2017 SUSTAINABILITY REPORT

Charging Onward.

AMERICAN MUNICIPAL POWER, INC.

AMP
PUBLIC POWER PARTNERS™

Table of Contents

AMP and its members remain committed to their sustainability initiatives and stated principles.

Marc Gerken, PE (right) AMP President/CEO and Steve Dupee, AMP Board of Trustees Chair

2017 was another successful year as AMP members saw the completion of the Combined Hydro Project and new solar facilities in the Ohio communities of Bowling Green, Marshallville, Prospect as well as Front Royal, Virginia. With the completion of these projects, AMP furthers its commitment to a diverse generation portfolio while embracing renewable resources.

In an effort to best support and assist its members, AMP launched and enhanced several programs in 2017. One in particular, led by AMP's Focus Forward Committee, developed a process to help member communities respond to peak shaving needs and prepared materials for members to use to inform and educate their customers.

As an organization, AMP prepared and submitted more than 325 compliance reports, performed more than 100 site inspections, and conducted our new environmental audit program at three sites, all without a single violation cited by any regulatory agency.

Unpredictability in the regulatory world seems to be the new norm and, just as in 2016, AMP waded through the uncertainty with rigor in 2017. AMP successfully increased representation and involvement as a stakeholder, and as a driver of issue advocacy, within PJM, at FERC and in dealings with state agencies on behalf of members.

It is not by accident that you are reading this report electronically. The AMP Board of Trustees voted to produce all annual reports digitally, beginning with 2017 reports. This is part of AMP's commitment to be a good steward of the environment.

This sustainability report has been designed as a companion to the AMP and Efficiency Smart-prepared annual reports. The AMP Board of Trustees adopted Environmental Stewardship principles in 2005, with a re-adoption and expansion in 2011. Throughout this report we illustrate how we use these principles as a business approach that creates long-term member value by embracing opportunities and managing risks derived from economic, regulatory and societal developments.

Marc S. Gerken, PE
AMP President/CEO

AMP Board of Trustees Chair
Village Manager of Wellington

PRINCIPLE

1

Providing a balanced and sustainable power supply portfolio

AMP is committed to providing our members with a variety of options for meeting their power supply needs. This includes maintaining a balanced portfolio of generation projects, power purchase agreements, and a project development pipeline that includes cost-effective fuel and generation technology options. This also means using energy efficiency and load control as meaningful tools in power supply planning to reduce the need for new generation resources.

AMP and its members own or have long term contracts for approximately 1,900 megawatts (MW) of generation and AMP members have diverse resource portfolios that include coal, natural gas, hydro, solar, wind, landfill gas, diesel and wholesale market purchases. AMP's renewable resources made up approximately 21 percent of its members' energy needs. Visit the "Generation Assets" section of the AMP website for additional information.

A few of the many noteworthy items in regards to AMP's power supply portfolio in 2017 are highlighted below.

Hydropower

The Smithland Hydroelectric Plant began full commercial operation on August 31, 2017. The facility is officially under the care, custody and control of AMP operations and is supplying power to 79 participating AMP member communities in five states. The 76-megawatt (MW) run-of-the-river facility is located near Smithland, Ky.

This important asset is part of AMP's commitment to further diversify its power supply portfolio by developing sustainable generating resources. This facility will provide long-term value and reliability to its participating members.

Smithland is the final project to come online as part of AMP's recent hydroelectric development efforts. Combined, AMP developed four projects with a total of 11 units, to bring more than 300 MW of new hydropower into its portfolio. The projects represent the largest deployment of run-of-the-river hydroelectric plants in the nation.

Solar

The dedication ceremony for the Bowling Green Solar Facility was held on April 27, 2017. The 20-MW facility, the largest solar installation in the state of Ohio, went into commercial operation in January 2017.

The Bowling Green Solar Facility is made up of 85,680 modules, 20 1-MW inverters and 10 34.5-kV transformers. The site uses a tracker system that rotates the solar panels to help in maximizing production. A substation was also built on the site that increases the voltage from 34.5 kV to 69 kV to be transmitted on a newly built 1.75-mile, 69-kV line that ties back into the City of Bowling Green's electric system.

The Bowling Green Solar Facility is part of the larger AMP Solar Phase II project. In the spring of 2016, AMP executed a solar power purchase agreement with DG AMP Solar, a wholly owned subsidiary of NextEra Energy Resources, for the development, construction and operation of up to 80 MW or more of new solar electric generation facilities. These solar facilities provide peaking resources and lower transmission costs for participating members. Twenty-two participating AMP members are receiving energy from the project.

A ribbon cutting was held in May for the Front Royal Solar Facility (2.5 MW) which went into commercial operation on May 8, 2017, joining the Marshallville Solar Facility (700 kW) and the Prospect Solar Facility (250 kW), both of which went into commercial operation on March 3, 2017. These projects are part of the larger AMP Solar Phase II project. The total that came online in 2017 is 23.45 MW.

Site	COD	DC kW	AC kW	Qty of Panels
Bowling Green	1/24/17	28,703	20,000	85,680
Front Royal	5/8/17	3,527	2,500	11,378
Marshallville	3/3/17	1,013	700	3,267
Prospect	3/3/17	362	250	1,080

Landfill Gas

On July 13, 2017, Georgetown officials hosted a ribbon cutting ceremony at the Brown County Landfill to celebrate the commercial operation of a 4-MW landfill generation project built by Energy Developments, Inc. (EDI). AMP will purchase all of the output from the plant under a 15-year power purchase agreement on behalf of Georgetown, Williamstown and Yellow Springs.

PRINCIPLE

2

Reducing our overall emissions profile

AMP is committed to reducing its overall emissions profile. Reductions of airborne emissions can be achieved through the use of efficient coal and natural gas and other lower- or zero-emission generation technologies (including hydroelectric and other renewables), supply-side or end-use efficiency improvements, and conservation activities. Improvements in energy and operational efficiency and use of efficient coal and natural gas technologies at the generation level will also reduce water usage and need for landfill space. Mindful that emissions of greenhouse gases (GHGs) will be limited at some point in the future, AMP will prudently invest in projects to offset carbon dioxide and other GHG emissions from our fossil generation resources. AMP also encourages efforts to account for and reduce GHG emissions by individual AMP member communities, which promotes balancing their system needs with other stewardship and customer values.

AMP continues to provide efficient and reliable power while also striving to reduce and mitigate for airborne emissions. Some highlights of AMP's efforts to reduce AMP's overall emissions profile include:

Carbon Mitigation/Carbon Offset Projects

AMP continues to monitor its 467 acres of reforestation projects, conducting site visits in late 2017 and working with S2C Pacific to engage various stakeholders on carbon management initiatives.

