

Pride In Public Power



Oklahoma Municipal
Power Authority
2017 Annual Report

YEAR IN REVIEW

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MISSION STATEMENT

“To provide reliable, low-cost energy and services to municipal entities to enable each municipality to be competitive, while maximizing the benefit to our stakeholders.”

2017 Highlights

January 1, 2017

OMPA begins operating under a new billing structure

May 12, 2017



The Demand & Energy Efficiency Program reaches \$1 million in total rebates

July 23, 2017

Southwest Power Pool votes to dissolve as a Regional Entity, impacting OMPA

March 9, 2017

Surplus 2016 revenues are both returned to members and set aside for Rate Stabilization Account

August 2, 2017



The committee for the Value of Public Power campaign meets for the first time

July 20, 2017

Board approves a contract to study the need for a data center at OMPA offices in Edmond

November 9, 2017

The 14th Amendment to the Power Sales Contract is approved, allowing for member distributed generation policies

December 14, 2017



Board of Directors approves expansion of OMPA linecrew to four linemen after new cities added

September 14, 2017



APPA President Sue Kelly is the key speaker at the Annual Electors' Meeting

December 14, 2017

Board of Directors approves the issuance of a Request For Proposal to study Oklaunion ownership



Chairman
Charles Lamb

From the Chairman and General Manager

The theme of this year's Annual Report is "Pride in Public Power". We chose this because there is much of which to be proud, and the story needs to be told. As is typical of Public Power, we tend to suit up, show up, and get the job done. Telling our story is not foremost on our to-do lists. In 2017, the OMPA Board of Directors took a valuable first step towards getting that story out, with initiating the Value of Public Power Campaign. While much of the work will be done in 2018, it all started in the 2017 Board planning retreat.

At the retreat, we discussed the declining understanding of Public Power's value to local communities. What came out of those discussions was a new initiative to improve on that: the Value of Public Power Campaign. The OMPA Board has committed to fund a multi-year initiative to raise the level of awareness at the community level as to the value its local utility provides. If successful, we believe this will pay huge dividends, not only at the local level, but at the Statehouse, as well. We were delighted to have Sue Kelly, American Public Power Association CEO, join



General Manager
Dave Osburn

us at our Annual Meeting. Her comments touched on the very nature of what we are trying to accomplish.

This campaign has many facets. OMPA staff will undertake numerous educational efforts and studies to explain and show the benefits of Public Power. The Board also established a scholarship for a member city official to attend the APPA National Conference. It is believed that attendance at this conference provides valuable insight into the benefits of Public Power, and to learn about the many exciting things their peers are doing. We hope they come back recharged and motivated to implement progressive changes in their community. This was certainly true for the 2017 recipient, Chuck Ralls of Comanche.

In addition, during 2017, the OMPA staff and Board started wrestling with many of the topics widely impacting our industry. What role does solar power and other distributed generation resources play in our future? Not only OMPA itself, but the member cities, as well. How do we manage the changing nature of power markets operated by the Regional Transmission Organizations (RTOs)? How has the changing resource mix within the RTOs and low natural gas prices impacted the viability of our coal units? All of these are challenges facing many utilities across America. Unfortunately, the future isn't always clear and tough decisions have to be made with the information available at the time.

In this report, you will see updates from various OMPA departments on some of the great work they are doing providing valuable services to our member cities. You will read about the continued investment into our facilities, whether at generating plants or out on the transmission and distribution systems.

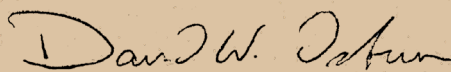
2017 also saw the start of a significant addition to the OMPA staff, that of our first Safety and Compliance Specialist. The Board agreed that we needed to improve on our safety culture and that it starts at the top. In addition to funding the new position and other safety-related expenses, they added Safety to OMPA core values, and start every board meeting with a Safety Moment.

As usual, it was another year of successes and challenges for the Oklahoma Municipal Power Authority, and we are proud to present the 2017 Annual Report.

Be proud to be Public Power!



