy operations – the countryside now features the landmarks of connection, with new and upgraded power lines and substations meeting their increasing demand for electricity.

> **"The growth has helped us stabilize our rates ... it means we can give more back to our members in the form of capital credits."**
>
> **Dave Frick, GM**

Given that MCREA has doubled its kilowatt hour sales in the last five years and increased from 15 substations to 22, they've learned how to handle that growth. Steve Sundet, MCREA manager of engineering, works with the electricity-intensive businesses moving into or growing within the area to evaluate their needs.

MCREA can handle much of the current growth with their existing infrastructure, but given the demand of different elements of the oil and gas business – like processing plants, compressors, oil wells and sand mines – they often pull in Tri-State to help.

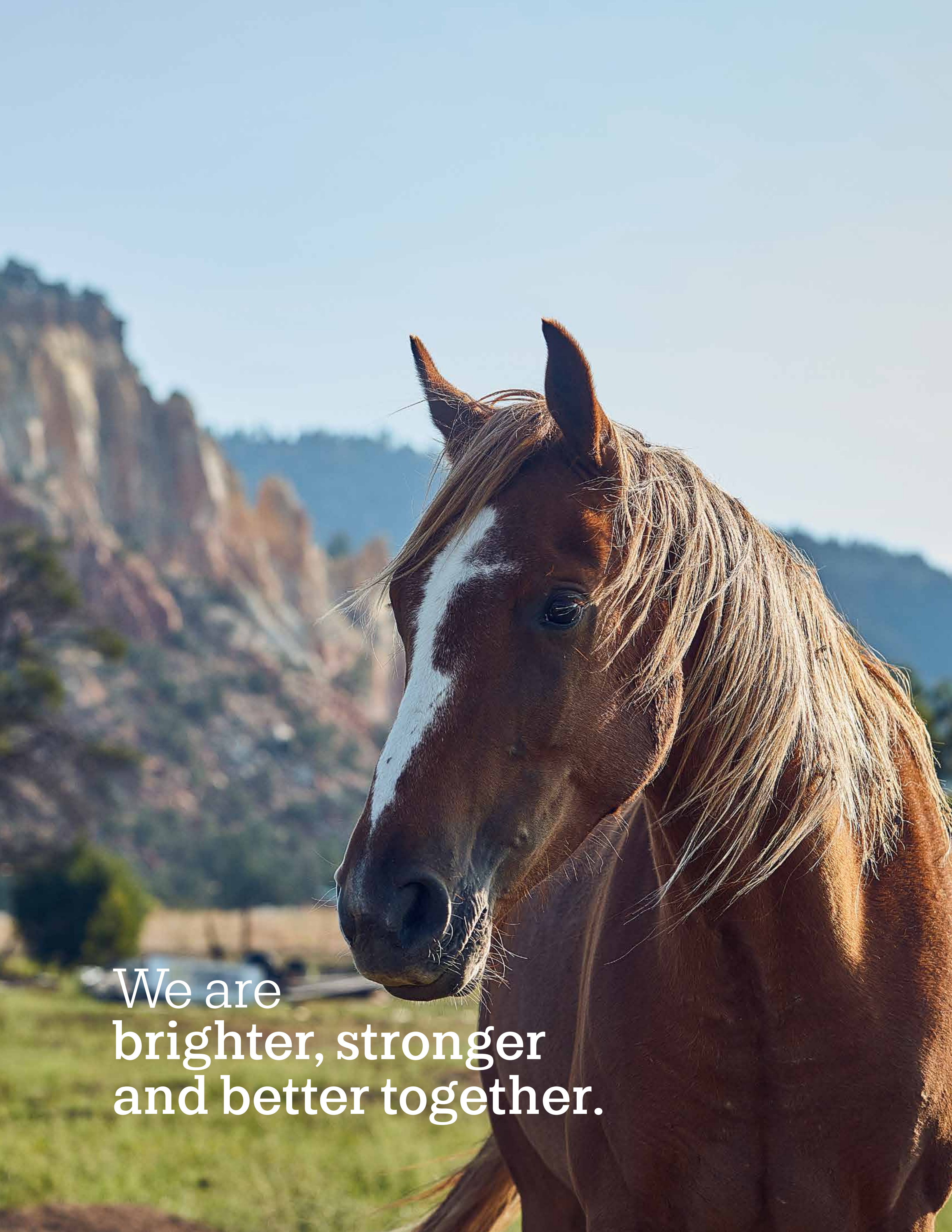
"We evaluate the estimated load, and generally when it's a 5-megawatt or larger demand from a new member, we get Tri-State involved," says Steve. One unique example of how Tri-State helped meet that demand was by tapping a 345 kilovolt line and installing a new delivery point for MCREA near Keota, Colorado. In fact, MCREA has 19 points of delivery where Tri-State provides power through the interconnected transmission system to the member's distribution system.

MCREA General Manager Dave Frick sees the impact of working together with Tri-State to support the growing load. "Us being part of the Tri-State family, that made this growth so much easier. The new delivery points have opened up so many more possibilities for us to meet the ongoing demand."

Dave has been at the helm through the recent growth and well before it. "In my first 20 years here at the co-op I never saw any of this happen, and in the last 10 years it's on a weekly basis that Steve's getting requests for new services," says Dave. "The growth has helped us stabilize our rates. At the end of the day it means we can give more back to our members in the form of capital credits."

Morgan County REA	**Location:** Ft. Morgan, Colorado	**Miles of line:** 2,836	**Meters:** 8,512	**Employees:** 39


We are
better together.


We are
brighter, stronger
and better together.

Together we strengthen our communities

with Jemez Mountains Electric Cooperative

In 2016, Sandoval County leadership began assessing ways to save money and reduce their facilities' environmental impact. The plan would include the installation of solar panels, high-efficiency heating and cooling equipment, water conservation measures and updating more than 5,700 interior and 440 exterior lighting fixtures to high-efficiency LEDs.

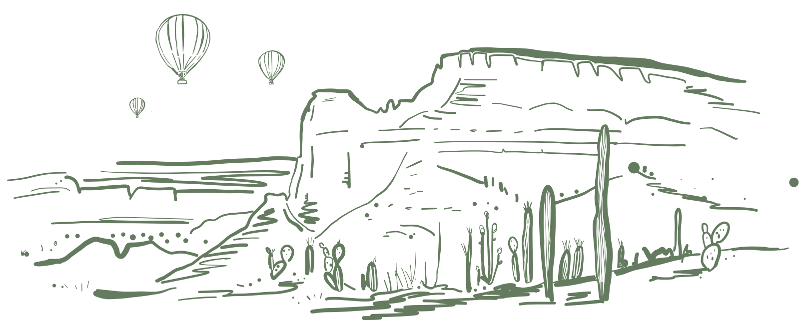
Since a project of this scale was new to Jemez, their CEO, Donna Montoya-Trujillo, partnered with Sandoval County to learn the best ways to build processes and move forward with the plans. "We want to help our members be as energy-efficient as possible and we want our schools, our government and our fire departments to be as strong as possible," she explained.

> "We want to help our members be as energy-efficient as possible."
>
> **Donna Montoya-Trujillo, CEO**

By the end of 2018, with the assistance of Jemez and Tri-State's energy efficiency programs, Sandoval County completed 15 LED retrofits on county buildings that included a community center, the county fairgrounds and 12 fire stations. With these energy-efficiency systems in place, the county is expecting to reduce annual energy costs by 35 percent.

While energy efficient products such as LEDs can save money on energy costs in some areas, new technologies also present an opportunity for increased load. "We're working with the state to learn more about installing electric vehicle charging stations and we're finding that other counties are also expressing interest in doing the same," Donna explained.

Jemez continues to work with their members to provide what Donna calls a basic human need – power. Having grown up in the area, she has a strong sense of community responsibility, which is "what's expected – it is the whole co-op structure. Our industry impacts the everyday lives of the people who live here and we want to work together to make everybody stronger."



Jemez Mountains Electric Cooperative	**Location:** Española, New Mexico	**Miles of line:** 4,061	**Meters:** 31,031	**Employees:** 110


TRI-STATE

Report of Ernst & Young LLP, Independent Registered Public Accounting Firm

The Board of Directors of Tri-State Generation and Transmission Association, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of Tri-State Generation and Transmission Association, Inc. (the "Association") as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Association at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Association's management. Our responsibility is to express an opinion on the Association's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Association in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Association is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Association's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Ernst + Young LLP

We have served as the Association's auditor since 1977.

Denver, Colorado
March 8, 2019

Tri-State Generation and Transmission Association, Inc.
Consolidated Statements of Financial Position
(dollars in thousands)

As of December 31,	2018	2017
ASSETS		
Property, plant and equipment		
Electric plant		
In service	$ 5,899,128	$ 5,802,844
Construction work in progress	207,732	175,567
Total electric plant	6,106,860	5,978,411
Less allowances for depreciation and amortization	(2,499,376)	(2,409,020)
Net electric plant	3,607,484	3,569,391
Other plant	384,650	283,546
Less allowances for depreciation, amortization and depletion	(110,939)	(105,660)
Net other plant	273,711	177,886
Total property, plant and equipment	3,881,195	3,747,277
Other assets and investments		
Investments in other associations	161,487	143,608
Investments in and advances to coal mines	18,928	18,274
Restricted cash and investments	10,606	5,979
Intangible assets, net of accumulated amortization	3,662	10,986
Other noncurrent assets	9,022	9,604
Total other assets and investments	203,705	188,451
Current assets		
Cash and cash equivalents	116,858	143,694
Restricted cash and investments	126	1,292
Deposits and advances	29,641	27,881
Accounts receivable—Members	107,572	102,035
Other accounts receivable	22,434	16,034
Coal inventory	55,883	46,849
Materials and supplies	93,786	89,459
Total current assets	426,300	427,244
Deferred charges		
Regulatory assets	437,377	454,523
Prepayment—NRECA Retirement Security Plan	31,837	37,607
Other	46,453	38,492
Total deferred charges	515,667	530,622
Total assets	**$ 5,026,867**	**$ 4,893,594**
EQUITY AND LIABILITIES		
Capitalization		
Patronage capital equity	$ 1,015,754	$ 1,003,020
Accumulated other comprehensive income (loss)	375	(210)
Noncontrolling interest	110,169	111,295
Total equity	1,126,298	1,114,105
Long-term debt	3,109,301	3,120,286
Total capitalization	4,235,599	4,234,391
Current liabilities		
Member advances	13,988	8,447
Accounts payable	105,009	117,510
Short-term borrowings	204,145	144,667
Accrued expenses	40,285	32,484
Current asset retirement obligations	2,183	3,087
Accrued interest	32,070	32,852
Accrued property taxes	28,582	27,137
Current maturities of long-term debt	95,757	78,004
Total current liabilities	522,019	444,188
Deferred credits and other liabilities		
Regulatory liabilities	137,369	81,824
Deferred income tax liability	18,098	17,205
Asset retirement obligations	54,589	53,768
Other	50,266	53,396
Total deferred credits and other liabilities	260,322	206,193
Accumulated postretirement benefit and postemployment obligations	8,927	8,822
Total equity and liabilities	**$ 5,026,867**	**$ 4,893,594**

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

Tri-State Generation and Transmission Association, Inc.
Consolidated Statements of Operations
(dollars in thousands)