EcoSmart Choice

The EcoSmart Choice program continued to grow in 2017, adding a new member and nearly 200 customers. Efforts to further streamline the program were implemented, including updates to the website, reporting forms and collateral materials. The program is designed to offer a green pricing option for individuals and companies who are interested in purchasing up to 100 percent renewable energy through the purchase of renewable energy certificates (RECs). Participating communities purchased more than 43,419 MWh of green power through the program in 2017. The program offset 20,581 tons of carbon dioxide (CO2) emissions, 16.5 tons of sulfur dioxide (SO2) emissions and 14.33 tons of nitrogen oxide (NOx) emissions in 2017.

Emissions Reductions

Since baseline year 2013, AMP has increased its power generated from renewable sources by nearly 300 percent. Largely, this effort has resulted in an emissions rate reduction* of CO2 by 15 percent, volatile organic compounds (VOC) by 7 percent, NOx by 5 percent and carbon monoxide (CO) by 87 percent. The SO2 emissions rate has increased by 27 percent and particulate matter (PM) increased by 5 percent.

**Emission rates are calculated as lbs/MWh generated. This does not include emissions from market purchases.*

PRINCIPLE

3

Using less

AMP recognizes that electricity not generated – because it is not needed – yields the greatest environmental benefit and is essential to a truly sustainable business approach. Reducing electricity demand through innovative conservation efforts and efficiency improvements offered to AMP member communities will help conserve natural resources as well as reduce emissions. AMP will also promote the "reduce, reuse, recycle" principles of sustainability to its membership and employees and throughout its operations.

AMP provides and facilitates many programs and services to its members in an effort to use less. Major accomplishments in this area throughout the past year are described here.

Efficiency Smart

AMP continues its success with the Vermont Energy Investment Corporation (VEIC) in providing a wide range of energy-efficiency and implementation services for subscribing AMP members through the Efficiency Smart (ES) program. The relationship with VEIC is in its eighth year. The goal of ES is to encourage residential, commercial and industrial customers to adopt cost-effective energy efficiency services that provide reliable and verifiable cost savings.

AMP members asked for more flexible energy efficiency options, which became available with the rollout of ES 3.0 in 2016, to better serve the different needs of different communities. The ES program grew by two members in 2017, with the addition of Versailles and Montpelier, for a total of 22 participants. The ES program is under active consideration by four additional communities heading into 2018. The results of the ES contract for 2014–2016 were completed and verified in 2017, and the program exceeded expectations, achieving 146 percent of its three-year MWh savings target. The guaranteed energy savings were achieved by all participating member communities.

In 2017, members conserved 15,507 MWh from the program, which avoided 7,350 tons of CO2, 5.89 tons of SO2 and 5.12 tons of NOx of emissions*.

The cumulative net savings of the program (Jan. 1, 2011 – Dec. 12, 2017) are 204,865 MWh.

Net revenue from the sale of Efficiency Smart capacity savings for the delivery year 2016–2017 within the PJM Interconnection region were approximately $164,758.

Visit www.efficiencysmart.org for more information.

In addition, AMP completed nine U.S. Department of Energy (USDOE) grant-subsidized energy audits through the Direct Connections Program for members with an estimated value of $144,000.

*Avoided emissions is derived from the amount of energy conserved multiplied by the PJM market power emissions rate.

PRINCIPLE

4

Making smart investments

AMP is faced with finding new power supply options to meet member needs. Volatile energy markets and aging generation resources have spurred AMP to make smart investments in efficient coal, natural gas, hydroelectric, landfill gas and solar generation assets to mitigate overexposure to the wholesale market. AMP will continue to pursue incorporating other cost-effective renewable resources as an important part of our generation portfolio and will endeavor to use any available favorable local, state or federal regulatory treatment when siting and financing these projects.

AMP continues its investment in renewable energy projects and continues to be recognized for its financial strength by rating agencies.

AMP continues its investment in renewable energy projects and continues to be recognized for its financial strength by rating agencies.

Investments in renewable energy projects continued throughout 2017. A power purchase agreement was signed with EDI for electricity derived from landfill gas (as described under Principle 1).

In May 2017, the National Federation of Municipal Analysts (NFMA) organization presented AMP with its Excellence in Disclosure Award.

NFMA cited AMP's work to interact with the investment community through a "comprehensive and easy-to-navigate investor relations site," timely annual and quarterly financial reports, rating agency reports and other important credit-related information, as well as "a web page dedicated to sustainability objectives, programs, practices and reporting."

NFMA highlighted that AMP has "a notable track record of presenting investor events and making time for one-on-one meetings to ensure that investors have the information they need."

In December 2017, AMP issued AMP Fremont Energy Campus (AFEC) Project Revenue Bonds, which were used to refund a portion of previously issued debt, resulting in 2018 savings of $10.56 million or $0.28/MWh to the project's participating members.

PRINCIPLE

5

Assisting member communities

AMP member municipal electric systems are critical components in the success of the communities they serve. Investment of capital – both financial and human – in AMP member communities is essential to ensuring a good quality of life and encouraging economic development and growth. AMP provides ongoing employee training, safety instruction, project engineering and other technical services to ensure that member communities have access to the most up-to-date services in these areas. Environmental enhancements (planting trees, creating green space, etc.) are also valuable assets to local communities, and AMP will provide technical support and work with interested member communities to identify energy efficiency, carbon management, and sustainable investment and development opportunities consistent with local needs.

AMP provides many diverse member training programs and compliance services. More detailed information on how AMP is assisting its members can be found in the separate AMP Annual Report with a few featured items from 2017 below:

Focus Forward

The Focus Forward Committee aims to educate and inform members about emerging industry trends and to prepare for further integration of Distributed Energy Resources (DER). The Committee convened the Focus Forward Advisory Council (FFAC) which is a group comprised of member-volunteers, rate consultants and AMP staff to examine these emerging trends, identify the needs of members and develop tools to assist member communities.

The Focus Forward Committee received regular monthly reports on sustainability trends, renewable energy certificate (REC) market and regulatory developments, and AMP sustainability initiatives.

During the past year, the Focus Forward Advisory Council (FFAC) met in May, July, September and November where they developed a list of emerging trends affecting the industry and refined ways to improve efforts to provide information to members.

The FFAC established four new initiatives to improve communications and provide relevant information to AMP members .

1. Additional DER resources

AMP, with guidance of the FFAC, finalized a template interconnection council resolution, application and agreement using information presented in the Focus Forward Toolkit: Preparing for a Distributed Resource Future. The templates are available on the Member Extranet page under Focus Forward, "Sample Interconnection Agreements and Metering Policies."