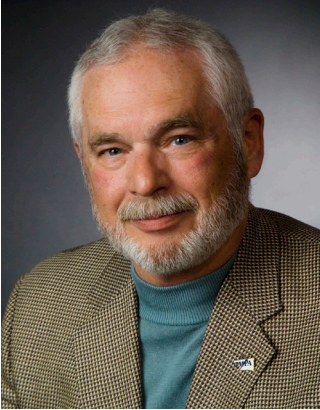
Charles Lamb,
Board Chairman



David W. Osburn,
General Manager



BOARD OF DIRECTORS



Charles Lamb
Edmond
Chairman



Robert Johnston
Frederick
Vice Chair



Homer Nicholson
Ponca City
Secretary



Jim Greff
Prague
Treasurer



Dale Bunn
Purcell
Member



Janice Cain
Altus
Member



Chuck Hall
Perry
Member



Jason McPherson
Marlow
Member



Chuck Ralls
Comanche
Member



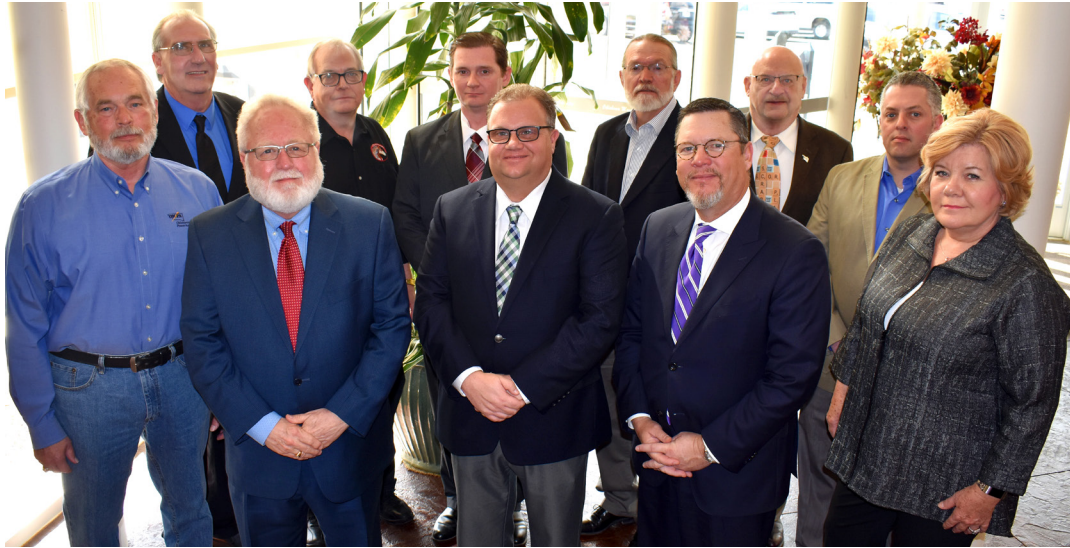
Dave Sleazickey
Kingfisher
Member



David Yeager
Duncan
Member

The Oklahoma Municipal Power Authority's 11-person Board of Directors is chosen entirely by representatives of the membership. Board members serve staggered, three-year terms.

BOARD/KEY PERSONNEL



This publication is issued by the Oklahoma Municipal Power Authority as authorized by the OMPA General Manager. 250 copies have been prepared and distributed at a cost of \$1,034. [74 O.S. § 3105 (B)]



Dave Osburn
General
Manager



Randy Elliott
General
Counsel



Jim McAvoy
Director of
Engineering Services



Melie Vincent
Director of
Operations



Drake Rice
Director of
Member Services



John Vansant
Director of Corporate
Services & CFO

MEMBERS

The Oklahoma Municipal Power Authority (OMPA) is a wholesale power company owned by 42 municipal electric utilities located in 29 Oklahoma counties.

In 2017, OMPA provided power to 116,352 customers in its member cities, including 100,861 residential customers and 15,491 commercial/industrial customers. OMPA's service area encompasses approximately 250,000 Oklahomans.

Members

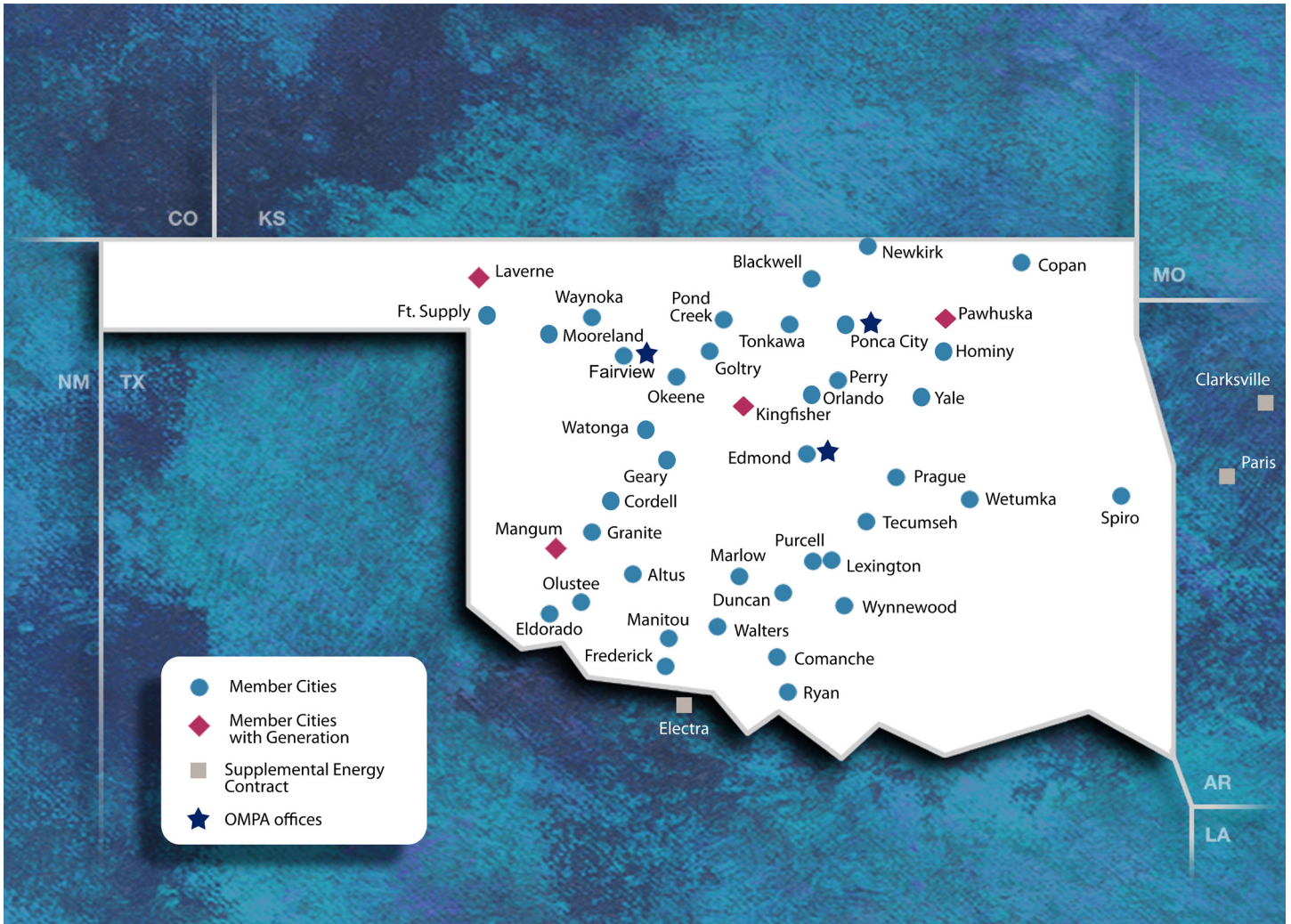
Altus Municipal Authority
Blackwell Municipal Authority
*Comanche Public Works Authority**
*Copan Public Works Authority**
*Duncan Public Utilities Authority**
Edmond Public Works Authority
*Eldorado Public Works Authority**