For the years ended December 31,	2018	2017	2016
Operating revenues			
Member electric sales	$ 1,235,872	$ 1,199,940	$ 1,134,781
Non-member electric sales	34,763	98,872	119,326
Other	50,202	89,781	86,989
	1,320,837	1,388,593	1,341,096
Operating expenses			
Purchased power	343,509	339,830	328,407
Fuel	237,721	244,328	235,645
Production	212,917	207,993	218,008
Transmission	161,652	153,510	156,713
General and administrative	33,046	28,704	26,320
Depreciation, amortization and depletion	154,975	174,526	173,969
Coal mining	637	40,034	36,929
Other	14,987	15,971	18,099
	1,159,444	1,204,896	1,194,090
Operating margins	**161,393**	**183,697**	**147,006**
Other income (expense)			
Interest	5,294	4,723	4,368
Capital credits from cooperatives	27,373	12,934	20,349
Membership withdrawal	—	5,000	—
Other, net	5,131	3,966	3,934
	37,798	26,623	28,651
Interest expense, net of amounts capitalized	153,704	147,608	144,877
Income tax benefit	(534)	(1,092)	(1,417)
Net margins including noncontrolling interest	46,021	63,804	32,197
Net income attributable to noncontrolling interest	(3,287)	(2,148)	(449)
Net margins attributable to the Association	**$ 42,734**	**$ 61,656**	**$ 31,748**

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

Tri-State Generation and Transmission Association, Inc.
Consolidated Statements of Comprehensive Income
(dollars in thousands)

For the years ended December 31,	2018	2017	2016
Net margins including noncontrolling interest	$ 46,021	$ 63,804	$ 32,197
Other comprehensive income (loss):			
Unrealized gain (loss) on securities available for sale	—	43	(13)
Unrecognized actuarial gain (loss) on postretirement benefit obligation	456	106	(821)
Reclassification of unrealized gain on securities available for sale included in net margin	(159)	—	—
Amortization of actuarial (gain) loss on postretirement benefit obligation included in net margin	288	(73)	(41)
Income tax expense related to components of other comprehensive income (loss)	—	—	—
Other comprehensive income (loss)	585	76	(875)
Comprehensive income including noncontrolling interest	46,606	63,880	31,322
Net comprehensive income attributable to noncontrolling interest	(3,287)	(2,148)	(449)
Comprehensive income attributable to the Association	**$ 43,319**	**$ 61,732**	**$ 30,873**

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

Tri-State Generation and Transmission Association, Inc.
Consolidated Statements of Equity
(dollars in thousands)

For the years ended December 31,	2018	2017	2016
Patronage capital equity at beginning of year	$ 1,003,020	$ 961,364	$ 952,082
Net margins attributable to the Association	42,734	61,656	31,748
Retirement of patronage capital	(30,000)	(20,000)	(22,466)
Patronage capital equity at end of year	**1,015,754**	**1,003,020**	**961,364**
Accumulated other comprehensive income (loss) at beginning of year	(210)	(286)	589
Unrealized gain (loss) on securities available for sale	—	43	(13)
Unrecognized actuarial gain (loss) on postretirement benefit obligation	456	106	(821)
Reclassification adjustment for unrealized gain on securities available for sale included in net margin	(159)	—	—
Reclassification adjustment for actuarial (gain) loss on postretirement benefit obligation included in net margin	288	(73)	(41)
Accumulated other comprehensive income (loss) at end of year	**375**	**(210)**	**(286)**
Noncontrolling interest at beginning of year	111,295	109,147	108,757
Net comprehensive income attributable to noncontrolling interest	3,287	2,148	449
Equity distribution to noncontrolling interest	(4,413)	—	(59)
Noncontrolling interest at end of year	**110,169**	**111,295**	**109,147**
Total equity at end of year	**$ 1,126,298**	**$ 1,114,105**	**$ 1,070,225**

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

Tri-State Generation and Transmission Association, Inc.
Consolidated Statements of Cash Flows *(dollars in thousands)*

For the years ended December 31,	2018	2017	2016
Operating activities			
Net margins including noncontrolling interest	$ 46,021	$ 63,804	$ 32,197
Adjustments to reconcile net margins to net cash provided by operating activities:			
Depreciation, amortization and depletion	154,975	174,526	173,969
Amortization of intangible asset	7,324	7,324	7,324
Amortization of NRECA Retirement Security Plan prepayment	5,372	5,372	5,372
Amortization of debt issuance costs	2,641	1,985	1,931
Impairment loss - Holcomb expansion	—	93,494	—
Deferred Holcomb expansion impairment loss	—	(93,494)	—
Deferred membership withdrawal income	—	—	47,572
Recognition of deferred membership withdrawal income	—	(5,000)	—
Deferred revenue	51,679	9,527	—
Recognition of deferred revenue	—	(15,000)	(9,200)
Capital credit allocations from cooperatives and income from coal mines over refund distributions	(18,090)	(4,417)	(17,933)
Proceeds from settlement of interest rate swap	—	4,625	—
Changes in operating assets and liabilities:			
Accounts receivable	(5,922)	4,924	(2,417)
Coal inventory	(8,080)	17,097	(4,668)
Materials and supplies	(3,576)	(1,691)	(2,267)
Accounts payable and accrued expenses	(10,434)	628	3,676
Accrued interest	(782)	(1,313)	(166)
Accrued property taxes	1,446	(448)	189
Other deferred credits - TEP transmission (settlement) refund	—	(15,521)	15,521
Other	(6,297)	(6,039)	(229)
Net cash provided by operating activities	**216,277**	**240,383**	**250,871**
Investing activities			
Purchases of plant	(280,712)	(214,781)	(219,771)
Changes in deferred charges	(2,233)	1,112	(298)
Proceeds from other investments	67	911	313
Net cash used in investing activities	**(282,878)**	**(212,758)**	**(219,756)**
Financing activities			
Changes in Member advances	(1,717)	(6,852)	(887)
Payments of long-term debt	(133,848)	(108,301)	(423,957)
Proceeds from issuance of long-term debt	150,090	60,000	309,985
Debt issuance costs	(10,697)	(1,450)	(2,985)
Increase in short-term borrowings, net	59,478	24,767	119,901
Retirement of patronage capital	(15,339)	(12,815)	(19,486)
Equity distribution to noncontrolling interest	(4,413)	—	(59)
Other	(328)	101	(854)
Net cash provided by (used in) financing activities	**43,226**	**(44,550)**	**(18,342)**
Net increase (decrease) in cash, cash equivalents and restricted cash and investments	**(23,375)**	**(16,925)**	**12,773**
Cash, cash equivalents and restricted cash and investments – beginning	**150,965**	**167,890**	**155,117**
Cash, cash equivalents and restricted cash and investments – ending	**$ 127,590**	**$ 150,965**	**$ 167,890**
Supplemental cash flow information:			
Cash paid for interest	$ 161,809	$ 159,112	$ 158,978
Cash paid for income taxes	$ —	$ —	$ 1,100
Supplemental disclosure of noncash investing and financing activities:			
Change in plant expenditures included in accounts payable	$ (44)	$ (3,242)	$ (1,354)

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

Tri-State Generation and Transmission Association, Inc.

Notes to Consolidated Financial Statements

NOTE 1 – ORGANIZATION

Tri-State Generation and Transmission Association, Inc. ("Tri-State," "we", "our," "us", or "the Association") is a taxable wholesale electric power generation and transmission cooperative organized for the purpose of providing electricity to our member distribution systems ("Member(s)"), that serve large portions of Colorado, Nebraska, New Mexico and Wyoming. We also sell a portion of our electric power to other utilities in our regions pursuant to long-term contracts and short-term sale arrangements. In 2018, 2017 and 2016, total megawatt-hours sold were 18.2, 18.0 and 17.9 million, respectively, of which 90.0, 88.3 and 88.0 percent, respectively, were sold to Members. Total revenue from electric sales was $1.3 billion for 2018, 2017 and 2016 of which 97.3, 92.3, and 90.5 percent in 2018, 2017 and 2016, respectively, was from Member sales. Energy resources were provided by our generation and purchased power, of which 58.9, 61.4 and 59.3 percent in 2018, 2017 and 2016, respectively, were from our generation.

Pursuant to our Bylaws, unless otherwise specified in a written agreement, each Member is required to purchase from us all electric power and energy used by such Member. This requirement in our Bylaws is further specified in a wholesale electric service contract with each Member. Our wholesale electric service contracts with our Members extending through 2050 for 42 Members (which constitute approximately 96.8 percent of our revenue from Member sales for 2018) and extending through 2040 for the remaining Member (Delta-Montrose Electric Association) are substantially similar. These contracts are subject to automatic extension thereafter until either party provides at least a two years' notice of its intent to terminate. Each contract obligates us to sell and deliver to the Member and obligates the Member to purchase and receive at least 95 percent of its electric power requirements from us. Each Member may elect to provide up to 5 percent of its requirements from distributed or renewable generation owned or controlled by the Member. As of December 31, 2018, 21 Members have enrolled in this program with capacity totaling approximately 139 megawatts of which 111 megawatts are in operation.

Revenue from one Member, United Power, Inc., was $185.7 million, or 15.0 percent, of our Member revenue and 14.0 percent of our total operating revenues in 2018. No other Member exceeded 10 percent of our Member revenue or our total operating revenues in 2018.

Power is provided to Members at rates determined by our Board of Directors ("Board"). Rates are designed to recover all costs and provide margins to increase Members' equity and to meet certain financial covenants, including a debt service ratio ("DSR") requirement and equity to capitalization ratio ("ECR") requirement.

We supply wholesale power to our Members through the utilization of a portfolio of resources, including generation and transmission facilities, long-term purchase contracts and short-term energy purchases. Our generating facilities also include undivided ownership interests in jointly owned generating facilities. See Note 3—Property, Plant and Equipment. In support of our coal-fired generating facilities, we have direct ownership and investment in coal mines.

We, including our subsidiaries, employ 1,504 people, of which 304 are subject to collective bargaining agreements. None of these agreements expire within one year.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF CONSOLIDATION: Our consolidated financial statements include the accounts of the Association, our wholly-owned and majority-owned subsidiaries, and certain variable interest entities for which we or our subsidiaries are the primary beneficiaries. See Note 14—Variable Interest Entities. Our consolidated financial statements also include our undivided interests in jointly owned facilities.

All significant intercompany balances and transactions have been eliminated in consolidation. The accompanying consolidated statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") as applied to regulated enterprises.

JOINTLY OWNED FACILITIES: We own undivided interests in two jointly owned generating facilities that are operated by the operating agent of each facility under joint facility ownership agreements with other utilities as tenants in common. These projects include the Yampa Project (operated by us) and the Missouri Basin Power Project ("MBPP") (operated by Basin Electric Power Cooperative ("Basin")). Each participant in these agreements receives a portion of the total output of the generation facilities, which approximates its percentage ownership. Each participant provides its own financing for its share of each facility and accounts for its share of the cost of each facility. The operating agent for each of these projects allocates the fuel and operating expenses to each participant based upon its share of the use of the facility. Therefore, our share of the plant asset cost, interest, depreciation and operating expenses is included in our consolidated financial statements. See Note 3 – Property, Plant and Equipment.

SEGMENT REPORTING: We are organized for the purpose of supplying wholesale power to our Members and do so through the utilization of a portfolio of resources, including generation and transmission facilities, long-term purchase contracts and short-term energy purchases. In support of our coal-fired generating resources, we have direct ownership and investments in coal mines. Our Board serves as our chief operating decision maker who manages and reviews our operating results and allocates resources as one operating segment. Therefore, we have one reportable segment for financial reporting purposes.