2. Electric vehicles brief

In response to members' increased interest in electric vehicles (EV), AMP compiled a comprehensive EV briefing document that is downloadable from the AMP Member Extranet. Information includes: the amount of power EVs use; the different types of vehicles and supply equipment; operational considerations; locations of public charging stations; and a sample of incentives/rebates offered by utilities and municipalities.

3. Host or promote educational webinars and events

The AMP Finance and Accounting Subcommittee hosted 28 participants, from 22 member communities in three states for a webinar about DER and rate designs on August 2, 2017. John Courtney, PE, owner of Courtney & Associates, provided an overview of behind-the-meter generation and discussed policy and factors to consider when designing rates.

The FFAC met on November 14, 2017, via webinar. The topic was "Battery Storage: Current Market and Potential Values." Nick Esch and Ted Davidovich from the Smart Electric Power Alliance (SEPA) presented results from SEPA's 2017 Utility Energy Storage Market Snapshot Report and Don Harrod, Village of Minster, presented the Village's experience with their solar plus storage project.

The American Public Power Association's (APPA) Public Power Forward webinar series and the SEPA webinars were promoted to AMP membership.

4. Reorganize the Focus Forward web page on the AMP website

The FFAC focused on several topics deemed as relevant trends in the industry to reorganize information on the Focus Forward web page of the AMP Member Extranet. Informational articles, documents, infographics and online case studies are linked under the corresponding trend topics to give members one central repository to find information regarding industry trends.

Advanced Metering Infrastructure

The AMP AMI Program completed its first full year of operation in 2017. Many AMP members are considering Advanced Metering Infrastructure (AMI) deployments as an alternative to their existing manual, handheld or drive-by metering systems. AMP's program provides a complete approach for members who are considering an update to their metering infrastructure and provides a foundation for smart city initiatives. The program extends from the meter to the datacenter with a focus on eliminating the complexities of deploying and managing all of the systems, components and data interfaces required to have a fully functional solution. AMP's program scales from the smallest to the largest of our members and allows for lower cost acquisition of electric, water and gas meters, and communications equipment through purchasing aggregation, sharing of key resources necessary to deploy meters and systems operation. The IT infrastructure is also provided using a shared services operating model.

The Borough of Ephrata Electric Division partnered with AMP and in April 2017, launched its Advanced Metering Initiative, replacing all 6,700 electric meters with AMI technology. The Borough of Ephrata typically experiences increased system losses from fall into winter. However, that did not happen after the new AMI meters were installed in 2017. System losses at the end of 2017 were the lowest in years and will realize an annual savings of more than $571,000.

eReliability Tracker

Through the APPA membership, AMP began offering eReliability Tracker service to all AMP members at no cost in late 2015. There are 38 members who now participate in the program, receiving customized annual reports that analyze the utility's outage information for the previous year and compare the data to other subscribers' data in the same region and class size. Subscribers to the service can earn a certificate of excellence, as well as points toward APPA Reliable Public Power (RP3) designation, through active participation in the service.

Environmental Services to Members

AMP provided high-quality and cost-effective environmental affairs services to numerous Members including preparation of permit applications, compliance monitoring and inspections, report preparation and negotiating with the Ohio Environmental Protection Agency (Ohio EPA) on behalf of members.

PRINCIPLE

6

Reaching out to stakeholders

AMP will reach out to other stakeholder entities – including (but not limited to) government, business, academia, media and other utility organizations – to ensure that they understand AMP's mission and vision and AMP's approach to sustainability. This outreach is intended to help AMP identify potential future collaborative opportunities beyond those traditionally associated with providing electric power supply. AMP encourages member communities to identify potential partnership opportunities as well.

AMP continues to foster existing and develop new relationships with stakeholders. Several examples of how this was accomplished in 2017 are highlighted below:

Regulatory

AMP prepared and submitted more than 325 compliance reports and performed more than 100 site inspections of AMP assets, with no violations cited by any regulatory agencies. AMP also developed an environmental audit program, and conducted audits at three hydroelectric plants. In addition, AMP submitted nine Renewable Energy Certifications (REC) applications for five facilities across six states.

Legislative

In 2017, AMP worked closely with Ohio Municipal Electric Association (OMEA) to continue raising awareness to the rising transmission costs that have increased significantly in recent years. A review commissioned by AMP and performed by Dr. Ken Rose, a nationally recognized economist on U.S. energy markets, found that between 2011 and 2017, the annual revenue requirement for transmission owners increased 294 percent in the PJM territory. AMP and OMEA are seeking increased transparency and oversight over supplemental transmission projects, which are not required for electric grid resiliency, are not subject to a rigorous approval process and whose costs are passed on to all users of the grid.

Additionally, AMP and OMEA have been raising awareness with congressional lawmakers over transmission, capacity market and other wholesale market concerns. In July, AMP testified before the U.S. House of Representatives Energy and Power Subcommittee during a hearing on the Federal Power Act to examine the state of the electric industry through the perspective of market participants.

AMP continues to actively participate in FERC and RTO proceedings and meet with FERC Commissioners and key staff to express concerns over these issues. Additionally, AMP continues to advocate for regulatory environments and market structures that permit less dependence on transmission and support sustainability. This includes development of resources behind the meter, energy efficiency, demand response, energy storage and distributed energy resources.

At the state level, AMP and OMEA were successful in amending Ohio state law to certify small hydroelectric projects as renewable energy resources. This will provide additional value to the small hydro facilities owned by member communities as they are now eligible to generate renewable energy credits. AMP has also increased its monitoring and engagement in states within the AMP footprint to ensure renewable projects are able to generate the most value for members and participants.

2017 AMP / OMEA Annual Conference

More than 400 participants took part in the 2017 AMP/OMEA Conference held in Columbus Sept. 25–28, 2017.

Following the welcome and opening session with AMP President/CEO Marc Gerken, AMP and OMEA welcomed Delia Patterson, acting senior vice president of advocacy and communications, and general counsel of the APPA. Patterson provided an update on challenges and opportunities currently facing public power. Conference participants also heard from Amy Myers Jaffe, leading expert on global energy policy, discussing key industry trends and topics, as well as from information technology and cybersecurity expert, Dr. Dale Meyerrose, who provided insight into risks associated with new technologies in the utility industry.

During the conference, participants were able to attend panel discussions regarding peak shaving – including what members can do to lower costs, what rating agencies look for from municipal utilities, and state and federal legislative updates.

In addition to the many sessions and events, AMP, OMEA and the various project participants held membership meetings throughout the four-day annual conference.

Napoleon students visit wind farm, solar site

Napoleon Area Schools fourth grade classes visited and toured the AMP Wind Farm and the Bowling Green solar installation on May 17, 2017. The class also toured the Napoleon substation, and watched a bucket truck and climbing demonstration. Pictured are Harry Phillips (left), AMP director of marketing/member relations, and Dennis Clapp, Napoleon's electric distribution superintendent, teaching the students about the AMP Wind Farm.