Fairview Utilities Authority
Fort Supply Public Works Authority
Frederick Public Works Authority
Geary Utilities Authority
*Goltry Public Works Authority**
*Granite Public Works Authority**
*Hominy, Oklahoma Public Works Authority**
Kingfisher Public Works Authority
Laverne Public Works Authority
*Lexington Public Works Authority**
Mangum Utilities Authority
*Manitou Public Works Authority**
Marlow Municipal Authority
Mooreland Public Works Authority
New Cordell Utility Authority
Newkirk Municipal Authority
Okeene Public Works Authority
*Olustee Public Works Authority**
Orlando Public Works Authority
Pawhuska Public Works Authority
Perry Municipal Authority
Ponca City Utility Authority

Pond Creek Public Works Authority
Prague Public Works Authority
*Purcell Public Works Authority**
*Ryan Utilities Authority**
*Spiro Municipal Improvement Authority**
Tecumseh Utility Authority
Tonkawa Municipal Authority
*Walters Public Works Authority**
Watonga Public Works Authority
Waynoka Utilities Authority
*Wetumka Municipal Authority**
Wynnewood City Utilities Authority
*Yale Water and Sewage Trust**
** Also has SWPA Allocation*

Others Served

Clarksville Light & Water Company
Electra Utility Authority
Paris Municipal Light & Water



GENERATION

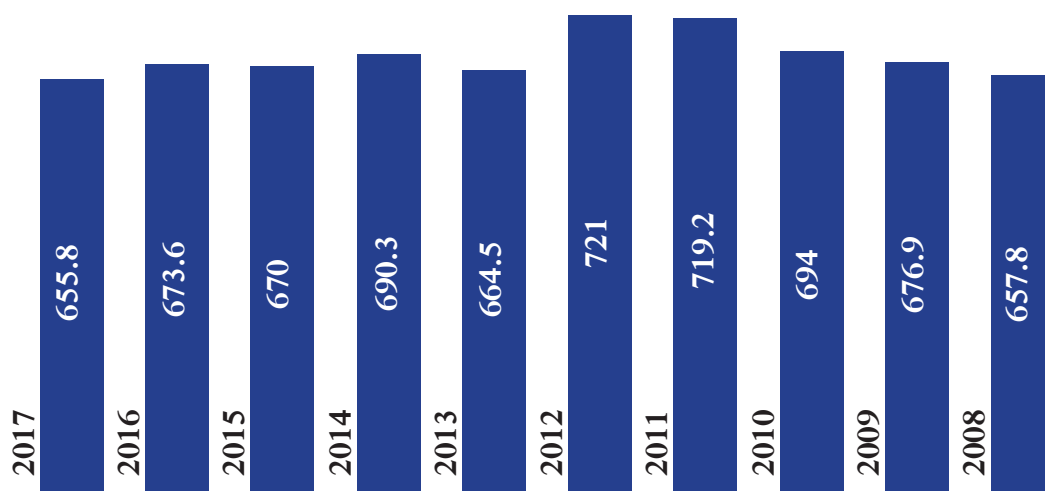
Resource Mix

Natural gas continued in 2017 to be the primary power resource for OMPA at 52 percent of the portfolio.