BUSINESS COMBINATIONS: We account for business acquisitions by applying the accounting standard related to business combinations. In accordance with this method, the identifiable assets acquired, the liabilities assumed and any noncontrolling interests in the acquired entities are required to be recognized at their acquisition date fair values. We typically engage an independent valuation firm to determine the acquisition date fair values of most of the acquired assets and assumed liabilities. The excess of total consideration transferred over the net assets acquired is recognized as goodwill. Acquisition-related costs such as legal fees, accounting services fees and valuation fees, are expensed as incurred. We are required to consolidate these acquired entities.

If an acquisition does not result in acquiring a business, the transaction is accounted for as an acquisition of assets. This method requires measurement and recognition of the acquired net assets based upon the amount of cash transferred and the amount paid for acquisition-related costs. There is no goodwill recognized in an acquisition of assets.

USE OF ESTIMATES: The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates.

IMPAIRMENT EVALUATION: Long-lived assets (property, plant and equipment, intangible assets, investments and preliminary surveys and investigation costs) that are held and used are evaluated for impairment whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable. An impairment loss is recognized when estimated undiscounted cash flows expected to result from the use of the asset plus net proceeds expected from disposition of the asset (if any) are less than the carrying value of the asset. When an impairment loss is recognized, the carrying amount of the asset is reduced to its estimated fair value based on quoted market prices or other valuation techniques. There were no impairments of long-lived assets recognized for 2018 and 2016. In June 2017, we determined that the $93.5 million of development costs (which excluded the costs of land and water rights) for a new coal-fired generating unit or units at Holcomb Generating Station were impaired. The impairment loss was deferred in accordance with the accounting requirements related to regulated operations at the discretion of our Board. See Note 2 – Accounting for Rate Regulation.

VARIABLE INTEREST ENTITIES: We evaluate our arrangements and relationships with other entities, including our investments in other associations and investments in coal mines, in accordance with the accounting standard related to consolidation of variable interest entities. This guidance requires us to identify variable interests (contractual, ownership or other financial interests) in other entities and whether any of those entities in which we have a variable interest in, meets the criteria of a variable interest entity. An entity is considered to be a variable interest entity when its total equity investment at risk is not sufficient to permit the entity to finance its activities without additional subordinated financial support, or its equity investors, as a group, lack the characteristics of having a controlling financial interest. In making this assessment, we consider the potential that our arrangements and relationships with other entities provide subordinated financial support, the potential for us to absorb losses or rights to residual returns of an entity, the ability to directly or indirectly make decisions about the entity's activities and other factors. If an entity that we have a variable interest in meets the criteria of a variable interest entity, we must determine whether we are the primary beneficiary of that entity. The primary beneficiary is the entity that has the power to direct the activities of the variable interest entity that most significantly impact the variable interest entity's economic performance, and the obligation to absorb losses or the right to receive benefits from the variable interest entity that could be potentially significant to the variable interest entity. If we are determined to be the primary beneficiary of (has controlling financial interest in) a variable interest entity, then we would be required to consolidate that entity. In certain situations, it may be determined that power is shared among multiple unrelated parties such that no one party has the power to direct the activities of a variable interest entity that most significantly impact the variable interest entity's economic performance (decisions about those activities require the consent of each of the parties sharing power). In accordance with the accounting guidance prescribed by consolidation of variable interest entities, if the determination is made that power is shared among multiple unrelated parties, then no party is the primary beneficiary. See Note 14—Variable Interest Entities.

ACCOUNTING FOR RATE REGULATION: We are subject to the accounting requirements related to regulated operations. In accordance with these accounting requirements, some revenues and expenses have been deferred at the discretion of our Board, which has budgetary and rate-setting authority, if it is probable that these amounts will be refunded or recovered through future rates. Regulatory assets are costs we expect to recover from our Members based on rates approved by our Board in accordance with our rate policy. Regulatory liabilities represent probable future reductions in rates associated with amounts that are expected to be refunded to our Members based on rates approved by our Board in accordance with our rate policy. We recognize regulatory assets as expenses and regulatory liabilities as operating revenues, other income, or a reduction in expense concurrent with their recovery in rates.

Regulatory assets and liabilities are as follows (dollars in thousands):

	December 31, 2018	December 31, 2017
Regulatory assets		
Deferred income tax expense (1)	$ 18,098	$ 17,205
Deferred prepaid lease expense – Craig Unit 3 Lease (2)	—	3,237
Deferred prepaid lease expense – Springerville Unit 3 Lease (3)	86,005	88,296
Goodwill – J.M. Shafer (4)	51,994	54,843
Goodwill – Colowyo Coal (5)	38,227	39,261
Deferred debt prepayment transaction costs (6)	149,559	158,187
Deferred Holcomb expansion impairment loss (7)	93,494	93,494
Total regulatory assets	437,377	454,523
Regulatory liabilities		
Interest rate swap - unrealized gain (8)	8,576	4,311
Interest rate swap - realized gain (9)	4,215	4,614
Deferred revenues (10)	82,006	30,327
Membership withdrawal (11)	42,572	42,572
Total regulatory liabilities	137,369	81,824
Net regulatory asset	$ 300,008	$ 372,699

(1) A regulatory asset or liability associated with deferred income taxes generally represents the future increase or decrease in income taxes payable that will be received or settled through future rate revenues.

(2) Represented deferral of the loss on acquisition related to the Craig Generating Station ("Craig Station") Unit 3 prepaid lease expense upon acquisitions of equity interests in 2002 and 2006. The regulatory asset for the deferred prepaid lease expense was amortized to depreciation, amortization and depletion expense in the amount of $6.5 million annually through December 31, 2017. The remaining $3.2 million was amortized to depreciation, amortization and depletion expense for the six month period ending June 30, 2018 and recovered from our Members in rates.
(3) Represents deferral of the loss on acquisition related to the Springerville Generating Station Unit 3 ("Springerville Unit 3") prepaid lease expense upon acquiring a controlling interest in the Springerville Unit 3 Partnership LP ("Springerville Partnership") in 2009. The regulatory asset for the deferred prepaid lease expense is being amortized to depreciation, amortization and depletion expense in the amount of $2.3 million annually through the 47-year period ending in 2056 and recovered from our Members in rates.
(4) Represents goodwill related to our acquisition of Thermo Cogeneration Partnership, LP ("TCP") in December 2011. Goodwill is being amortized to depreciation, amortization and depletion expense in the amount of $2.8 million annually through the 25-year period ending in 2036 and recovered from our Members in rates.
(5) Represents goodwill related to our acquisition of Colowyo Coal Company LP ("Colowyo Coal") in December 2011. Goodwill is being amortized to depreciation, amortization and depletion expense in the amount of $1.0 million annually through the 44-year period ending in 2056 and recovered from our Members in rates.
(6) Represents transaction costs that we incurred related to the prepayment of our long-term debt in 2014. These costs are being amortized to depreciation, amortization and depletion expense in the amount of $8.6 million annually over the 21.4-year period ending in 2036 and recovered from our Members in rates.
(7) Represents deferral of the impairment loss related to development costs, including costs for the option to purchase development rights for the expansion of the Holcomb Generating Station. The plan for the recovery from our Members in rates has not been determined by our Board. Once the plan for recovery is determined, the deferred impairment loss will be recognized in other operating expenses.
(8) Represents deferral of an unrealized gain related to the change in fair value of a forward starting interest rate swap that was entered into in 2016 in order to hedge interest rates on anticipated future borrowings. Upon settlement of this interest rate swap, the realized gain or loss will be deferred and subsequently recognized as interest expense when amortized over the term of the associated long-term debt borrowing. See Note 6 – Long-Term Debt and Note 8 – Fair Value.
(9) Represents deferral of a realized gain of $4.6 million related to the October 2017 settlement of a forward starting interest rate swap. This realized gain was deferred as a regulatory liability and is being amortized to interest expense over the 12-year term of the First Mortgage Obligations, Series 2017A and refunded to Members through reduced rates when recognized in future periods.
(10) Represents deferral of the recognition of non-member electric sales revenues. These deferred non-member electric sales revenues will be refunded to Members through reduced rates when recognized in non-member electric sales revenue in future periods.
(11) Represents the deferral of the recognition of other income recorded in connection with the withdrawal of a former member from membership in us. This deferred membership withdrawal income will be refunded to Members through reduced rates when recognized in other income in future periods.

ELECTRIC PLANT AND DEPRECIATION: Electric plant is stated at cost. The cost of internally constructed assets includes payroll, overhead costs and interest charged during construction. Interest rates charged during construction of 4.7 percent were used for 2018, 2017 and 2016. The amount of interest capitalized during construction was $8.6, $11.0 and $13.8 million during 2018, 2017 and 2016, respectively. At the time that units of electric plant are retired, original cost and cost of removal, net of the salvage value, are charged to the allowance for depreciation. Replacements of electric plant that involve less than a designated unit value are charged to maintenance expense when incurred. Electric plant is depreciated based upon estimated depreciation rates and useful lives that are periodically re-evaluated. See Note 3 - Property, Plant and Equipment.

COAL RESERVES AND DEPLETION: Coal reserves are recorded at cost. Depletion of coal reserves is computed using the units-of-production method utilizing only proven and probable reserves.

LEASES: The accounting for lease transactions in conformity with GAAP requires management to make various assumptions, including the discount rate, the fair market value of the leased assets and the estimated useful life, in order to determine whether a lease should be classified as operating or capital.

INVESTMENTS IN OTHER ASSOCIATIONS: Investments in other associations include investments in the patronage capital of other cooperatives and other required investments in the organizations. Our investment in a cooperative increases when a cooperative allocates patronage capital credits to us and it decreases when we receive a cash retirement of the allocated capital credits from the cooperative. A cooperative allocates its patronage capital credits to us based upon our patronage (amount of business done) with the cooperative.

Investments in other associations are as follows (dollars in thousands):

	December 31, **2018**	December 31, **2017**
Basin Electric Power Cooperative	$ 118,115	$ 101,820
National Rural Utilities Cooperative Finance Corporation - patronage capital	11,704	11,232
National Rural Utilities Cooperative Finance Corporation - capital term certificates	16,018	16,085
CoBank, ACB	9,062	8,174
Western Fuels Association, Inc.	2,392	2,346
Other	4,196	3,951
Investments in other associations	$ 161,487	$ 143,608

Our investments in other associations are considered equity securities without readily determinable fair values, and as such are measured at cost minus impairment. We have evaluated these investments for indicators of impairment. There were no impairments of these investments recognized during 2018, 2017 or 2016.

INVESTMENTS IN AND ADVANCES TO COAL MINES: We have direct ownership and investments in coal mines to support our coal-fired generating resources. We, and certain participants in the Yampa Project, are members of Trapper Mining, Inc. ("Trapper Mining"), which is organized as a cooperative and is the owner and operator of the Trapper Mine near Craig, Colorado. Our investment in Trapper Mining is recorded using the equity method. In addition, we have ownership in Western Fuels Association, Inc. ("WFA"), which is an owner of Western Fuels-Wyoming, Inc. ("WFW"), the owner and operator of the Dry Fork Mine near Gillette, Wyoming. Dry Fork Mine provides coal to MBPP, which is the operator of Laramie River Generating Station. We, through our undivided interest in the jointly owned facility MBPP, advance funds to the Dry Fork Mine.