PRINCIPLE

7

Leading by example

AMP encourages its officers and employees to lead by example through increased efforts to reuse and recycle home and office products and conserve energy, both at home and in the workplace. To the extent practicable, AMP will strive to use its headquarters building to demonstrate the use of green materials and energy efficient products, thus leading by example. AMP will report its sustainability and environmental stewardship actions on both a quarterly and an annual basis and, where possible, measure its success in achieving the goals laid out by these sustainability principles.

Striving to be public power's leader in wholesale energy supply and value-added member services, as declared in the AMP vision statement, carries with it the responsibility to help set the standard for sustainability. Key efforts of AMP-specific sustainability for the year include:

Corporate safety

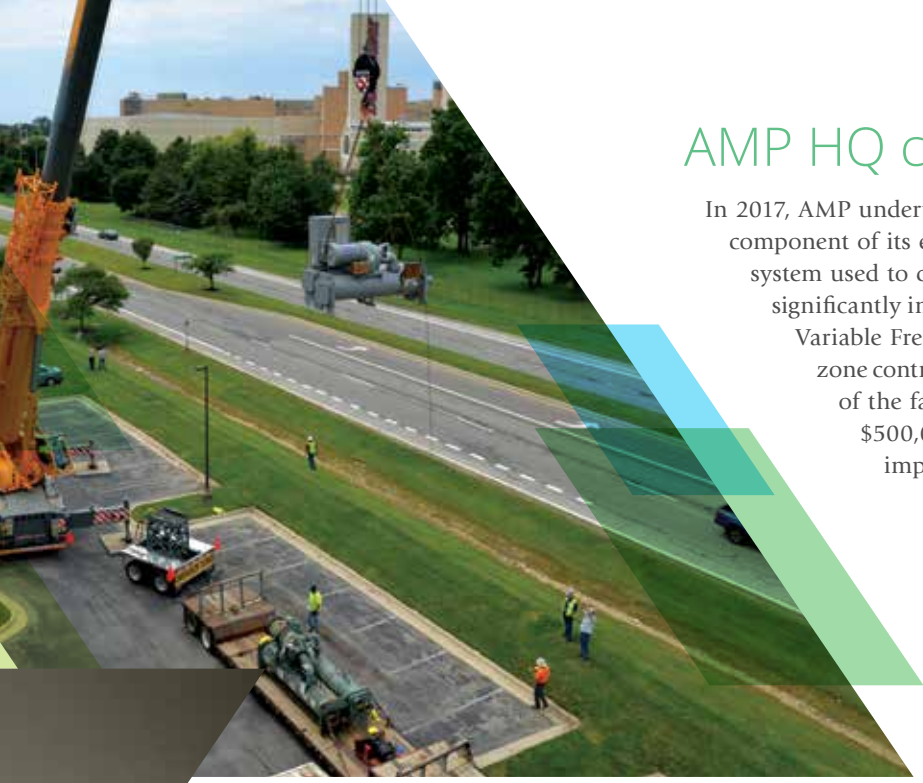
AMP experienced one recordable accident in 2017. AMP had an average of 192 employees in 2017 with a total of 296,986 man hours worked and an incident rate of 0.67 for the year.* In addition, AMP provided new hire safety training for 29 new employees.

*Incident rate is the number of recordable injuries per 100 full-time employees and is calculated as: the number of recordable injuries x 200,000 average hours worked by 100 full-time employees in a year / man hours worked for the year.

AMP DNA Award

Chris Norton was recognized as the AMP 2017 DNA Award recipient. Norton is the director of market regulatory affairs with AMP's power supply and generation operations department and has been with the organization for 19 years.

AMP President/CEO Marc Gerken presented Norton with the award on June 9. Gerken initiated the annual award to recognize an employee who advances AMP's vision and mission. The DNA Award exemplifies AMP's core values: cooperation, integrity, innovation, action oriented, effective communication and member focused.



AMP HQ corporate sustainability initiatives

In 2017, AMP undertook a substantial facility improvement project critical to the building infrastructure and a major component of its energy consumption. The project was the replacement of a 25-year old HVAC chiller and control system used to cool the building. Specific consideration was given to obtaining a replacement system that would significantly improve the energy efficiency of the building. The new 270 Ton chiller is a centrifugal unit with five Variable Frequency Drive (VFD) motors. The associated programmable control system allows for individual zone control, as well as functionality to control the operation of the system depending on the cooling demands of the facility (i.e. considering the occupancy of the building and time of day). The project was a nearly $500,000 facility improvement project. The new chiller system benefits the environment through its improved efficiency, and lowers the operating cost of AMP headquarters.

Lighting within the underground parking garage was replaced with LED lamps and T-12 lighting throughout the building was replaced with T-8 fluorescents as bulbs burned out. The T-8 bulbs use approximately 35 percent less electricity to produce the same amount of light as the T-12 bulbs.

Also in 2017, the roof of the building was replaced with a white-reflective roofing material. According to the White Roof Project, white roofs reflect up to 90 percent of sunlight (as opposed to traditional black roofs which reflect only 20 percent).

AMP is in the process of installing a ChargePoint dual charging, Level 2, 7.2 KW, CT-4000 electric vehicle charging station at its headquarters location. The engineering and design work was complete in 2017, with installation taking place the first quarter of 2018. The charging station will be free for use by members, building tenants, employees and visitors.

Staff giving/charitable

AMP once again demonstrated generosity through several charitable efforts in 2017. Employees contributed a total of $21,863 through the payroll deduction program. The money went to 18 different charities chosen by employees.

Two blood drive events were held at AMP headquarters, one in May and one in November. Staff and friends donated 53 units of blood to help save lives and benefit the American Red Cross.

In August and September, staff contributed $2,370 to the Hurricane Harvey relief efforts. AMP matched $1,000 and Marc and Marsha Gerken contributed an additional matching donation of $500. In total, $3,870 was contributed to hurricane relief efforts.

Nov. 27 through Dec. 15 marked AMP's annual Holiday Giving program. Collections were received at headquarters and at AMP generating facilities. Headquarters staff donated 105 pounds of non-perishable food products to the Mid-Ohio Food Bank, along with cash donations of $585. The cash contributions to the food bank were matched by other sponsors, bringing total contributions to $1,170. For each dollar donated, the Mid-Ohio Food Bank can provide four meals or distribute $10 worth of groceries to families in need. Headquarters staff also donated approximately 200 pounds of clothes, infant and personal hygiene items, and toiletries to the Columbus Community Shelter Board.