Renewables grew as part of the resources, up to 19 percent, surpassing coal at 18 percent.



Energy is listed in megawatts



System-Wide Peak

OMPA's coincident peak for utilities served in Oklahoma only was 655.84 megawatts in 2017.

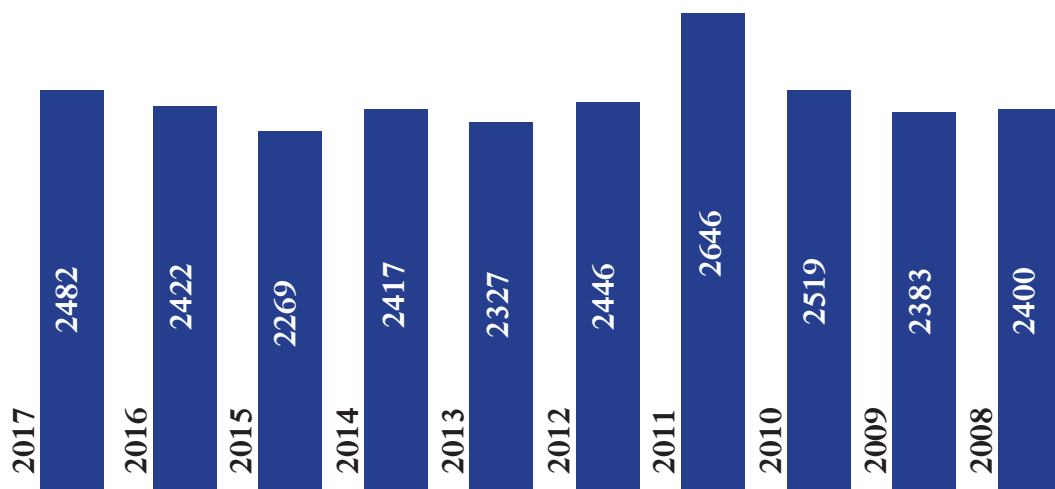
This peak was down slightly in comparison to recent years, following a jump to 721 megawatts in 2012.

The Authority did not add any members in 2017.

Power Delivered

OMPA's total power delivered in 2017 was 2,482 gigawatts, which was a slight increase over 2016, but still 164 gigawatts below the 10-year high of 2,646 in 2011.

In all, 24,311 gigawatts of power have been delivered in the last 10 years.



Energy is listed in gigawatts

OPERATIONS

OMPA's Operations Department works hard so customers don't have to think about them.

They're not shy, but rather simply like member city end customers to find their power costs affordable and, therefore, rather uninteresting. The decisions Operations makes on a daily and – sometimes hourly – basis have a direct impact on end-user bills. To that end, it maintains and develops efficient procedures, stays flexible and continuously looks for better ways to make smart decisions that lead to affordable power.

In 2017, Operations focused on documenting processes and the thought that goes into work. Developing desk procedures ensures everyone on the team knows the what, when and how of Operations activity. That leads to fewer missed opportunities and errors. Operations also maintains a strategy document that captures and communicates best practices in interacting with the Southwest Power Pool market.

Maintaining a flexible, diverse power supply

portfolio keeps rates low by limiting exposure to the volatility of fuel prices. Flexibility will allow OMPA to respond economically to potential decline in load due to energy efficiency and distributed generation. Operations also continue to maintain a portfolio of generation with diverse capabilities. Though OMPA's resources still need the consistent performance of coal and gas generation, the need is growing for generators that can react quickly to sudden shifts in available wind and sun.

In 2017, OMPA's generation portfolio mix remained well-balanced. Lower heat rate gas units made up 28 percentage of OMPA's capacity to meet base and intermediate load needs. Higher heat rate gas units for peak demand made up 23 percent of the portfolio. Base-power coal was another 15 percent. Nameplate renewable capacity was 24 percent. Power purchase agreements rounded out the remaining 11

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Power Supply

Kaw (hydro)

Location: Ponca City, OK
OMPA share: 35 megawatts



GRDA #2 (coal)

Location: Chouteau, OK
OMPA share: 20 megawatts



PCRP (gas/steam)

Location: Ponca City, OK
OMPA share: 62 megawatts



Oklauion (coal)

Location: Vernon, TX
OMPA share: 76 megawatts



John W. Turk Jr. (coal)

Location: Fulton, AR
OMPA share: 43 megawatts



McClain (natural gas)

Location: Newcastle
OMPA share: 118 megawatts



Redbud (natural gas)

Location: Luther, OK
OMPA share: 158 megawatts



Canadian Hills (wind)

Location: El Reno, OK
OMPA share: 49 megawatts

Charles Lamb Center
Location: Ponca City, OK
OMPA share: 103 megawatts



Henry W. Pirkey (lignite)

Location: Hallsville, TX
OMPA share: 15 megawatts



OK Wind Center

Location: Woodward, OK
OMPA share: 51 megawatts

Landfill-to-Gas
Location: Sand Springs, OK
OMPA share: 3 megawatts



Dolet Hills (lignite)

Location: DeSoto Parish, LA
OMPA share: 25 megawatts



OPERATIONS

percent.