Investments in and advances to coal mines are as follows (dollars in thousands):

	December 31, **2018**	December 31, **2017**
Investment in Trapper Mine	$ 15,350	$ 14,998
Advances to Dry Fork Mine	3,578	3,276
Investments in and advances to coal mines	$ 18,928	$ 18,274

CASH, CASH EQUIVALENTS AND RESTRICTED CASH AND INVESTMENTS: We consider highly liquid investments with an original maturity of three months or less to be cash equivalents. The fair value of cash equivalents approximates their carrying values due to their short-term maturity.

Restricted cash and investments represent funds designated by our Board for specific uses and funds restricted by contract or other legal reasons. A portion of the funds are funds that have been restricted by contract that are expected to be settled within one year. These funds are therefore classified as current on our consolidated statements of financial position. The other funds are for funds restricted by contract or other legal reasons that are expected to be settled beyond one year. These funds are classified as noncurrent and are included in other assets and investments on our consolidated statements of financial position.

The following table provides a reconciliation of cash, cash equivalents and restricted cash and investments reported within our consolidated statements of financial position that sum to the total of the same such amount shown in our consolidated statements of cash flows (dollars in thousands):

	December 31, **2018**	December 31, **2017**
Cash and cash equivalents	$ 116,858	$ 143,694
Restricted cash and investments - current	126	1,292
Restricted cash and investments - noncurrent	10,606	5,979
Cash, cash equivalents and restricted cash and investments	$ 127,590	$ 150,965

Our Board Policy for Financial Goals and Capital Credits was revised in 2018 to provide that our Board will endeavor to fund an internally restricted cash account for the purpose of cash funding deferred revenues and incomes held as regulatory liabilities. In connection with such policy, at the end of 2018, our Board internally restricted cash in the amount of $4.6 million.

MARKETABLE SECURITIES: We hold marketable securities in connection with the directors' and executives' elective deferred compensation plans which consist of investments in stock funds, bond funds and money market funds. These securities are measured at fair value on a recurring basis with changes in fair value recognized in earnings. The estimated fair value of the investments is based upon their active market value (Level 1 inputs) and is included in other noncurrent assets on our consolidated statements of financial position. At December 31, 2018, the cost and estimated fair value of the investments were $0.8 and $0.7 million, respectively. At December 31, 2017, the cost and estimated fair value of the investments were $1.0 and $1.2 million, respectively.

INVENTORIES: Coal inventories at our owned generating facilities are stated at LIFO (last-in, first-out) cost and were $24.6 and $26.8 million as of December 31, 2018 and 2017, respectively. The remaining coal inventories, other fuel, and materials and supplies inventories are stated at average cost. In 2018, we realized lower coal fuel expense of $0.8 million as a result of a LIFO inventory liquidation at our generating facilities.

OTHER DEFERRED CHARGES: We make expenditures for preliminary surveys and investigations for the purpose of determining the feasibility of contemplated generation and transmission projects. If construction results, the preliminary survey and investigation expenditures will be reclassified to electric plant—construction work in progress. If the work is abandoned, the related preliminary survey and investigation expenditures will be charged to the appropriate operating expense account or the expense could be deferred as a regulatory asset to be recovered from our Members in rates subject to approval by our Board, which has budgetary and rate-setting authority.

We make advance payments to the operating agents of jointly owned facilities to fund our share of costs expected to be incurred under each project including MBPP – Laramie River Station and Yampa Project – Craig Generating Station Units 1 and 2. We also make advance payments to the operating agent of Springerville Unit 3.

We have entered into a forward starting interest rate swap to hedge a portion of our future long-term debt interest rate exposure. The unrealized gain of $8.6 and $4.3 million as of December 31, 2018 and 2017, respectively, was deferred in accordance with the accounting requirements related to regulated operations. See Note 2 – Accounting for Rate Regulation.

Other deferred charges are as follows (dollars in thousands):

	December 31, **2018**	December 31, **2017**
Preliminary surveys and investigations	$ 20,660	$ 19,737
Advances to operating agents of jointly owned facilities	13,161	10,740
Interest rate swap	8,576	4,311
Other	4,056	3,704
Total other deferred charges	$ 46,453	$ 38,492

DEBT ISSUANCE COSTS: We account for debt issuance costs as a direct deduction of the associated long-term debt carrying amount consistent with the accounting for debt discounts and premiums. Deferred debt issuance costs are amortized to interest expense using an effective interest method over the life of the respective debt.

ASSET RETIREMENT OBLIGATIONS: We account for current obligations associated with the future retirement of tangible long-lived assets in accordance with the accounting guidance relating to asset retirement and environmental obligations. This guidance requires that legal obligations associated with the retirement of long-lived assets be recognized at fair value at the time the liability is incurred and capitalized as part of the related long-lived asset. Over time, the liability is adjusted to its present value by recognizing accretion expense and the capitalized cost of the long-lived asset is depreciated in a manner consistent with the depreciation of the underlying physical asset. In the absence of quoted market prices, we determine fair value by using present value techniques in which estimates of future cash flows associated with retirement activities are discounted using a credit adjusted risk-free rate and a market risk premium. Upon settlement of an asset retirement obligation, we will apply payment against the estimated liability and incur a gain or loss if the actual retirement costs differ from the estimated recorded liability. These liabilities are included in asset retirement obligations.

Coal mines: We have asset retirement obligations for the final reclamation costs and post-reclamation monitoring related to the Colowyo Mine, the New Horizon Mine, and the Fort Union Mine. New Horizon Mine started final reclamation on June 8, 2017.

Generation: We, including our undivided interest in jointly owned facilities, have asset retirement obligations related to equipment, dams, ponds, wells and underground storage tanks at the generating stations.

Transmission: We had an asset retirement obligation to remove a certain transmission line and related substation assets resulting from an agreement to relocate the line. The asset retirement obligation was settled during the third quarter of 2017.

Aggregate carrying amounts of asset retirement obligations are as follows (dollars in thousands):

	2018	**2017**
Asset retirement obligations at beginning of period	$ 56,855	$ 58,583
Liabilities incurred	6,065	4,294
Liabilities settled	(5,475)	(4,935)
Accretion expense	2,458	2,623
Change in cash flow estimate	(3,131)	(3,710)
Total asset retirement obligations at end of period	$ 56,772	$ 56,855
Less current asset retirement obligations at end of period	(2,183)	(3,087)
Long-term asset retirement obligations at end of period	$ 54,589	$ 53,768

We also have asset retirement obligations with indeterminate settlement dates. These are made up primarily of obligations attached to transmission and other easements that are considered by us to be operated in perpetuity and therefore the measurement of the obligation is not possible. A liability will be recognized in the period in which sufficient information exists to estimate a range of potential settlement dates as is needed to employ a present value technique to estimate fair value.

OTHER DEFERRED CREDITS AND OTHER LIABILITIES: In 2015, we renewed transmission right of way easements on tribal nation lands where certain of our electric transmission lines are located. $32.3 million will be paid by us for these easements from 2019 through the individual easement terms ending between 2036 and 2040. The present value for the easement payments were $21.0 and $21.3 million as of December 31, 2018 and December 31, 2017, respectively, which is recorded as other deferred credits and other liabilities.

A contract liability represents an entity's obligation to transfer goods or services to a customer for which the entity has received consideration (or the amount is due) from the customer. We have received deposits from others and these deposits are reflected in contract liabilities (unearned revenue) until recognized in other operating revenues over the life of the agreement. We have received deposits from various parties and those that may still be required to be returned are a liability and these are reflected in customer deposits.

The following other deferred credits and other liabilities are reflected on our consolidated statements of financial position (dollars in thousands):

	December 31, **2018**	December 31, **2017**
Transmission easements	$ 20,966	$ 21,337
Unearned revenue	4,592	3,735
Customer deposits	2,458	2,898
Other	22,250	25,426
Total other deferred credits and other liabilities	$ 50,266	$ 53,396

MEMBERSHIPS: There are 43 $5 memberships outstanding at December 31, 2018 and 2017.

PATRONAGE CAPITAL: Our net margins are treated as advances of capital from our Members and are allocated to our Members on the basis of their electricity purchases from us. Net losses, should they occur, are not allocated to Members, but are offset by future margins. Margins not yet distributed to Members constitute patronage capital. Patronage capital is held for the account of our Members and is distributed through patronage capital retirements when our Board deems it appropriate to do so, subject to debt instrument restrictions.

ELECTRIC SALES REVENUE: Revenue from electric energy deliveries is recognized when delivered. See Note 10 – Revenue.

OTHER OPERATING REVENUE: Other operating revenue consists primarily of wheeling, transmission and lease revenues, coal sales and revenue from supplying steam and water to a paper manufacturer located adjacent to the Escalante Generating Station. Wheeling revenue is received when we charge other energy companies for transmitting electricity over our transmission lines. Transmission revenue is from our membership in the Southwest Power Pool, a regional transmission organization. The lease revenue is primarily from a power sales arrangement that is required to be accounted for as an operating lease since it conveys to others the right to use power generating equipment for a stated period of time. See Note 9 – Leases. Coal sales revenue results from the sale of coal from the Colowyo Mine to other joint owners in the Yampa Project (the "Yampa Participants") under a contract which ended December 31, 2017. We sell coal from the Colowyo Mine under other contracts with third parties. The associated Colowyo Mine expenses are included in coal mining, depreciation, amortization, and depletion and interest expense on our consolidated statements of operations.

INCOME TAXES: We are a taxable cooperative subject to federal and state taxation. As a taxable electric cooperative, we are allowed a tax exclusion for margins allocated as patronage capital. We utilize the liability method of accounting for income taxes. However, in accordance with our regulatory accounting treatment, changes in deferred tax assets or liabilities result in the establishment of a regulatory asset or liability. A regulatory asset or liability associated with deferred income taxes generally represents the future increase or decrease in income taxes payable that will be received or settled through future rate revenues. Under this regulatory accounting approach, the income tax expense (benefit) on our consolidated statements of operations includes only the current provision. See Note 9 – Income Taxes.

INTERCHANGE POWER: We occasionally engage in interchanges, or non-cash swapping, of energy. Based on the assumption that all energy interchanged will eventually be received or delivered in-kind, interchanged energy is generally valued at the average cost of fuel to generate power. Additionally, portions of the energy interchanged are valued per contract with the utility involved in the interchange. When we are in a net energy advance position, the advanced energy balance is recorded as an asset. If we owe energy, the net energy balance owed to others is recorded as a liability. The net activity for the year is included in purchased power expense. The interchange liability balance of $2.3 and $1.5 million at December 31, 2018 and 2017, respectively, is included in accounts payable. The net interchange activity recorded in purchased power expense was an expense of $0.6 million in 2018 and a credit of $0.4 million and $0.3 million in 2017 and 2016.

EVALUATION OF SUBSEQUENT EVENTS: We evaluated subsequent events through March 8, 2019, which is the date when the financial statements were issued.

ACCOUNTING PRONOUNCEMENTS-NOT YET ADOPTED: In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-02, *Leases (Topic 842)* ("Topic 842"). Topic 842 supersedes the lease recognition requirements in Accounting Standards Codification ("ASC") 840, Leases. Under Topic 842, a lessee is required to recognize a right-of-use asset and a corresponding lease liability on the balance sheet for most leases greater than twelve months and disclose certain key qualitative and quantitative information about lease arrangements. The right-of-use asset represents a lessee's right to use (control the use of) the underlying asset for the lease term. The lease liability represents a lessee's obligation to make lease payments. The right-of-use asset and the lease liability are initially measured at the present value of the lease payments over the lease term. For operating leases, the lessee subsequently recognizes straight-line lease expense over the life of the lease, similar to accounting for operating leases under Topic 840. For finance leases, the lessee subsequently recognizes interest expense and amortization of the right-of-use asset, similar to accounting for capital leases under Topic 840. Lessor accounting remains substantially the same as that applied under Topic 840. Topic 842 requires that leases be recognized and measured as of the earliest period presented, using a modified retrospective approach, with all periods presented being adjusted and presented under the new standard. In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements*, which provides companies an optional adoption method and thereby not adjusting comparative financial statements. Topic 842 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years.