Staff at the Willow Island and Belleville Hydroelectric plants respectively donated 60 pounds and 35 pounds of food to the Old Man Rivers Mission in Parkersburg, W. Va.; staff at the Smithland Hydroelectric plant donated $120 to Livingston County Helping Hands in Kentucky; staff at the Cannelton Hydroelectric plant donated $120 to Hancock County Community Action in Ohio; and staff at the Fremont Energy Center worked with the Marine Corps Reserve to support Toys for Tots, filling a large, five-foot bin with new toys.

Awards to Member Communities

In the generation category, safety awards were presented to:

- Bryan Municipal Utilities
- Orrville Utilities

In the transmission/distribution category, safety awards were presented to:

- Berlin (Md.) Electric Utility Department
- Bryan Municipal Utilities
- Borough of Ephrata Electric Division
- Jackson Center Municipal Electric
- Village of Minster Electric Department
- St. Clairsville Light & Power
- Wapakoneta Electric Department

Safety Commendations were given to:

- Bryan Municipal Utilities for generation
- Orrville Utilities for generation
- City of Cuyahoga Falls Electric System for transmission and distribution
- Dover Light & Power for transmission and distribution
- Hudson Public Power for transmission and distribution
- Orrville Utilities for transmission and distribution
- City of Wadsworth Electric and Communications for transmission and distribution

Mutual Aid Commendations were given to:

- Hudson Public Power for providing assistance to Village of Newton Falls
- Oberlin Municipal Light & Power for providing assistance to Village of Newton Falls
- Orrville Utilities for providing assistance to Village of Newton Falls
- Piqua Power System for providing assistance to Dayton Power & Light
- Shelby Division of Electricity and Telecommunications for providing assistance to Village of Lucas
- Hamilton Department of Electric for providing assistance to the Village of Eldorado
- Bryan Municipal Utilities for providing assistance to the Village of Pioneer and Village of Holiday City installation of the Selwyn Drive Substation

Additionally, several communities assisted with the mutual aid efforts in the aftermath of Hurricane Irma.

- Berea Municipal Utilities
- Berlin (Md.) Electric Utility Department
- Bowling Green Municipal Utilities
- Bryan Municipal Utilities
- Coldwater Board of Public Affairs
- City of Cuyahoga Falls Electric System
- Borough of Ephrata
- Hamilton Department of Electric
- Hudson Public Power
- Montpelier Municipal Utility
- Napoleon Light and Power
- Orrville Utilities
- Paducah Power System
- Pemberville Municipal Electric
- Piqua Power Systems
- City of St. Marys Municipal Electric System
- Tipp City Municipal Utilities
- Wapakoneta Electric Department
- City of Wadsworth Electric and Communications
- City of Westerville Electric Division

Finance Awards

- Highest Credit Score Population more than 5,000 – the City of Westerville with a score of 105 percent
- Highest Credit Score Population less than 5,000 – the Village of Clinton with a score of 98 percent
- Most Improved Credit Score – the Village of Edgerton with a 40 percent improvement
- Financing of the Year – the Borough of Ephrata for the AMI project

Innovation Awards

- Village of Monroeville Electric Department for their Distribution System Automation project

Public Power Promotion Awards

- Coldwater Board of Public Utilities promotion of RP3 designation
- Cuyahoga Falls Electric System Small Commercial Energy Efficiency Program
- Dover Light and Power Public Power Week
- Orrville Utilities for its new website

Systems Improvement Awards

- Village of Versailles for the circuit #1 12 kV conversion and substation improvements
- Honorable Mention: City of Columbiana North and South Voltage Conversions project
- Honorable Mention: City of St. Clairsville improved reliability along Ault Drive by rebuilding the entire pole line with new poles and wires
- Honorable Mention: Village of Yellow Springs completed a meter replacement program that impact both the electric and water utilities
- Honorable Mention: Dover Light and Power 69 kV East Circuit
- Honorable Mention: Orrville Utilities Boiler #13 Fuel Conversion Project
- Honorable Mention: City of Wapakoneta 69 kV Rebuild
- Honorable Mention: City of Wadsworth Electric and Communications Department for the ODOT State Route 94 Widening Project

Electric System Sustainability Awards

- Cuyahoga Falls Electric System and Sustainability Leadership Plan
- Dover Light and Power for the boat dock LED lighting project
- Orrville Utilities LED street light replacement project

AMP Hard Had Safety Awards Member utilities with 2017 Hard Hat Award winners were:

- Berlin Electric (Md.)
- Bryan Municipal Utilities
- Cuyahoga Falls Electric System
- Dover Light & Power
- Borough of Ephrata
- Monroeville Municipal Light & Power
- Orrville Utilities
- St. Clairsville Light and Power
- City of Wadsworth Electric & Communications
- City of Westerville Electric Division
- Village of Yellow Springs

The 16 AMP and DEMEC members below received Reliable Public Power Provider (RP3) designation from the APPA in 2017. They joined the four AMP members who received the recognition in 2016, the nine AMP members in 2015, and the 14 AMP and DEMEC members who were recognized in 2014.