Base and intermediate gas units generated 50 percent of OMPA's energy in 2017. Nearly 19 percent of OMPA generation came from coal. Renewables provided 20 percent and an additional 10 percent of power needs were met through power purchase agreements. Higher heat rate gas units made up 2 percent of total generation.

Though OMPA is positioned well, change is coming at a rapid pace. Battery storage technology is maturing with declining cost. Wind and solar growth is accelerating. Electrical vehicles are poised to become mainstream.

OMPA is committed to keeping rates low, regardless of the changes that come. Operations follows through on that commitment with consistent and thoughtful decision-making and execution. Although the power industry is exciting, Operations is dedicated to ensuring public power bills are not.



Above and going clockwise are Melie Vincent, Umesh Sadalge, Ryan Tuter and Bruce Jackson at a Strategic Issues meeting.

Strategic Issues

In 2017, Director of Operations Melie Vincent led a "Strategic Issues" team of OMPA staff in identifying developing industry trends that may prove to be challenges or opportunities for the Authority and its members in the future.

Some of the items detailed include electric vehicles, distributed

generation, microgrids, energy storage, transmission expansion and costs, and a need for lawmakers and elected officials to be educated on the industry and the role OMPA plays in it.

Findings from the effort were to be presented to the Board of Directors at its annual retreat in the spring of 2018.

Power Supply Study

In late 2017, the Board of Directors approved the issuing of a Request for Proposal to commission a study about the future of being a joint owner in the Oklaunion plant.

Based in Vernon, Tex., Oklaunion is a coal plant rated at 76 megawatts. Previous to the power supply study, the majority owner had notified the

minority owners that it would like to sell its share of the plant.

The purpose of the study would be to determine the best position for OMPA's portfolio moving forward, both with and without Oklaunion.

The authors of the study - the Energy Authority - were to present their results to the Board of Directors.

FINANCE



CFO John Vasant speaks at a rates meeting in 2017.

In 2016, new rates were developed for use beginning in 2017. A new billing program, using custom designed software, also had to be developed to allow OMPA to bill those new rates. It was successfully completed in January of 2017 and the first bills under the new design were sent out in February.

The 2017 Rate Study's narrative and supporting schedules were a hybrid between the old and new rate design. For the 2018 Rate Study, OMPA redesigned the study to reflect only the new rate structure. The 2018 Study is streamlined and clearer, compared to studies under the old design.

The 2018 Rate Study was approved by the OMPA board of directors at its October meeting. In a first for OMPA, a Rates Forum for all member cities was held in November of 2017. The forum explained the details of the budget and rate study process and significant cost changes for 2018. It also presented long-term forecasts of where OMPA believes rates are headed over the next 10 years. This is information that was normally only shared with the Board of Directors in years past. OMPA is planning to continue to hold rate forums for all member cities in coming years.

In 2016, OMPA began an initiative to implement an "Enterprise Risk Management" (ERM) system. ERM provides a framework to help identify and manage strategic and emerging risks and to help enhance OMPA's response to the various risks it faces. A Risk Committee was formed of several OMPA board members, as well as staff. The Risk Committee reviewed risks identified by staff and prepared an OMPA ERM document. The OMPA full Board of

Directors approved the 2017 ERM document at the April 2017 board meeting. The ERM report is a "living" document and will be reviewed and updated every year.

Chuck Hall from Perry is Chairman of the Risk Committee. In addition to OMPA staff, the committee also includes Dale Bunn of Purcell, Jason McPherson of Marlow and Charles Lamb of Edmond (ex-officio).

One of the risks described in the ERM document is distributed generation (usually rooftop solar panels) and the potential risks to member cities and their cost recovery, if it becomes more widespread. OMPA has been helping member cities prepare for distributed generation for several years. As part of that, the accounting and finance department helps member cities develop retail rates that will help to mitigate the cost recovery impact of distributed generation. During 2017, OMPA helped develop such rates for more than ten member cities.



The Risk Committee meets, shortly after being formed.

FINANCE/SAFETY

In 2017, under mutual agreement with the North American Electric Reliability Corporation (NERC), the Southwest Power Pool (SPP) Board voted to dissolve the SPP Regional Entity. As a result, OMPA underwent the process of submitting an application to NERC to transfer to the Midwest Reliability Organization (MRO).

Regional Entities carry out compliance monitoring and enforcement activities on behalf of NERC.

In December, NERC staff recommended most SPP registered entities, including OMPA, be transferred to MRO. Pending NERC Board and FERC

approval, the transition was expected to occur as early as July 1, 2018. Once approved by NERC, staff will begin attending MRO meetings to become involved in the appropriate committees.

A Safety and Compliance Specialist was also added to the OMPA staff in Ponca City in 2017. The position oversees all aspects of safety at the three generation plants, the line crew and Edmond staff.