We are finalizing the implementation of Topic 842 related to policies, processes and internal controls during the first quarter of 2019. We anticipate electing the optional adoption method provided by ASU 2018-11 and not adjusting comparative financial statements. Topic 842 provides a number of optional practical expedients for transition. We anticipate electing the package of practical expedients under the transition guidance which permits us not to reassess under the new standard our prior conclusions for lease identification and lease classification on expired or existing contracts and whether initial direct costs previously capitalized would qualify for capitalization under Topic 842. We also anticipate electing the practical expedient related to land easements, allowing us to not reassess our current accounting treatment for existing agreements on land easements, which are not accounted for as leases. We anticipate not electing the hindsight practical expedient to determine the reasonably certain lease term for existing leases. While we are finalizing the implementation of Topic 842, we do not expect the new standard to have a material impact on our consolidated statements of operations. We expect the lease commitments discussed in Note 11 – Leases to be included on our consolidated statements of financial position in the form of a lease asset and a lease liability. Such amounts are based on the present value of such commitments using our incremental borrowing rate.

NOTE 3 – PROPERTY, PLANT AND EQUIPMENT

Our property, plant and equipment consist of electric plant and other plant. Both of these are discussed below and are included on our consolidated statements of financial position.

ELECTRIC PLANT: At December 31, 2018, our investment in electric plant and the related annual rates of depreciation or amortization calculated using the straight-line method are as follows (dollars in thousands):

	Annual Depreciation Rate			Plant In Service	Accumulated Depreciation	Net Book Value
Generation plant	0.89 %	to	6.27 %	$ 3,601,911	$ (1,504,802)	$ 2,097,109
Transmission plant	1.11 %	to	2.09 %	1,556,860	(562,216)	994,644
General plant	1.46 %	to	9.53 %	492,991	(316,233)	176,758
Other	2.75 %	to	10.00 %	247,366	(116,125)	131,241
Electric plant in service (at cost)				$ 5,899,128	$ (2,499,376)	3,399,752
Construction work in progress						207,732
Electric plant						$ 3,607,484

At December 31, 2017, our investment in electric plant and the related annual rates of depreciation or amortization calculated using the straight-line method are as follows (dollars in thousands):

	Annual Depreciation Rate			Plant In Service	Accumulated Depreciation	Net Book Value
Generation plant	0.89 %	to	6.27 %	$ 3,558,369	$ (1,443,599)	$ 2,114,770
Transmission plant	1.11 %	to	2.09 %	1,496,362	(545,583)	950,779
General plant	1.46 %	to	9.53 %	484,022	(307,578)	176,444
Other	2.75 %	to	10.00 %	264,091	(112,260)	151,831
Electric plant in service (at cost)				$ 5,802,844	$ (2,409,020)	3,393,824
Construction work in progress						175,567
Electric plant						$ 3,569,391

At December 31, 2018, we had $32.6 million of commitments to complete construction projects, of which approximately $29.9, $2.4 and $0.3 million are expected to be incurred in 2019, 2020 and 2021, respectively.

JOINTLY OWNED FACILITIES: Our share in each jointly owned facility is as follows as of December 31, 2018 (these electric plant in service, accumulated depreciation and construction work in progress amounts are included in the electric plant table above) (dollars in thousands):

	Tri-State Share	Electric Plant in Service	Accumulated Depreciation	Construction Work In Progress
Yampa Project - Craig Generating Station Units 1 and 2	24.00 %	$ 396,382	$ 239,736	$ 117
MBPP - Laramie River Station	27.13 %	427,051	298,013	52,821
Total		$ 823,433	$ 537,749	$ 52,938

OTHER PLANT: Other plant consists of mine assets (discussed below) and non-utility assets (which consist of piping and equipment specifically related to providing steam and water from the Escalante Generating Station to a third party for the use in the production of paper).

We own 100 percent of Elk Ridge Mining and Reclamation, LLC ("Elk Ridge"), organized for the purpose of acquiring coal reserves and supplying coal to us, which is the owner and operator of the New Horizon Mine near Nucla, Colorado. New Horizon Mine is in mine reclamation and no longer produces coal. Elk Ridge also owns Colowyo Coal, which is the owner and operator of the Colowyo Mine, a large surface coal mine near Craig, Colorado. We are currently mining the South Taylor pit and started development on the Collom mining pit in 2017. During 2018, we incurred capital expenditures of $87.3 million related to the Collom mining pit development. We also own a 50 percent undivided ownership in the land and the rights to mine the property known as Fort Union Mine. The expenses related to this coal used by us are included in fuel expense on our consolidated statements of operations.

Other plant assets are as follows (dollars in thousands):

	December 31, 2018	December 31, 2017
Colowyo Mine assets	$ 326,838	$ 223,377
New Horizon Mine assets	44,589	46,946
Fort Union Mine assets	846	846
Accumulated depreciation and depletion	(104,031)	(99,100)
Net mine assets	268,242	172,069
Non-utility assets	12,377	12,377
Accumulated depreciation	(6,908)	(6,560)
Net non-utility assets	5,469	5,817
Net other plant	$ 273,711	$ 177,886

NOTE 4 – INTANGIBLE ASSETS

The December 2011 acquisition of TCP resulted in recording an intangible asset in the amount of $55.5 million relating to a contractual obligation that TCP has to a third party under a purchase power agreement. The $55.5 million intangible asset represented the amount that the purchase power agreement contract terms were above market value at the acquisition date and is being amortized on a straight-line basis over the remaining life of the purchase power agreement through June 30, 2019. The straight-line method is consistent with the terms of the purchase power agreement as this contract is for a fixed amount of capacity at a fixed capacity rate that stays constant over the term of the contract. The amortization of the purchase power agreement intangible asset is accounted for as a reduction of the revenue generated by the purchase power agreement and is included in other operating revenue. The amortization was $7.3 million in each of the years 2018, 2017 and 2016. The remaining intangible asset of $3.7 million as of December 31, 2018 will be amortized in 2019.

NOTE 5 – CONTRACT ASSETS AND CONTRACT LIABILITIES

Contract Assets

A contract asset represents an entity’s right to consideration in exchange for goods or services that the entity has transferred to a customer when that right is conditioned on something other than the passage of time (for example, the entity’s future performance). We have no contract assets as of December 31, 2018.

Accounts Receivable

We record accounts receivable for our unconditional rights to consideration arising from our performance under contracts with our Members and other parties. Uncollectible amounts, if any, are identified on a specific basis and charged to expense in the period determined to be uncollectible. See Note 10 – Revenue.

Contract liabilities (unearned revenue)

A contract liability represents an entity’s obligation to transfer goods or services to a customer for which the entity has received consideration (or the amount is due) from the customer. We have received deposits from others and these deposits are reflected in unearned revenue (included in other deferred credits and other liabilities on our consolidated statements of financial position) before revenue is recognized, resulting in contract liabilities. We recognized $0.9 million of this unearned revenue in 2018 in other operating revenues on our consolidated statements of operations.

Our contract assets and liabilities consist of the following (dollars in thousands):

	December 31, **2018**	December 31, **2017**
Accounts receivable - Members	$ 107,572	$ 102,035
Other accounts receivable - trade:		
Non-member electric sales	6,998	5,493
Coal sales	-	1,446
Other	6,006	6,634
Total other accounts receivable - trade	13,004	13,573
Other accounts receivable - nontrade	9,430	2,461
Total other accounts receivable	$ 22,434	$ 16,034
Contract liabilities (unearned revenue)	$ 7,906	$ 7,567

NOTE 6 – LONG-TERM DEBT

We have $3.1 billion of long term debt which consists of mortgage notes payable, pollution control revenue bonds and the Springerville certificates. The mortgage notes payable and pollution control revenue bonds are secured on a parity basis by a Master First Mortgage Indenture, Deed of Trust and Security Agreement (“Master Indenture”) except for one unsecured note in the aggregate amount of $34.4 million as of December 31, 2018. Substantially all our assets, rents, revenues and margins are pledged as collateral. The Springerville certificates are secured by the assets of Springerville Unit 3. All long-term debt contains certain restrictive financial covenants, including a DSR requirement and ECR requirement.

Long-term debt consists of the following (dollars in thousands):

	December 31, 2018	December 31, 2017
Mortgage notes payable		
3.66% to 8.08% CFC, due through 2028	$ 77,085	$ 80,948
2.63% to 4.43% CoBank, ACB, due through 2042	245,787	257,630
First Mortgage Obligations, Series 2017A, Tranche 1, 3.34%, due through 2029	60,000	60,000
First Mortgage Obligations, Series 2017A, Tranche 2, 3.39%, due through 2029	60,000	—
First Mortgage Bonds, Series 2016A, 4.25% due 2046	250,000	250,000
First Mortgage Bonds, Series 2014E-1, 3.70% due 2024	250,000	250,000
First Mortgage Bonds, Series 2014E-2, 4.70% due 2044	250,000	250,000
First Mortgage Bonds, Series 2010A, 6.00% due 2040	500,000	500,000
First Mortgage Obligations, Series 2014B, Tranche 1, 3.90%, due through 2033	180,000	180,000
First Mortgage Obligations, Series 2014B, Tranche 2, 4.30%, due through 2039	20,000	20,000
First Mortgage Obligations, Series 2014B, Tranche 3, 4.45%, due through 2045	550,000	550,000
First Mortgage Obligations, Series 2009C, Tranche 1, 6.00%, due through 2019	27,143	54,286
First Mortgage Obligations, Series 2009C, Tranche 2, 6.31%, due through 2021	66,000	88,000
Variable rate CFC, as determined by CFC, due through 2026	498	549
Variable rate CFC, LIBOR-based term loan, due through 2049	102,220	102,220
Variable rate CoBank, ACB, LIBOR-based term loans, due through 2044	137,130	102,220
Pollution control revenue bonds		
Moffat County, CO, 2.00% term rate through October 2022, Series 2009, due 2036	46,800	46,800
Springerville certificates		
Series A, 6.04%, due through 2018	—	13,721
Series B, 7.14%, due through 2033	405,000	405,000
Other	—	47
Total debt	$ 3,227,663	$ 3,211,421
Less debt issuance costs	(29,775)	(21,720)
Less debt discounts	(10,139)	(10,360)
Plus debt premiums	17,309	18,949
Total debt adjusted for discounts, premiums and debt issuance costs	$ 3,205,058	$ 3,198,290
Less current maturities	(95,757)	(78,004)
Long-term debt	$ 3,109,301	$ 3,120,286

We have a secured revolving credit facility with National Rural Utilities Cooperative Finance Corporation, as lead arranger and administrative agent, in the amount of $650.0 million ("Revolving Credit Agreement") that expires on April 25, 2023. We had no outstanding borrowings at December 31, 2018. As of December 31, 2018, we had $445.0 million in availability (including $295.0 million under the commercial paper back-up sublimit) under the Revolving Credit Agreement.