Sustainability Performance 2013-2017

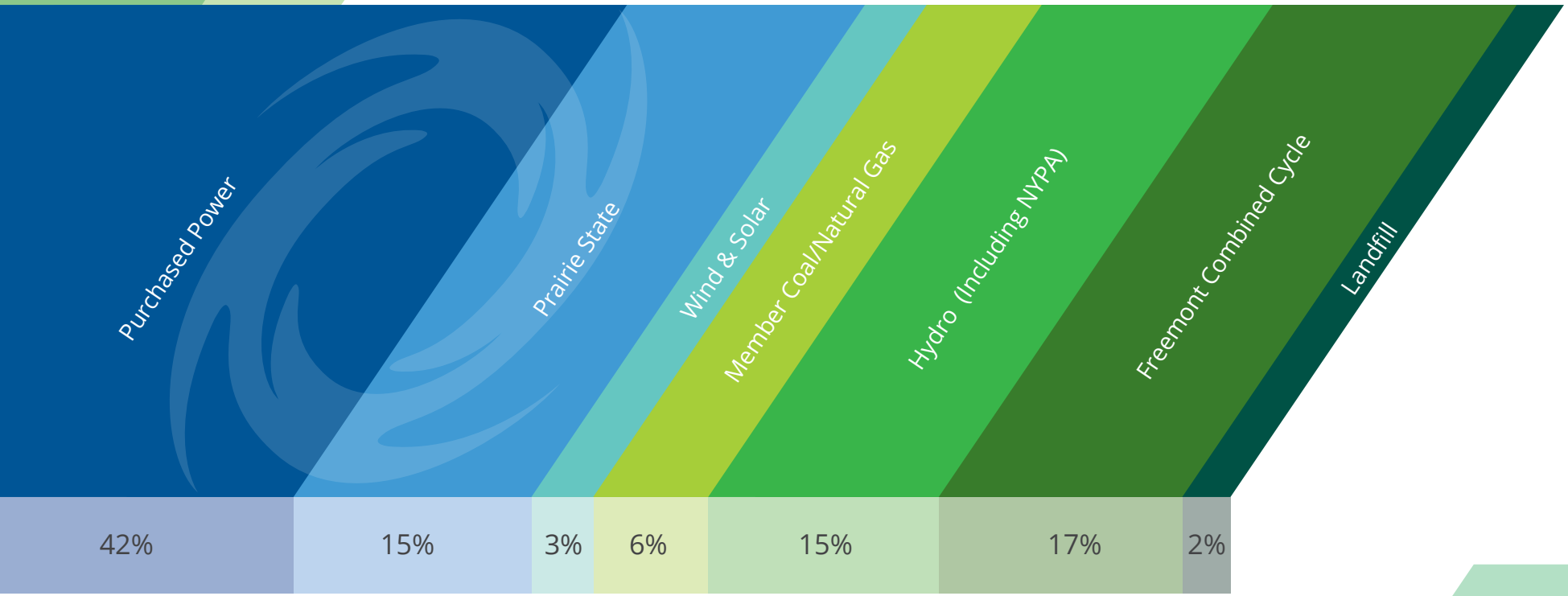
	2013	2014	2015	2016	2017
AMP Organization and Financial Metrics					
Number of member communities	129	130	131	135	135
Load (in million MWh)	16.4	16.5	16.5	16.7	15.8
System peak (in MW)	3,404	3,346	3,378	3,416	3,400
Electric revenue (in $)	$953,077,162	$1,012,684,268	$1,103,886,270	$1,218,475,675	$1,203,615,402
Service fees (in $)	$9,648,054	$10,913,504	$11,515,575	$11,501,983	$10,981,725
Programs and other revenue (in $)	$19,769,641	$16,305,240	$12,589,167	$12,513,647	$14,362,362
Operating expenses (in $)	$879,798,629	$937,845,012	$1,002,832,762	$1,028,599,138	$982,458,119
Net margin (in $)	$5,278,799	$2,577,656	$5,823,840	$10,247,552	$3,530,525
Number of employees (as of 12/31)	147	178	180	156	165
Power Generation (in net MWh)					
Prairie State Energy Campus (AMP share)	1,955,562	2,185,294	2,592,694	2,461,472	2,514,386
AFEC	2,708,704	2,351,669	3,649,554	2,683,735	3,154,240
Belleville Hydro	284,731	303,340	258,668	273,205	274,360
Distributed Generation	8,183	6,561	9,498	19,615	17,139
AMP Wind Farm	14,582	14,262	13,086	10,892	12,076
Napoleon Solar	5,270	5,147	5,111	4,888	4,905
Greenup Hydro (toatal plant)	0	0	0	235,313	259,398
Meldahl Hydro (toatal plant)	0	0	0	366,655	490,875
Cannelton Hydro	0	0	0	343,202	449,129
Willow Island Hydro	0	0	0	218,242	230,523
Landfill Gas	375,844	370,642	373,821	363,104	382,320
Blue Creek Wind	139,573	135,645	138,109	136,861	141,448
Smithland Hydro	0	0	0	0	164,489
Solar Phase II	0	0	0	0	42,232
Total	**5,493,079**	**5,372,560**	**7,040,541**	**7,117,184**	**8,137,521**
Efficiency and Other Offsets to Traditional Generation					
Efficiency Smart - cumulative generation savings since 2011 (in MWh)**	121,339	142,002	159,416	189,950	204,865
% of 2011-2013 targets	150.1%	-	-	-	-
% of 2014-2016 targets	-	48%	97%	161%	146%
% of 2017-2019 targets	-	-	-	-	36%
EcoSmart Choice (green energy sales in MWh)	5,642	9,645	41,871	48,021	43,420
Health and Safety					
Employee work-related fatalities	0	0	0	0	0
Reportable incidents or accidents	0	0	1	2	1
Lost work-day incidents	0	0	1	1	0

	2013	2014	2015	2016	2017
Environment					
Permit violations	1[1]	0	0	0	0
Fines or penalties	0	0	0	0	0
NPDES permit exceedances	0	0	0	1[2]	0
CO2 emissions (in short tons)	3,231,142	3,276,805	3,967,732	3,798,210	4,068,820
Annual CO2 emission rate (in lbs/MWh)	1,176	1,220	1,127	1,067	1000
SO2 emissions (in short tons)	1,159	1,390	1,824	2,010	2,178
Annual SO2 emission rate (in lbs/MWh)	0.422	0.517	0.518	0.565	0.535
NOx emissions (in short tons)	699	775	894	1033	1035
Annual NOx emissions rate (in lbs/MWh)	0.255	0.289	0.254	0.290	0.254
PM emissions (in short tons)	64	63	79	122	100
Annual PM emission rate (in lbs/MWh)	0.023	0.023	0.022	0.034	0.025
CO emissions (in short tons)	560	540	352	146	106
Annual CO emission rate (in lbs/MWh)	0.204	0.201	0.100	0.041	0.026
VOC emissions (in short tons)	32	42	14	29	44
Annual VOC emission rate (in lbs/MWh)	0.012	0.016	0.004	0.008	0.011
Cooling water usage AFEC (net, in million gallons)	358	453	467	540	602
Cooling water usage AMP share of PSEC (in million gallons)	-	-	1,308	1,105	1,107
AMP HQ recycling (estimate, in pounds)	-	21,000	19,200	10,410	58,525
Non-Hazardous waste generation (in lbs)	-	-	-	-	19,454
Hazardous waste generation (in lbs)	-	-	-	-	190
Universal waste generation (in lbs)	-	-	-	-	265
Forestry carbon projects – cumulative acres of trees planted	210	210	210	467	467
Community					
Number of scholarships awarded	8	8	8	8	8
Value of scholarships awarded	$16,000	$16,000	$16,000	$16,000	$20,000
AMP employee charitable giving (payroll deduction in $)	$8,880	$10,856	$14,213	$18,396	$21,863

[1] *minor record keeping issue that was immediately corrected*

[2] *minor sampling exceedance that has been addressed*

2017 AMP Member Energy Resource Mix
(16,500,00 MWh)



Note:

- The Member coal figure includes the participation of AMP members Paducah and Princeton in PSEC through the Kentucky Municipal Power Association.
- The wind and solar figure includes member-owned solar.
- The hydro figure includes member-owned hydro.