In addition to the creation of that position, OMPA also implemented a new incentive program for safety practices. Staff was to be given the opportunity to earn gift cards, quarterly luncheons and more for identifying and reporting potential safety hazards.

Financial Highlights

| | 2017 | 2016 | 2015 | 2014 |
|--|----------------------|----------------------|----------------------|----------------------|
| Operating Revenues | \$187,610,105 | \$184,783,987 | \$183,950,481 | \$193,013,302 |
| Operating Expenses | \$156,192,297 | \$156,618,344 | \$154,296,176 | \$161,699,145 |
| Operating Income | \$31,417,808 | \$28,165,643 | \$29,654,305 | \$31,314,157 |
| Net Interest Expense | \$28,881,200 | \$28,169,959 | \$27,776,343 | \$27,996,995 |
| Other Income and Expenses (net) | (\$1,609,394) | \$306,652 | \$78,860 | \$2,758,433 |
| Increase/Decrease in Net Position | \$927,214 | \$302,336 | \$1,956,822 | \$6,075,595 |

ENGINEERING

The linecrew field office in Fairview hosted lineman training for the first time in 2017.



Emphasis on providing reliable power transmission and distribution service continues to be one of the main goals of OMPA in 2017.

Continuing a multi-year plan to upgrade OMPA-owned substations, projects at Ryan, Spiro and Yale were completed. A two-phase project at Purcell substation was started with completion expected in 2018.

At Ryan and Yale substations, the padmount transformer fuses were replaced with electronically-controlled reclosers to better protect the transformers and allow remote monitoring of the substation via the Supervisory Control and Data Acquisition (SCADA) computer system. The Spiro substation project involved replacing the south transformer fuses with a 69 kV circuit switcher and relays to provide better transformer and substation bus protection. At the Purcell substation, the goal is to install a second 138/12 kV transformer as a backup for the existing transformer and to allow

maintenance to be performed on either unit. For 2017, the transformer was ordered, and its foundation was installed. Connecting the transformer along with other equipment to the Purcell electric system will be accomplished in 2018.

In addition to substation improvements, the

Authority owns more than 30 miles of transmission lines. In an ongoing effort to replace existing wood poles, staff continued a program of installing steel poles. The focus was on replacing 20-plus poles on the Ryan, Yale and Waynoka 25 kV lines.

A relationship that began in 2015 with transmission company Gridliance continued, focusing on potential projects to improve reliability to

member cities Duncan, Frederick and Marlow. The Authority's agreement with Gridliance allows it to participate in the cost of projects, which allow a rate of return to help offset increasing transmission costs.



Pictured, at right, is OMPA Linecrew Supervisor Anthony Hale.

Continued on next page

ENGINEERING

Cyber security continues to be an ever-growing industry concern, as computer hackers can cause tremendous damage to information technology (IT) systems using malware, email phishing, and other social engineering methods. OMPA IT personnel have implemented training for employees on how to recognize these cyber security threats. All employees have completed this training. Also, ongoing e-mail and other social engineering tests are performed on a random basis to test an employee's ability to recognize cyber attacks. For OMPA and many other companies, employees are the "human" firewall that prevents harm to IT systems.

OMPA's line crew continued its growth in 2017, adding Cordell to the cities serviced. There are several other cities interested in joining the program in 2018. Due to this prospect, OMPA added an additional lineman position in late 2017 bringing the total crew size to four. The line crew presently serves Cordell, Fairview, Ft. Supply, Goltry, Laverne, Mooreland, Pond Creek, and Waynoka. Geary joined the program in January 2018 and Comanche is scheduled to join starting April 1, 2018.

In addition to helping member cities that have



Distribution Engineer Mike Hensley

line crew agreements, the line crew is available for any member city to use. They also perform regular substation and line inspections of OMPA and member city facilities and assist with OMPA substation improvement projects.



MEMBER SERVICES



Director of Member Services Drake Rice is interviewed for a show to be aired on OETA.

OMPA staff and the cities and towns served by the Authority promoted Public Power perhaps more than ever before in 2017.

For the first time, a campaign was formed to formally promote municipal utility ownership on a state-wide scale. The campaign was led by a committee that included OMPA staff and representatives from cities and towns of Authority members. It was to officially launch into the public sometime in 2018 and is intended to be a multi-year effort.

The campaign – which formed under the moniker “Value of Public Power” – will promote municipal utility ownership to customers of those utilities through traditional marketing methods, but will also be active in speaking at public events in communities and crafting reports for individual cities and towns that details specific benefits of local utility ownership.

This was in addition to the usual promotional

efforts at OMPA. Those include activities with the state legislature, as staff continued to educate them on the role of a joint-action agency and the importance of municipal utilities in their communities.

A large luncheon for legislators was held in Oklahoma City in the spring, accompanying more regional luncheons around the state throughout the year.

Public Power Week was again held in October, and several OMPA members participated with public events for the first time. In all, 15 utilities participated either with Open Houses, school safety presentations or both.