On December 11, 2018, we entered into a Term Loan Agreement with CoBank, ACB under which we issued our First Mortgage Obligations, Series 2018B which consist of fixed rate borrowings in the amount of $55.2 million due through December 2028 and variable rate borrowings in the amount of $69.8 million due through December 2038. As of December 31, 2018, the full amount of the fixed rate borrowings was funded and $34.9 million of the variable rate borrowings was funded. We expect to draw the remaining $34.9 million of variable rate funds on or prior to April 15, 2019. $55.2 million of the total proceeds were used to refinance an existing term loan with CoBank, ACB and the remaining proceeds have been or will be used to delay additional commercial paper borrowings or to repay outstanding commercial paper.

Annual maturities of total debt adjusted for debt issuance costs, discounts and premiums at December 31, 2018 are as follows (dollars in thousands):

2019	$ 95,757
2020	81,779
2021	87,921
2022	93,368
2023	73,408
Thereafter	2,772,825
	$ 3,205,058

We are exposed to certain risks in the normal course of operations in providing a reliable and affordable source of wholesale electricity to our Members. These risks include interest rate risk, which represents the risk of increased operating expenses and higher rates due to increases in interest rates related to anticipated future long-term borrowings. To manage this exposure, we have entered into a forward starting interest rate swap to hedge a portion of our future long-term debt interest rate exposure. We anticipate settling the interest rate swap in conjunction with the issuance of future long-term debt.

The term of the interest rate swap contract is as follows (dollars in thousands):

	Notional Amount	Fixed Rate (Pay)	Benchmark Interest Rate (Receive)	Effective Date	Maturity Date
Interest rate swap	$ 80,000	2.304 %	30 year - LIBOR	June 2019	June 2049

NOTE 7 – SHORT-TERM BORROWINGS

We have a commercial paper program under which we issue unsecured commercial paper in aggregate amounts not exceeding the commercial paper back-up sublimit under our Revolving Credit Agreement, which is the lesser of $500 million or the amount available under our Revolving Credit Agreement. The commercial paper issuances are used to provide an additional financing source for our short-term liquidity needs. The maturities of the commercial paper issuances vary, but may not exceed 397 days from the date of issue. The commercial paper notes are classified as current and are included in current liabilities as short-term borrowings on our consolidated statements of financial position.

Commercial paper consisted of the following (dollars in thousands):

	2018	2017
Commercial paper outstanding, net of discounts	$ 204,145	$ 144,667
Weighted average interest rate	2.65 %	1.52 %

At December 31, 2018, $295.0 million of the commercial paper back-up sublimit remained available under the Revolving Credit Agreement. See Note 6 – Long-Term Debt.

NOTE 8 – FAIR VALUE

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability between market participants in the principal market, or in the most advantageous market when no principal market exists. The fair value measurements accounting guidance emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability (market participants are assumed to be independent, knowledgeable, able and willing to transact an exchange and not under duress). In considering market participant assumptions in fair value measurements, a three-tier fair value hierarchy for measuring fair value was established which prioritizes the inputs used in measuring fair value as follows:

Level 1 inputs are based upon quoted prices for identical instruments traded in active (exchange-traded) markets. Valuations are obtained from readily available pricing sources for market transactions (observable market data) involving identical assets or liabilities.

Level 2 inputs are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuation techniques (such as option pricing models and discounted cash flow models) for which all significant assumptions are observable in the market.

Level 3 inputs consist of unobservable market data which is typically based on an entity's own assumptions of what a market participant would use in pricing an asset or liability as there is little, if any, related market activity.

In instances where the determination of the fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy within which the entire fair value measurement falls is based on the lowest level input that is significant to the fair value measurement in its entirety. The assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability.

Marketable Securities

We hold marketable securities in connection with the directors' and executives' elective deferred compensation plans which consist of investments in stock funds, bond funds and money market funds. These securities are measured at fair value on a recurring basis with changes in fair value recognized in earnings. The estimated fair value of the investments is based upon their active market value (Level 1 inputs) and is included in other noncurrent assets on our consolidated statements of financial position. The amortized cost and fair values of our marketable securities are as follows (dollars in thousands):

	As of December 31, 2018		As of December 31, 2017	
	Cost	Estimated Fair Value	Cost	Estimated Fair Value
Marketable securities	$ 818	$ 712	$ 1,007	$ 1,166

Cash Equivalents

We invest portions of our cash and cash equivalents in commercial paper, money market funds, and other highly liquid investments. The fair value of these investments approximates our cost basis in the investments. In aggregate, the fair value was $107.2 million and $109.4 million as of December 31, 2018 and 2017, respectively.

Debt

The fair values of debt were estimated using discounted cash flow analyses based on our current incremental borrowing rates for similar types of borrowing arrangements. These valuation assumptions utilize observable inputs based on market data obtained from independent sources and are therefore considered Level 2 inputs (quoted prices for similar assets, liabilities (adjusted) and market corroborated inputs). The principal amounts and fair values of our debt are as follows (dollars in thousands):

	December 31, 2018		December 31, 2017	
	Principal Amount	Estimated Fair Value	Principal Amount	Estimated Fair Value
Total debt	$ 3,227,663	$ 3,421,753	$ 3,211,421	$ 3,600,650

Interest Rate Swaps

We entered into a forward starting interest rate swap to hedge a portion of our future long-term debt interest rate expense. See Note 6 – Long-Term Debt. This interest rate swap is derivative instruments in accordance with ASC 815, Derivatives and Hedging, and is recorded at fair value on a recurring basis. The estimated fair value of this interest rate swap utilizes observable inputs based on market data obtained from independent sources and is therefore considered a Level 2 input (quoted prices for similar assets, liabilities (adjusted) and market corroborated inputs) and is included in other deferred charges on our consolidated statements of financial position. At December 31, 2018, the fair value of the interest rate swap was an unrealized gain of $8.6 million, which was deferred in accordance with our regulatory accounting.

NOTE 9 – INCOME TAXES

We had an income tax benefit of $0.5 million, $1.1 million and $1.4 million in 2018, 2017 and 2016, respectively. These income tax benefits are due to our election to receive an alternative minimum tax credit refund in lieu of recognizing bonus depreciation.

The liability method of accounting for income taxes is utilized. In accordance with our regulatory accounting treatment, changes in deferred tax assets or liabilities result in the establishment of a regulatory asset or liability. A regulatory asset or liability associated with deferred income taxes generally represents the future increase or decrease in income taxes payable that will be received or settled through future rate revenues. Under this regulatory accounting approach, the income tax expense (benefit) on our consolidated statements of operations includes only the current portion.

Under the liability method, deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and for income tax purposes.

Components of our net deferred tax liability are as follows (dollars in thousands):

	December 31, 2018	December 31, 2017
Deferred tax assets		
Safe harbor lease receivables	$ 17,067	$ 19,222
Net operating loss carryforwards	100,565	104,102
Alternative minimum tax credit carryforwards	615	1,230
Deferred revenues and membership withdrawal	29,650	17,350
Other	22,483	23,707
	170,380	165,611
Deferred tax liabilities		
Basis differences- property, plant and equipment	115,887	112,285
Capital credits from other associations	32,689	28,787
Deferred debt prepayment transaction costs	35,595	37,649
Other	4,307	4,095
	188,478	182,816
Net deferred tax liability	$ (18,098)	$ (17,205)

The $0.9 million increase in net deferred tax liabilities is not recognized as a tax expense in 2018 due to our regulatory accounting treatment of deferred taxes. Instead, the tax expense is deferred and reflected as an increase in the regulatory asset established for deferred income tax expense. The accounting for regulatory assets is discussed further in Note 2—Accounting for Rate Regulation. The regulatory asset account for deferred income tax expense has a balance of $18.1 and $17.2 million at December 31, 2018 and 2017, respectively.

The reconciliation between the statutory federal income tax rate and the effective tax rate is as follows:

	2018	2017	2016
Federal income tax expense at statutory rate	21.00 %	35.00 %	35.00 %
State income tax expense, net of federal benefit	2.80	2.63	2.63
Patronage exclusion	(23.80)	(37.63)	(37.63)
Asset retirement obligations	3.57	(0.16)	5.85
Deferred revenues and membership withdrawal	(28.78)	5.11	(43.90)
Other book tax differences	24.42	(2.82)	37.28
Regulatory treatment of deferred taxes	(0.46)	(3.91)	(3.79)
Effective tax rate	(1.25)%	(1.78)%	(4.56)%

We had taxable income of $34.6 million for 2018. At December 31, 2018, we have federal and state net operating loss carryforwards of $433.6 million and $332.6 million, respectively, which, if not utilized, will expire between 2019 and 2037. We also have $0.6 million of alternative minimum tax credit carryforwards which is fully refundable through 2021. The future reversal of existing temporary differences will more likely than not enable the realization of the net operating loss carryforward.

We file a U.S. federal consolidated income tax return and income tax returns in state jurisdictions where required. The statute of limitations remains open for federal and state returns for the years 2015 forward. We do not have any liabilities recorded for uncertain tax positions.

The Tax Cuts and Jobs Act (“TCJA”), enacted on December 22, 2017, reduced the corporate income tax rate from 35 percent to 21 percent, effective January 1, 2018. The Securities and Exchange Commission issued guidance in Staff Accounting Bulletin 118 (“SAB 118”) which allows registrants to record provisional amounts for the accounting effects of TCJA during a measurement period not to extend beyond one year from the date of enactment. As of December 31, 2017, we recorded a $17.2 million provisional estimate to remeasure deferred tax balances at 21 percent. With the filing of our 2017 U.S. federal income tax return, we have completed the accounting of TCJA under SAB 118 with no net adjustment to the provisional estimate made at December 31, 2017. We continue to monitor and assess the accounting implications of guidance issued pertaining to the TCJA.

NOTE 10 - REVENUE

Revenue from Contracts with Customers

Our revenues are derived primarily from the sale of electric power to our Members pursuant to long-term wholesale electric service contracts. Our contracts with our Members extend through 2050 for 42 Members and 2040 for the remaining Member.

Member electric sales

Revenues from electric power sales to our Members are primarily from our Class A rate schedule. Our Class A rate schedule for electric power sales to our Members consist of three billing components: an energy rate and demand rates. Our Class A rate schedule is variable and is approved by our Board. Energy and demand have the same pattern of transfer to our Members and are both measurements of the electric power provided to our Members. Therefore, the provision of electric power to our Members is one performance obligation. Prior to our Members' requirement for electric power, we do not have a contractual right to consideration as we are not obligated to provide electric power until the Member requires each incremental unit of electric power. We transfer control of the electric power to our Members over time and our Members simultaneously receive and consume the benefits of the electric power. Progress toward completion of our performance obligation is measured using the output method, meter readings are taken at the end of each month for billing purposes, energy and demand are determined after the meter readings and Members are invoiced based on the meter reading. Payments from our Members are received in accordance with the wholesale electric service contracts' terms, which is less than 30 days from the invoice date. Member electric sales revenue is recorded as Member electric sales on our consolidated statements of operations and Accounts receivable – Members on our consolidated statements of financial position.

In addition to our Member electric sales, we have non-member electric sales and other operating revenue which consist of several revenue streams. The following revenue is reflected on our consolidated statements of operations as follows (dollars in thousands):

Non-member electric sales:	**2018**	**2017**	**2016**
Long-term contracts	$ 45,314	$ 62,227	$ 88,296
Short-term contracts	41,127	31,172	21,830
Deferred revenue	(51,678)	(9,527)	—
Recognition of deferred revenue	—	15,000	9,200
Coal sales	1,075	40,697	34,844
Other	49,127	49,084	52,145
Total non-member electric sales and other operating revenue	$ 84,965	$ 188,653	$ 206,315

Non-member electric sales

Revenues from electric power sales to non-members are primarily from long-term contracts and short-term market sales. We deferred $51.7 million and $9.5 million of non-member electric sales revenue for the years ended December 31, 2018 and December 31, 2017, respectively, as directed by our Board, which has budgetary and rate-setting authority. We recognized $15.0 million and $9.2 million of deferred non-member electric sales revenue for the years ended December 31, 2017 and December 31, 2016, respectively, as directed by our Board. See Note 2 – Accounting for Rate Regulation.