Emissions Avoidance 2017 Report

	2017 MWh	CO2 emissions avoided (Tons)*	SO2 emissions avoided (Tons)*	NOx emissions avoided (Tons)*	Total emissions avoided (Tons)
Belleville Hydro (JV5)	274,360	130,047	104.26	90.54	130,241
Greenup Hydro	259,398	122,955	98.57	85.60	123,139
Meldahl Hydro	490,875	232,675	186.53	161.99	233,023
Cannelton Hydro	449,129	212,887	170.67	148.21	213,206
Willow Island Hydro	230,523	109,268	87.60	76.07	109,432
Smithland Hydro	164,489	77,968	62.51	54.28	78,085
AMP Wind Farm (JV6)	12,076	5,724	4.59	3.99	5,733
Napoleon Solar	4,905	2,325	1.86	1.62	2,328
Landfill Gas**	382,320	2,518,349	145.28	126.17	2,518,620
Blue Creek Wind	141,448	67,046	53.75	46.68	67,147
EcoSmart Choice	43,420	20,581	16.50	14.33	20,612
Efficiency Smart	204,865	97,106	77.85	67.61	97,251
Solar Phase II	42,232	20,018	16.05	13.94	20,048
Carbon Offset*** Forestation Projects	467 acres	487			487
					3,619,353

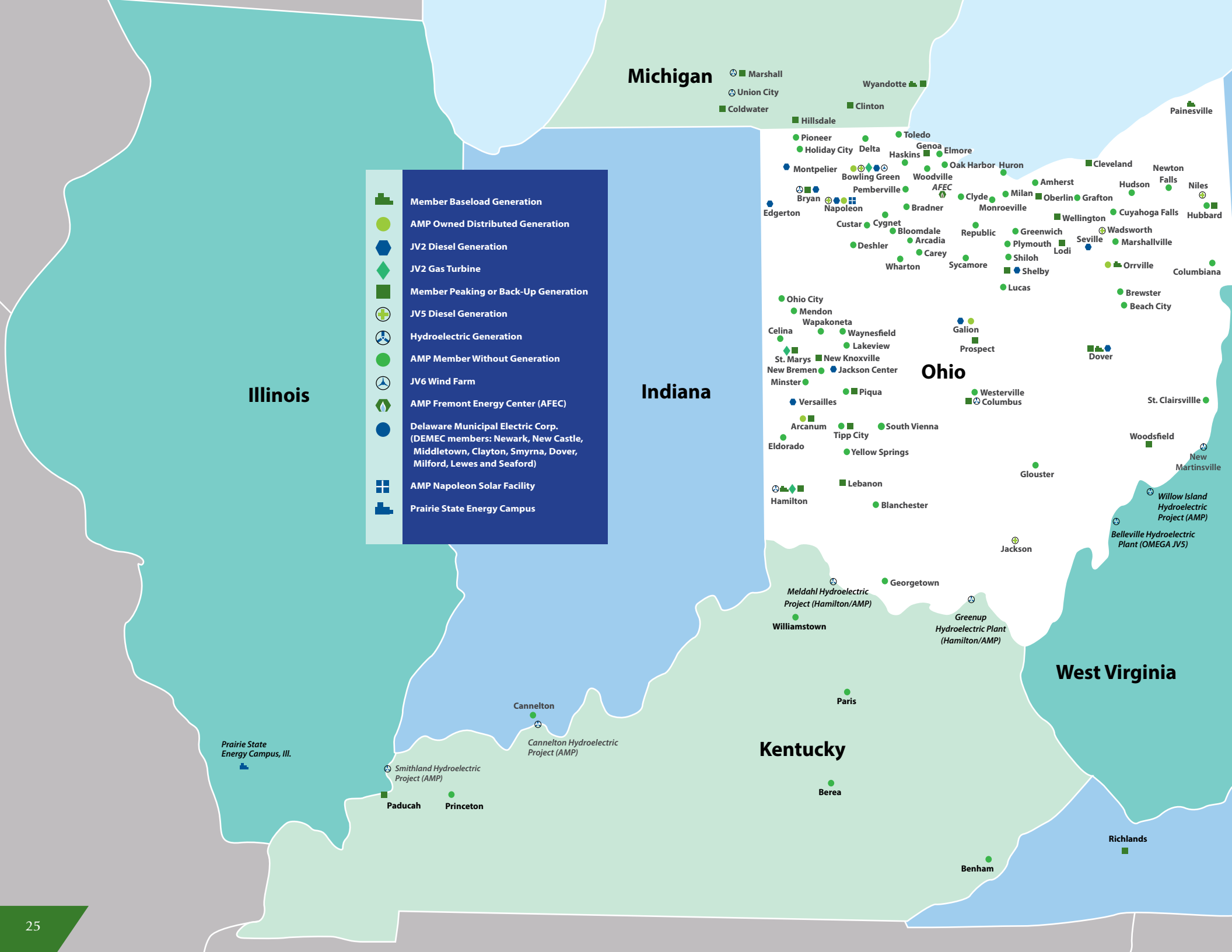
**http://pjm.com/-/media/library/reports-notices/special-reports/20180315-2017-emissions-report.ashx?la=en*
***USEPA estimates 1.043 tons of CO2 is sequestered annually by one acre of average US forest.*
****Includes direct emissions reduced from methane (CO2e) and avoided emissions from CO2. https://www.epa.gov/lmop/landfill-gas-energy-benefits-calculator*