OMPA was featured on a 30-minute episode of Oklahoma Grand, a documentary series airing on Oklahoma Educational Television (OETA). The show featured

interviews with Drake Rice, Kalvin Beaston and Jim Hendrix, and was filmed at the Charles D. Lamb Energy Center and Kaw Hydrofacility near Ponca City.



Energy Services Specialist Palma Lough, left, talks about Public Power

MEMBER SERVICES

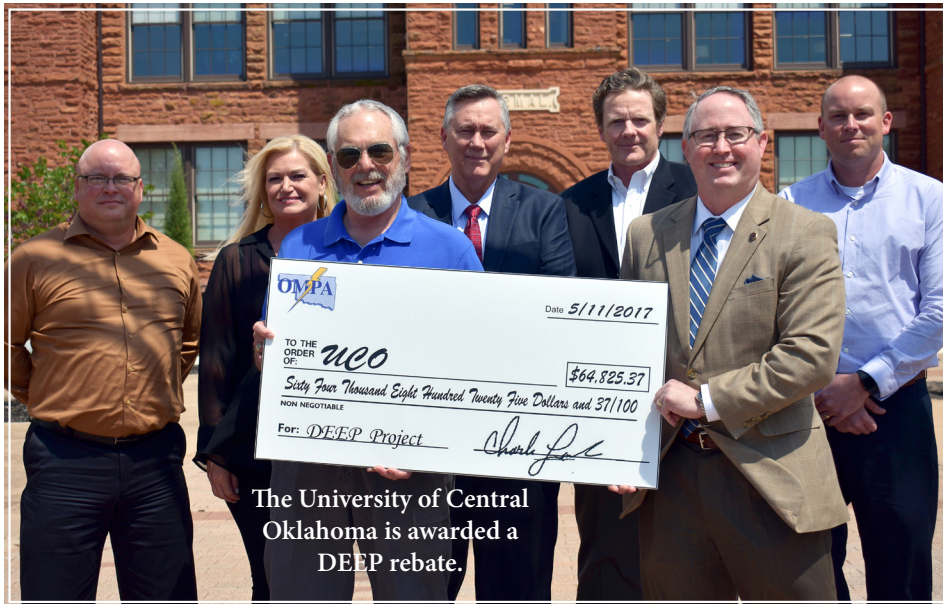
Competitive Utility Program

The Competitive Utility Program (CUP) was formed in 1995 as a way for member utilities to remain competitive by implementing best practices. Always one of the Oklahoma Municipal Power Authority's most popular programs, it saw a record 26 members either certified

or re-certified in 2017.

A voluntary program, CUP provides a way for members to evaluate and improve the operation of their utilities by reaching benchmarks in areas of customer service, energy services, utility operations, maintenance and reliability.

In addition to the benefits that come with certification, members can also receive financial incentives in the form of reductions in the cost of power purchased from OMPA. Those rewards are received through the implementation of a number of management policies.



The University of Central Oklahoma is awarded a DEEP rebate.

Demand Reduction

The Oklahoma Municipal Power Authority's various energy-efficiency-related programs were formed as a way to delay the time by which the Authority needs to purchase expensive generation.

It was a record-breaking year for one of them in 2017.

The Demand and Energy Efficiency Program (DEEP) awards rebates to commercial and industrial customers of OMPA members who improve

their energy efficiency through LED lighting conversion projects, HVAC replacement, machine and motor replacement and more.

In 2017, there were 103 DEEP projects awarded rebate totals of \$530,975. Included among the rebates were two of the largest handed out in the program's history – checks of \$64,825 and \$85,705 for lighting upgrades on the campus of the University of Central Oklahoma

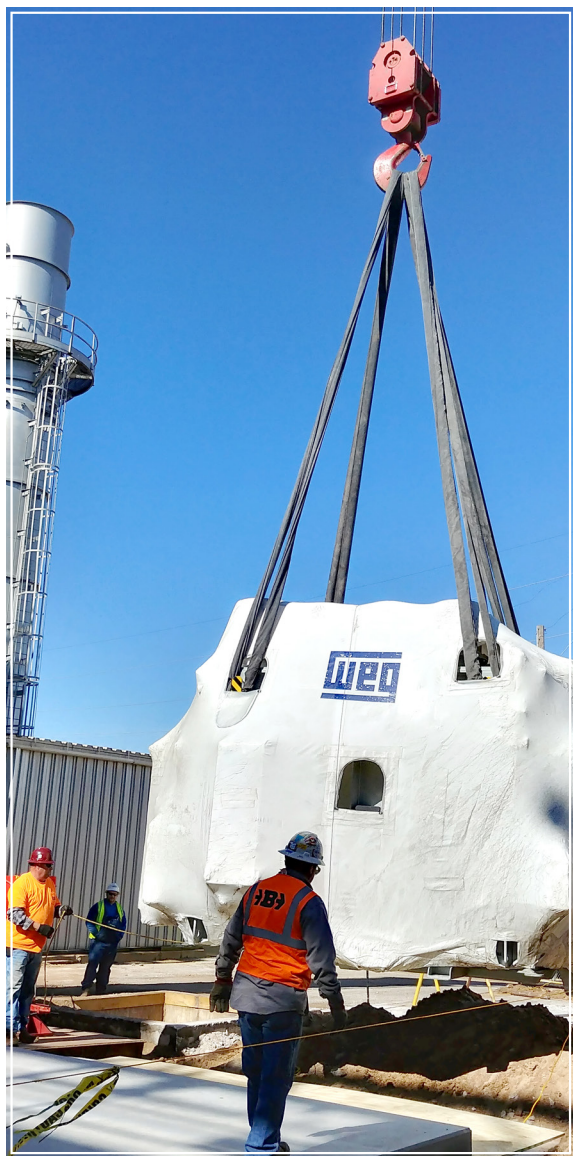
in Edmond. In all, rebated projects equaled an estimated demand reduction of 3,642 kilowatts, for an average rebate total of \$145.76 per kilowatt reduced.