We have both long-term and short-term non-member electric sales contracts that provide energy. Prior to our customers' demand for energy, we do not have a contractual right to consideration as we are not obligated to provide energy until the customer demands each incremental unit of energy. We transfer control of the energy to our customer over time and our customer simultaneously receives and consumes the benefits of the electric power. Progress toward completion of our performance obligation is measured using the output method. Payments are received in accordance with the contract terms, which is less than 30 days after the invoice is received by the customer.

Coal Sales

Coal sales revenue results from the sale of coal from the Colowyo Mine to third parties. Colowyo Coal had a long term coal sales contract that expired in December 2017. We sell coal from the Colowyo Mine under other contracts with third parties. We have an obligation to deliver coal and our progress of our completion toward our performance obligation is measured using the output method. Our performance obligation is completed as coal is delivered.

Other operating revenue

Other operating revenue consists primarily of the following revenue streams: wheeling, transmission, supplying steam and water, and leasing. Wheeling revenue is received when we charge other energy companies for transmitting electricity over our transmission lines (payments are received in accordance with the contract terms which is within 20 days of the date the invoice was issued). Transmission revenue is from Southwest Power Pool's scheduling of transmission across our transmission assets because of our membership in it (Southwest Power Pool collects the revenue from the customer and pays us for the scheduling, system control, dispatch transmission service, and the annual transmission revenue requirement). Steam and water revenue is derived from supplying steam and water to a paper manufacturer located adjacent to the Escalante Station (payments from the customer are received in accordance with the contract terms which is less than 15 days from the invoice date). Each of these services or goods are provided over time and progress toward completion of our performance obligations are measured using the output method. The lease revenue is primarily from a certain power sales arrangement that is required to be accounted for as an operating lease since the arrangement conveys the right to use power generating equipment for a stated period of time.

NOTE 11 – LEASES

LEASING ARRANGEMENTS AS LESSOR: We have lease agreements as lessor for certain operational assets. We are also the lessor under a power sales arrangement that is required to be accounted for as an operating lease since the arrangement conveys the right to use power generating equipment for a stated period of time. This power sales arrangement is to a third party at our J.M. Shafer Generating Station. The third party directs the use of 122 megawatts of the 272 megawatt generating capability of the J.M. Shafer Generating Station through June 30, 2019 under a tolling arrangement whereby the third party provides its own natural gas for generation of electricity. The revenue from these lease agreements of $17.6, $17.2 and $23.8 million for 2018, 2017 and 2016, respectively, are included in other operating revenue on our consolidated statements of operations.

LEASING ARRANGEMENTS AS LESSEE: We have lease agreements for the right to use power generating equipment at the Brush Generating Station and for the use of various facilities and operational assets. Under the power purchase arrangement at the Brush Generating Station, we are required to account for the arrangement as an operating lease since it conveys to us the right to use power generating equipment for a stated period of time. Under this agreement, we direct the use of 70 megawatts at the Brush Generating Station for a 10-year term ending December 31, 2019 and provide our own natural gas for generation of electricity. We do not anticipate renewing this power purchase arrangement.

Rent expense for all operating leases was $7.6, $7.3 and $7.2 million for 2018, 2017 and 2016, respectively (of these amounts, $5.3 million was related to the Brush Generating Station in 2018, 2017 and 2016). Rent expense is included in operating expenses on our consolidated statements of operations. Future expected minimum lease commitments under operating leases are as follows (dollars in thousands):

2019	$	6,741
2020		570
2021		419
2022		225
2023		187
Thereafter		400
	$	8,542

NOTE 12 – RELATED PARTIES

TRAPPER MINING, INC.: We, and certain participants in the Yampa Project, own Trapper Mining. Organized as a cooperative, Trapper Mining supplied 31.1, 24.7 and 26.2 percent in 2018, 2017 and 2016, respectively, of the coal for the Yampa Project. Our 26.57 percent share of coal purchases from Trapper Mining was $18.2, $18.8 and $16.9 million in 2018, 2017 and 2016, respectively. Our membership interest in Trapper Mining of $15.4 and $15.0 million at December 31, 2018 and 2017, respectively, is included in investments in and advances to coal mines on our consolidated statements of financial position.

NOTE 13 – EMPLOYEE BENEFIT PLANS

DEFINED BENEFIT PLAN: Substantially all of our 1,504 employees participate in the National Rural Electric Cooperative Association Retirement Security Plan (“RS Plan”) except for the 225 employees of Colowyo Coal. The RS Plan is a defined benefit pension plan qualified under Section 401(a) and tax-exempt under Section 501(a) of the Internal Revenue Code. It is considered a multiemployer plan under the accounting standards for compensation - retirement benefits. The plan sponsor’s Employer Identification Number is 53-0116145 and the Plan Number is 333.

A unique characteristic of a multiemployer plan compared to a single employer plan is that all plan assets are available to pay benefits to any plan participant. Separate asset accounts are not maintained for participating employers. This means that assets contributed by one employer may be used to provide benefits to employees of other participating employers.

Our contributions to the RS Plan in each of the years 2018, 2017 and 2016 represented less than 5 percent of the total contributions made each year to the plan by all participating employers. We made contributions to the RS Plan of $27.8, $26.7 and $24.8 million in 2018, 2017 and 2016, respectively.

In December 2012, the National Rural Electric Cooperative Association approved an option to allow participating cooperatives in the RS Plan to make a contribution prepayment and reduce future required contributions. The prepayment amount is a cooperative’s share, as of January 1, 2013, of future contributions required to fund the RS Plan’s unfunded value of benefits earned to date using RS Plan actuarial valuation assumptions. The prepayment amount is equal to approximately 2.5 times a cooperative’s annual RS Plan required contribution as of January 1, 2013. After making the prepayment, the annual contribution was reduced by approximately 25 percent, retroactive to January 1, 2013. The reduced annual contribution is expected to continue for approximately 15 years. However, changes in interest rates, asset returns and other plan experience different from expected, plan assumption changes and other factors may have an impact on future contributions and the 15-year period.

In May 2013, we elected to make a contribution prepayment of $71.2 million to the RS Plan. This contribution prepayment was determined to be a long-term prepayment and therefore recorded in deferred charges and amortized beginning January 1, 2013 over the 13-year period calculated by subtracting the average age of our workforce from our normal retirement age under the RS Plan.

Our contributions to the RS Plan include contributions for substantially all of the 304 bargaining unit employees that are made in accordance with collective bargaining agreements.

For the RS Plan, a "zone status" determination is not required, and therefore not determined, under the Pension Protection Act ("Act") of 2006. In addition, the accumulated benefit obligations and plan assets are not determined or allocated separately by individual employer. In total, the RS Plan was over 80 percent funded at both January 1, 2018 and January 1, 2017, based on the Act funding target and the Act actuarial value of assets on those dates.

Because the provisions of the Act do not apply to the RS Plan, funding improvement plans and surcharges are not applicable. Future contribution requirements are determined each year as part of the actuarial valuation of the plan and may change as a result of plan experience.

DEFINED CONTRIBUTION PLAN: We have a qualified savings plan for eligible employees who may make pre-tax and after-tax contributions totaling up to 100 percent of their eligible earnings subject to certain limitations under federal law. We make no contributions for the 304 bargaining unit employees. For all of the eligible non-bargaining unit employees, other than the 225 employees of Colowyo Coal, we contribute 1 percent of an employee's eligible earnings. For the bargaining unit employees of New Horizon Mine, we match 1 percent of employee's contributions. For the employees of Colowyo Coal, we contribute 7 percent of an employee's eligible earnings and also match an employee's contributions up to 5 percent. We made contributions to the plan of $4.6 million for 2018, $3.2 million for 2017 and $3.0 million for 2016.

POSTRETIREMENT BENEFITS OTHER THAN PENSIONS: We sponsor three medical plans for all non-bargaining unit employees under the age of 65. Two of the plans provide postretirement medical benefits to full-time non-bargaining unit employees and retirees who receive benefits under those plans, who have attained age 55, and who elect to participate. All three of these non-bargaining unit medical plans offer postemployment medical benefits to employees on long-term disability. The plans were unfunded at December 31, 2018, are contributory (with retiree premium contributions equivalent to employee premiums, adjusted annually) and contain other cost-sharing features such as deductibles.

The postretirement medical benefit and postemployment medical benefit obligations are determined annually by an independent actuary and are included in accumulated postretirement benefit and postemployment obligations on our consolidated statements of financial position as follows (dollars in thousands):

	2018	2017
Postretirement medical benefit obligation at beginning of period	$ 8,455	$ 7,997
Service cost	677	607
Interest cost	288	281
Benefit payments (net of contributions by participants)	(408)	(324)
Actuarial gain	(456)	(106)
Postretirement medical benefit obligation at end of period	$ 8,556	$ 8,455
Postemployment medical benefit obligation at end of period	371	367
Total postretirement and postemployment medical obligations at end of period	$ 8,927	$ 8,822

In accordance with the accounting standard related to postretirement benefits other than pensions, actuarial gains and losses are not recognized in income but are instead recorded in accumulated other comprehensive income on our consolidated statements of financial position. If the unrecognized amount is in excess of 10 percent of the projected benefit obligation, amounts are reclassified out of accumulated other comprehensive income and included in net income as the excess amount is amortized over the average remaining service lives of the active plan participants. Unrecognized actuarial gains and losses have been determined per actuarial studies for the postretirement medical benefit obligation.

The net unrecognized actuarial gains and losses related to the postretirement medical benefit obligation are included in accumulated other comprehensive income as follows (dollars in thousands):

	2018	2017
Amounts included in accumulated other comprehensive income at beginning of period	$ (369)	$ (402)
Amortization of actuarial loss into income	367	6
Amortization of prior service credit into other income (expense)	(79)	(79)
Actuarial gain	456	106
Amounts included in accumulated other comprehensive income at end of period	$ 375	$ (369)

The assumptions used in the 2018 actuarial study performed for our postretirement medical benefit obligation were as follows:

Weighted-average discount rate	3.44 %
Initial health care cost trend (2018)	8.00 %
Ultimate health care cost trend	4.50 %
Year that the rate reached the ultimate health care cost trend rate	2027
Expected return on plan assets (unfunded)	N/A
Average remaining service lives of active plan participants (years)	12.35

Changes in the assumed health care cost trend rates would impact the accumulated postretirement medical benefit obligation and the net periodic postretirement medical benefit expense as follows (dollars in thousands):

	1% Increase	1% Decrease
Accumulated postretirement medical benefit obligation	$ 905	$ (783)
Net periodic postretirement medical benefit expense	153	(128)

The following are the expected future benefits to be paid (net of contributions by participants) related to the postretirement medical benefit obligation during the next 9 years (dollars in thousands):

2019	$ 530
2020	564
2021	608
2022	683
2023	651
2024 through 2027	3,433
	$ 6,469

NOTE 14 – VARIABLE INTEREST ENTITIES

The following is a description of our financial interests in variable interest entities that we consider significant. This includes an entity for which we are determined to be the primary beneficiary and therefore consolidate and also entities for which we are not the primary beneficiary and therefore do not consolidate.