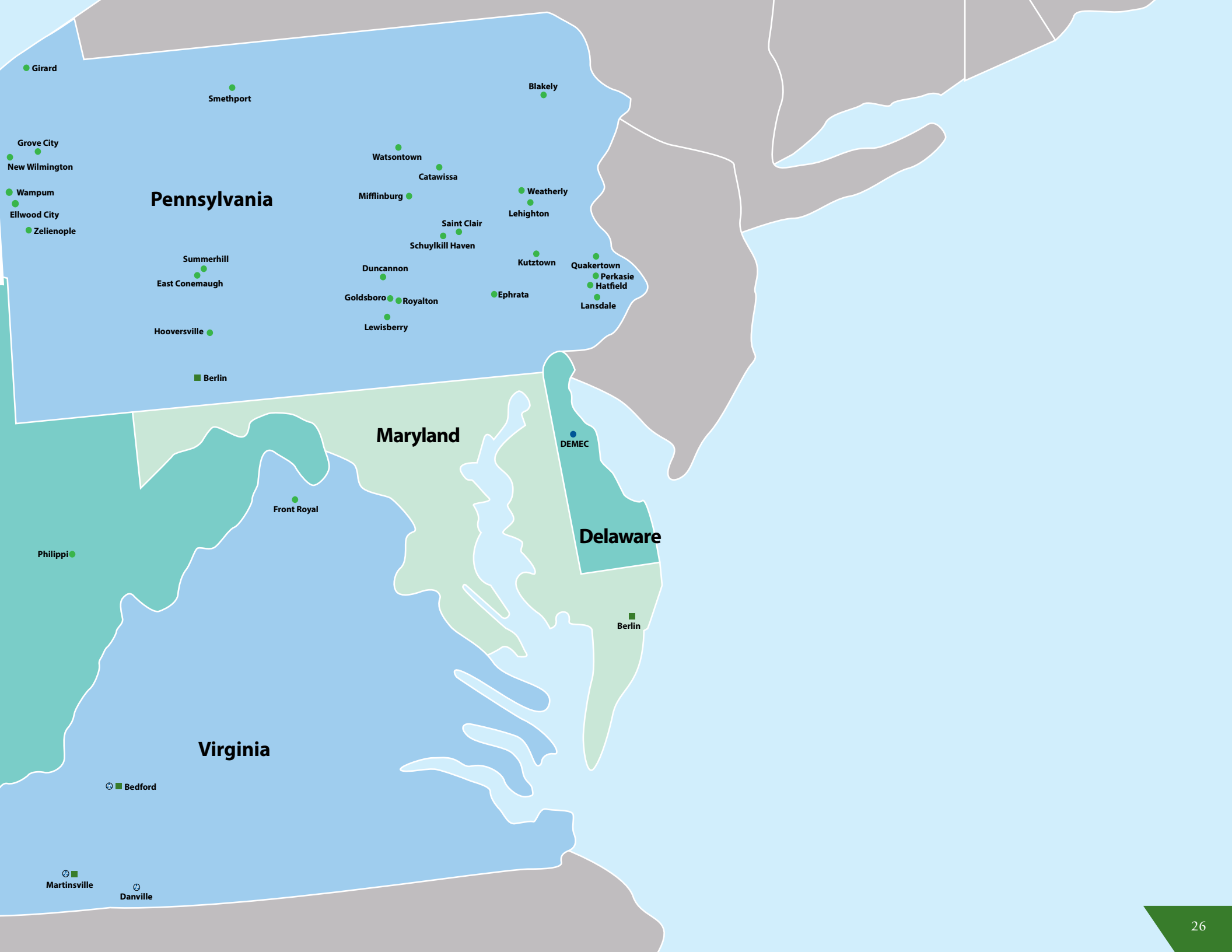
PJM Market Power Emissions Rate [1]	2017
CO2 emissions Factor (lbs/MWh)	948
SO2 emissions Factor (lbs/MWh)	0.79
NOx emissions Factor (lbs/MWh)	0.66

Green Bond Financed Hydro Projects 2017 Report

	Meldahl	Combined Hydro (Cannelton, Willow Island, Smithland)
Net renewable capacity (MW)	108.8	162.8*
Net renewable generation (MWh)	490,875	844,140
Capacity factor (%)	51.50	59.20
Emissions avoidance		
Annual CO2 (GHG) emissions avoided (Tons)	232,675	400,122
SO2 emissions avoided (Tons)	193.90	333.44
NOx emissions avoided (Tons)	161.99	278.57

**prorated MW to reflect actual MW online, the project is rated at 208 MW*
[1] PJM 2013-2017 CO2, SO2 and Nox Emissions Rates Report March 15, 2018


Member Baseload Generation
AMP Owned Distributed Generation
JV2 Diesel Generation
JV2 Gas Turbine
Member Peaking or Back-Up Generation
JV5 Diesel Generation
Hydroelectric Generation
AMP Member Without Generation
JV6 Wind Farm
AMP Fremont Energy Center (AFEC)
Delaware Municipal Electric Corp. (DEMEC members: Newark, New Castle, Middletown, Clayton, Smyrna, Dover, Milford, Lewes and Seaford)
AMP Napoleon Solar Facility
Prairie State Energy Campus
Michigan
Illinois
Indiana
Ohio
Kentucky
West Virginia
Marshall
Union City
Coldwater
Clinton
Hillsdale
Wyandotte
Painesville
Pioneer
Holiday City
Delta
Toledo
Genoa
Haskins
Elmore
Oak Harbor
Huron
Cleveland
Newton Falls
Montpelier
Bowling Green
Woodville
Amherst
Hudson
Niles
Pemberville
AFEC
Bryan
Napoleon
Clyde
Milan
Oberlin
Grafton
Edgerton
Bradner
Monroeville
Hubbard
Wellington
Cuyahoga Falls
Custar
Cygnet
Bloomdale
Republic
Greenwich
Wadsworth
Seville
Arcadia
Plymouth
Marshallville
Deshler
Lodi
Carey
Shiloh
Wharton
Sycamore
Shelby
Orrville
Columbiana
Lucas
Brewster
Beach City
Ohio City
Mendon
Wapakoneta
Galion
Celina
Waynesfield
Prospect
Lakeview
Dover
St. Marys
New Knoxville
New Bremen
Jackson Center
Minster
Piqua
Versailles
Westerville
Columbus
St. Clairsvillle
Arcanum
Tipp City
South Vienna
Eldorado
Yellow Springs
Woodsfield
New Martinsville
Glouster
Lebanon
Hamilton
Blanchester
Willow Island Hydroelectric Project (AMP)
Belleville Hydroelectric Plant (OMEGA JV5)
Jackson
Georgetown
Meldahl Hydroelectric Project (Hamilton/AMP)
Greenup Hydroelectric Plant (Hamilton/AMP)
Williamstown
Paris
Cannelton
Cannelton Hydroelectric Project (AMP)
Prairie State Energy Campus, Ill.
Smithland Hydroelectric Project (AMP)
Berea
Paducah
Princeton
Richlands
Benham


Girard
Smethport
Blakely
Grove City
New Wilmington
Watsontown
Catawissa
Wampum
Ellwood City
Zelienople
Pennsylvania
Mifflinburg
Weatherly
Lehighton
Saint Clair
Schuylkill Haven
Summerhill
East Conemaugh
Duncannon
Kutztown
Quakertown
Perkasie
Hatfield
Lansdale
Goldsboro
Royalton
Ephrata
Lewisberry
Hooversville
Berlin
Maryland
DEMEC
Front Royal
Delaware
Philippi
Berlin
Virginia
Bedford
Martinsville
Danville

AMP
PUBLIC POWER PARTNERS™

American Municipal Power, Inc.
1111 Schrock Road, Suite 100
Columbus, Ohio 43229
614.540.1111
www.amppartners.org

For more information contact:
Holly Karg
Director of Media Relations
and Communications
hkarg@amppartners.org

2017 financials are available at www.amppartners.org