Another energy-efficiency program is the Ways I Save Electricity (WISE) program, which is intended for residential customers of OMPA members who choose to participate in the program, since rebate totals are based on a 50-50 split from the Authority and the member utility. Rebates can be provided for newly installed energy-efficient HVAC systems, including ground-source heat pumps and air-source heat pumps, as well as ceiling insulation.

There were 135 rebates processed for HVAC systems for a total of \$104,612 with an estimated kilowatt reduction of 285 kilowatts. There were 67 ceiling insulation rebates awarded for \$13,598 with an estimated kilowatt reduction of 18.

OMPA also continued to provide free energy audits to customers of member utilities, completing a total of 150 in 2017.

PONCA CITY PRODUCTION



Public Power means more than just control over local distribution systems. It can also mean control in actual power supply.

For OMPA members, that includes a series of plants in the Ponca City area that are both owned and operated by OMPA staff. Among them are the units that make up the Ponca City Repowering Project (PCRP), the Charles D. Lamb Energy Center (CDLEC) and the Kaw Hydrofacility.

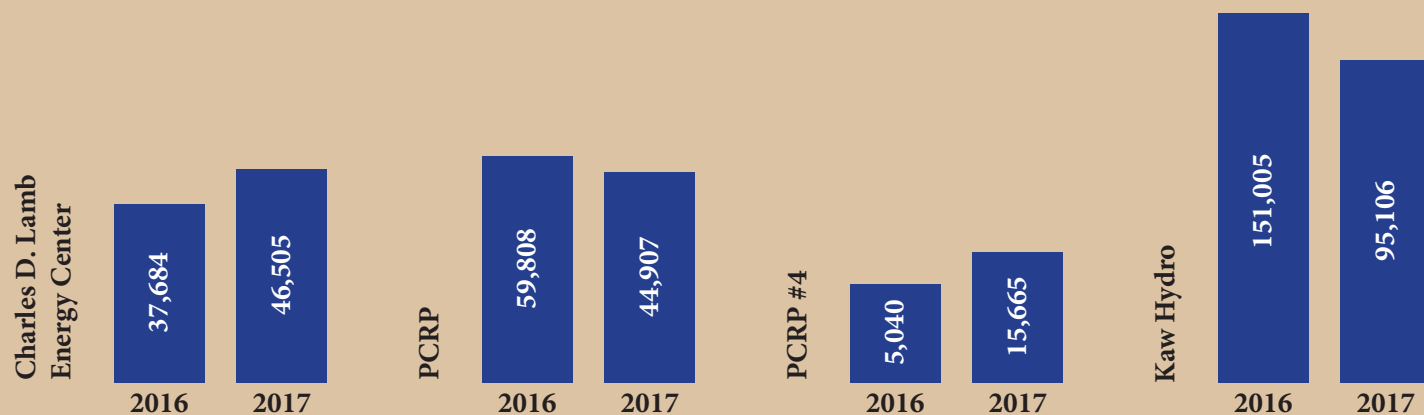
These plants are manned by staff in way that ensures they run as reliably and efficiently as possible. In 2017, for the units at PCRP, that required a large maintenance effort.

The Unit 3 gas turbine and generator underwent major maintenance in the spring. The turbine was removed and sent to the General Electric maintenance depot in Houston. Major maintenance on the turbine included hot gas path component replacement, along with implementation of critical service bulletins. The generator was also disassembled as part of major maintenance and underwent extensive repairs of the end windings and a rotor rewind.

To improve Unit 3 reliability, turbine controls were upgraded from the obsolete Mark V to Woodward Micronet during the fall of 2017. The upgrade not only included the replacement of control hardware and software, but also an upgrade to generator protections relaying, excitation, synchronization and vibration monitoring. The unit was returned to operation and running satisfactory with Phase 2 of control tuning scheduled for the spring of 2018.

The Unit 1 30 MVA Generator Step-Up Transformer Project also got underway, which comprised of procurement and installation of a new step-up transformer, the addition of a 69 kV breaker, and an upgrade to Unit 1 480 v and 15 kV switchgear. Koontz Electric, out of Morrilton, Ark., was selected as the General Works Contractor, with Oklahoma City firm Guernsey Engineering performing owner engineering services.

Plant Production (in mwhs)



DVD Button