Consolidated Variable Interest Entity

Springerville Partnership: We own a 51 percent equity interest, including the 1 percent general partner equity interest, in the Springerville Partnership, which is the 100 percent owner of Springerville Unit 3 Holding LLC ("Owner Lessor"). The Owner Lessor is the owner of the Springerville Unit 3. We, as general partner of the Springerville Partnership, have the full, exclusive and complete right, power and discretion to operate, manage and control the affairs of the Springerville Partnership and take certain actions necessary to maintain the Springerville Partnership in good standing without the consent of the limited partners. Additionally, the Owner Lessor has historically not demonstrated an ability to finance its activities without additional financial support. The financial support is provided by our remittance of lease payments in order to permit the Owner Lessor, the holder of the Springerville Unit 3 assets, to pay the debt obligations and equity returns of the Springerville Partnership. We have the primary risk (expense) exposure in operating the Springerville Unit 3 assets and are responsible for 100 percent of the operation, maintenance and capital expenditures of Springerville Unit 3 and the decisions related to those expenditures including budgeting, financing and dispatch of power. Based on all these facts, it was determined that we are the primary beneficiary of the Owner Lessor. Therefore, the Springerville Partnership and Owner Lessor have been consolidated by us.

Assets and liabilities of the Springerville Partnership that are included in our consolidated statements of financial position are as follows (dollars in thousands):

	December 31, 2018	December 31, 2017
Net electric plant	$ 794,549	$ 812,687
Noncontrolling interest	110,169	$ 111,295
Long-term debt	416,057	$ 431,269
Accrued interest	12,056	$ 12,401

Our consolidated statements of operations include the following Springerville Partnership expenses for the years ended December 31 (dollars in thousands):

	2018	2017	2016
Depletion, amortization and depletion	$ 18,138	$ 19,592	$ 21,047
Interest	27,511	28,382	30,394

The revenue associated with the Springerville Partnership lease has been eliminated in consolidation. Income, losses and cash flows of the Springerville Partnership are allocated to the general and limited partners based on their equity ownership percentages. The net income or loss attributable to the 49 percent noncontrolling equity interest in the Springerville Partnership is reflected on our consolidated statements of operations.

Unconsolidated Variable Interest Entities

Western Fuels Association: WFA is a non-profit membership corporation organized for the purpose of acquiring and supplying fuel resources to its members, which includes us. WFA supplies fuel to MBPP for the use of the Laramie River Station through its ownership in WFW. We also receive coal supplies directly from WFA for the Escalante Generating Station in New Mexico. The pricing structure of the coal supply agreements with WFA is designed to recover the mine operating costs of the mine supplying the coal and therefore the coal sales agreements provide the financial support for the mine operations. There is not sufficient equity at risk for WFA to finance its activities without additional financial support. Therefore, WFA is considered a variable interest entity in which we have a variable interest. The power to direct the activities that most significantly impact WFA's economic performance (acquiring and supplying fuel resources) is held by the members who are represented on the WFA board of directors whose actions require joint approval. Therefore, since there is shared power over the significant activities of WFA, we are not the primary beneficiary of WFA and the entity is not consolidated. Our investment in WFA, accounted for using the cost method, was $2.4 million and $2.3 million for December 31, 2018 and 2017, respectively, and is included in investments in other associations.

Western Fuels – Wyoming: WFW, the owner and operator of the Dry Fork Mine in Gillette, Wyoming, was organized for the purpose of acquiring and supplying coal, through long-term coal supply agreements, to be used in the production of electric energy at the Laramie River Station (owned by the participants of MBPP) and at the Dry Fork Station (owned by Basin). WFA owns 100 percent of the class AA shares and 75 percent of the class BB shares of WFW, while the participants of MBPP (of which we have a 27.13 percent undivided interest) own the remaining 25 percent of class BB shares of WFW. The pricing structure of the coal supply agreements is designed to recover the costs of production of the Dry Fork Mine and therefore the coal supply agreements provide the financial support for the operation of the Dry Fork Mine. There is not sufficient equity at risk at WFW for it to finance its activities without additional financial support. Therefore, WFW is considered a variable interest entity in which we have a variable interest. The power to direct the activities that most significantly impact WFW's economic performance (which includes operations, maintenance and reclamation activities) is shared with the equity interest holders since each member has representation on the WFW board of directors whose actions require joint approval. Therefore, we are not the primary beneficiary of WFW and the entity is not consolidated.

Trapper Mining, Inc.: Trapper Mining is a cooperative organized for the purpose of mining, selling and delivering coal from the Trapper Mine to the Craig Station Units 1 and 2 through long-term coal supply agreements. Trapper Mining is jointly owned by some of the participants of the Yampa Project. We have a 26.57 percent cooperative member interest in Trapper Mining. The pricing structure of the coal supply agreements is designed to recover the costs of production of the Trapper Mine and therefore the coal supply agreements provide the financial support for the operation of the Trapper Mine. There is not sufficient equity at risk for Trapper Mining to finance its activities without additional financial support. Therefore, Trapper Mining is considered a variable interest entity in which we have a variable interest. The power to direct the activities that most significantly impact Trapper Mining's economic performance (which includes operations, maintenance and reclamation activities) is shared with the cooperative members since each member has representation on the Trapper Mining board of directors whose actions require joint approval. Therefore, we are not the primary beneficiary of Trapper Mining and the entity is not consolidated. We record our investment in Trapper Mining using the equity method. Our membership interest in Trapper Mining was $15.4 million and $15.0 million at December 31, 2018 and 2017, respectively, and is included in investments in and advances to coal mines.

NOTE 15 – COMMITMENTS AND CONTINGENCIES

SALES: We have a resource-contingent power sales contract with Salt River Project Agricultural Improvement and Power District of 100 megawatts through August 31, 2036. We also had a resource-contingent firm power sales contract with Public Service Company of Colorado totaling 100 megawatts. This contract expired in March 2017.

COAL PURCHASE REQUIREMENTS: We are committed to purchase coal for our generating plants under contracts that expire between 2019 and 2034. These contracts require us to purchase a minimum quantity of coal at prices subject to escalation reflecting cost increases incurred by the suppliers due to market conditions. The coal purchase projection includes estimated future prices. As of December 31, 2018, the minimum coal to be purchased under these contracts is as follows (dollars in thousands):

2019	$ 117,888
2020	81,143
2021	62,041
2022	9,068
2023	—
Thereafter	8,302
	$ 278,442

ELECTRIC POWER PURCHASE AGREEMENTS: Our largest long-term electric power purchase contracts are with Basin and Western Area Power Administration ("WAPA"). We purchase from Basin power pursuant to two contracts: one relating to all the power which we require to serve our Members' load in the Eastern Interconnection and one relating to fixed scheduled quantities of electric power in the Western Interconnection. Both contracts with Basin continue through December 31, 2050 and are subject to automatic extension thereafter.

We purchase renewable power under long-term contracts, including hydroelectric power from WAPA and from specified renewable generating facilities, including wind, solar and small hydro. We purchase from WAPA pursuant to three contracts: one relating to WAPA's Loveland Area Project (terminates September 30, 2024), and two contracts relating to WAPA's Salt Lake City Area Integrated Projects (both terminate September 30, 2024). In 2015, we entered into a new contract with WAPA relating to the Loveland Area Project for the delivery of power from WAPA beginning

October 1, 2024 and ending September 30, 2054. In 2018, we entered into a new contract with WAPA related to Salt Lake City Area Integrated Projects for the delivery of power by WAPA beginning October 1, 2024 and ending September 30, 2057.

As of December 31, 2018, we have entered into renewable power purchase contracts to purchase the entire output from specified renewable facilities totaling approximately 579 MWs, including 367 MWs of wind-based power purchase agreements and 185 MWs of solar-based power purchases that expire between 2030 and 2042.

Costs under the above electric power purchase agreements for the years ended December 31 were as follows (dollars in thousands):

	2018	2017	2016
Basin	$ 149,246	$ 152,977	$ 145,557
WAPA	72,757	78,781	82,575
Other renewables	62,721	53,362	42,292

ENVIRONMENTAL: As with most electric utilities, we are subject to extensive federal, state and local environmental requirements that regulate, among other things, air emissions, water discharges and use and the management of hazardous and solid wastes. Compliance with these requirements requires significant expenditures for the installation, maintenance and operation of pollution control equipment, monitoring systems and other equipment or facilities.

Our operations are subject to environmental laws and regulations that are complex, change frequently and have historically become more stringent and numerous over time. Federal, state, and local standards and procedures that regulate environmental impact of our operations are subject to change. Consequently, there is no assurance that environmental regulations applicable to our facilities will not become materially more stringent, or that we will always be able to obtain all required operating permits. More stringent standards may require us to modify the design or operation of existing facilities or purchase emission allowances. An inability to comply with environmental standards could result in reduced operating levels or the complete shutdown of our facilities that are not in compliance. We cannot predict at this time whether any additional legislation or rules will be enacted which will affect our operations, and if such laws or rules are enacted, what the cost to us might be in the future because of such actions or the effect it could have on our financial condition, results of operations and cash flow.

From time to time, we are alleged to be in violation or in default under orders, statutes, rules, regulations, permits or compliance plans relating to the environment. Additionally, we may need to deal with notices of violation, enforcement proceedings or challenges to construction or operating permits. In addition, we may be involved in legal proceedings arising in the ordinary course of business. However, we believe our facilities are currently in compliance with such regulatory and operating permit requirements.

GUARANTEES: We provide guarantees under specified agreements or transactions, including certain reclamation obligations of WFW and our subsidiaries. Our guarantees are for payment or performance by us. Most of the guarantees issued by us limit the exposure to a maximum stated amount. The amount of our guarantees for reclamation obligations, or self-bonds, are based upon applicable state requirements and are different than the asset retirement obligations recognized on our consolidated financial statements in accordance with GAAP.

LEGAL: Pursuant to a power sales contract with another utility, we currently sell such utility 25 MWs of capacity and energy. The purchase rate for capacity was determined using our Class A wholesale rate schedule. The utility recently reviewed our charges for capacity since 2000 and alleged such charges were not in accordance with the terms of the power sales contract. We have resolved this matter with the utility regarding their review of our charges for capacity by entering into certain amendments to the power sales contract and without incurring any liability.

NOTE 16 – QUARTERLY FINANCIAL DATA (UNAUDITED)

Unaudited operating results by quarter for 2018 and 2017 are presented below. Results for the interim periods may fluctuate as a result of seasonal weather conditions, changes in rates and other factors. In the opinion of management, all adjustments (consisting of normal recurring accruals) necessary for the fair statement of our results of operations for such periods have been included (dollars in thousands):

Statement of Operations Data	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2018					
Operating revenues	$ 318,508	$ 327,513	$ 398,157	$ 276,659	$ 1,320,837
Operating margins	40,299	41,716	81,393	(2,015)	161,393
Net margins attributable to the Association	8,094	4,378	46,398	(16,136)(1)	42,734
2017					
Operating revenues	$ 338,429	$ 338,901	$ 396,511	$ 314,752	$ 1,388,593
Operating margins	51,018	36,970	74,946	20,763	183,697
Net margins attributable to the Association	23,526	4,791	40,798	(7,459)(2)	61,656

(1) In the fourth quarter of 2018, we deferred $51.7 million of non-member electric sales revenue.
(2) In the fourth quarter of 2017, we deferred $9.5 million of non-member electric sales revenue.

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